

FORTY-THREE YEARS IN THE FIELD
WITH THE U.S. FOREST SERVICE

An Interview with
Charles A. Connaughton

Conducted by
Elwood R. Maunder

Forest History Society
Santa Cruz, California

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Forest History Society, Inc.
P.O. Box 1581
Santa Cruz, California 95061

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INTRODUCTION

The careers of most men who have served in the United States Forest Service have been peripatetic. For those who move swiftly to posts of important responsibility, they follow a course of repeated transfer. This is clearly the case in the Forest Service career of Charles A. Connaughton who is the subject of this volume of oral history.

Connaughton early established a reputation for being an indefatigable public servant, a man clearly marked for major administrative assignments. Yet he served only briefly in the Washington Office headquarters of the agency of which he was a part from 1928 to his retirement in 1971. It was the considered judgment of a succession of chief foresters of the United States that this man was particularly well suited to manage the far-flung regional headquarters and research units of national forestry. Perhaps no greater compliment could be accorded him, for the regional level of administration has been the true locus of control over the 188 million acres of national forests and grasslands assigned by law to the Forest Service, one of the major agencies of the Department of Agriculture.

One is tempted to compare Charlie Connaughton with Major General George S. Patton, Jr. of World War II fame. Among those who knew him most intimately, he was and still is a legendary figure. Like Patton, he aroused great loyalty within those who served under his command; and, also like Patton, he had a reputation for being "an old ironpants," "a fury with no fringe on top," "a hard-nosed combatant in any fight," "a man who lived by the book and made you live by it, too." Armed with a razor-sharp mind and a rare capacity to handle the English language with both grace and power, Connaughton quickly won his seat on many councils within the forest-related complex. These included the Society of American Foresters, the American Forestry Association, the Western Forestry and Conservation Association, the Forest History Society, the Western Wood Products Association, a variety of forestry research groups, and a long list of other organizations, councils, conferences, congresses, and committees.

The several oral history sessions I had with Charles A. Connaughton were conducted in his Western Wood Products Association office in Portland, Oregon on April 1 and 2, 1975. The published transcript of those sessions which are here indexed and illustrated should be read in concert with Connaughton's own volume of memoirs, "Forestry in Mid-Century," of which only a limited number of copies were produced. One is deposited in the library of the Forest History Society at Santa Cruz, California.

Connaughton can be identified from these works as an articulate, conservative, and intensely loyal public servant. In this interview the researcher and casual reader alike will find discussion on fire, grazing, range, and timber surveys; and on flood, insect, and disease control activities of the Forest Service during the twenties and thirties in the Intermountain Region. Connaughton, who was temporarily stationed in the Washington Office at the time President Franklin Roosevelt inaugurated the Civilian Conservation Corps in 1933, relates his activities in implementing the CCC program in his home state of Idaho. Here are found discussion on the role of regional foresters and experiment station directors in Forest Service policy making and description of the relationships between U. S. presidents and their chiefs of the Forest Service. The establishment of wilderness areas and national forest boundaries, the comparison of southern forestry and California forestry, the importance of national forests to America's economy, and the future of this country's natural resources are discussed significantly in the text of this interview.

Since February 1971 the Forest History Society and the U. S. Forest Service have maintained a cooperative oral history program. The most recently published interview in this program is one with retired chief Richard E. McArdle. Six interviews relating to the multiple-use concept on the nation's national forests have also been published. These interviews were conducted with Edward C. Crafts, former assistant chief for Program Planning and Legislation; Frederick W. Grover, retired director of the Division of Land Classification; Verne L. Harper, former deputy chief of Research; Earl S. Peirce, retired chief of the Division of State Cooperation; Hamilton K. Pyles, retired deputy chief for Programs and Legislation; and J. Herbert Stone, retired regional forester, Pacific Northwest Region. The Society recognizes the many individuals associated with the Forest Service who have made this ongoing program possible, most notably, Frank Harmon, Thomas R. Jones, Lennart E. Lundberg, Chester A. Shields, and the late Clifford D. Owsley.

Special acknowledgement goes to my oral history staff, Karen L. Burman, Barbara D. Holman, Eleanor L. Maunder, Betty M. Mitson, and Pamela S. O'Neal for their diligent efforts in ushering this interview with Charlie Connaughton through the transcribing, editing, illustrating, indexing, typing, and binding stages of final processing.

Elwood R. Maunder
Executive Director
Forest History Society

Santa Cruz, California
February 13, 1976

Elwood Rondeau Maunder was born April 11, 1917 in Bottineau, North Dakota. University of Minnesota, B. A. 1939; Washington University at St. Louis, M.A. (modern European history) 1947; London School of Economics and Political Science, 1948. He was a reporter and feature writer for Minneapolis newspapers, 1939-41, then served as a European Theater combat correspondent in the Coast Guard during World War II, and did public relations work for the Methodist Church, 1948-52. Since 1952 he has been secretary and executive director of the Forest History Society, Inc., headquartered since 1969 in Santa Cruz, California, and founder and editor since 1957 of the quarterly Journal of Forest History. From 1964 to 1969, he was curator of forest history at Yale University's Sterling Memorial Library. Under his leadership the Forest History Society has been internationally effective in stimulating scholarly research and writing in the annals of forestry and natural resource conservation generally; 46 repositories and archival centers have been established in the United States and Canada at universities and libraries for collecting and preserving documents relating to forest history. As a writer and editor he has made significant contributions to this hitherto neglected aspect of history. In recognition of his services the Society of American Foresters elected him an honorary member in 1968. He is a charter member and one of the founders of the International Oral History Association. He is also a member of the Agricultural History Society, the American Historical Association, the Organization of American Historians, the Society of American Archivists, and the American Forestry Association.*

*Adapted from Henry Clepper, ed., Leaders of American Conservation (New York: The Ronald Press Company, 1971).



Charles A. Connaughton at time of his retirement, Olympic National Forest, Washington, 1971.

SESSION 1, TUESDAY MORNING, APRIL 1, 1975

Elwood R. Maunder: This is Elwood Maunder speaking from the offices of Charles A. Connaughton at the Western Wood Products Association in the Yeon Building in Portland, Oregon. We are beginning an oral history interview on Mr. Connaughton's career as a forester in the U.S. Forest Service.

Charlie, how was your early life directed toward a career in forestry?

Charles A. Connaughton: I was born and raised in a mountain community in central Idaho. We were part of the forest, so to speak, in this community although it originally was based on mining. By the time that I was old enough to accumulate a set of interests, the trees and forests began to loom larger and larger in this community. Really, when you take a look at the community in terms of what it had to offer in the way of inspiration to a youngster, the Forest Service gave me more to inspire my ambitions than any other thing. We had very limited contact with any other professional people. There were no doctors, no dentists, no lawyers, but we did have a forest ranger in the general area, whom we respected. The management of the public lands was looked to by our community as a very commendable and highly desirable part of our whole political and social structure. So I guess it's only natural that I began to look that way pretty young in life.

Of course, I began to have some other influences as my career began to form. I had to leave this mountain community to get to high school. We moved to Boise, Idaho. It was the nearest available high school. An old friend of the family, Mr. R.H. Rutledge, was then regional forester for the Forest Service in the Intermountain Region, and he used to visit Boise occasionally, and it was my pleasure to visit with him as a youngster. He encouraged and inspired me to consider forestry as a career. He pointed out that his own career had been possible without benefit of technical training largely as a result of the fact that during his time on the scene, the availability of technical foresters was quite limited. But looking into the future, the real answer would be to require real sound technical training, and

he would encourage me on every occasion to think of forestry as an academic career. This built in my mind until really, through the years, I developed no other interests or desires. I stayed right with forestry. I was exposed, of course, pretty much at every turn of the road to some connection to the line of forestry.

There was a forest supervisor's office in Boise and I recall one incident. I called on that office and had a discussion with the supervisor, a man by the name of E.C. Shepherd. He took the time to discuss with me his concepts of forestry. This made a lasting impression on me, the fact that this understanding man would take the time to talk to a youngster about forestry as a potential career. So, right along I generated an attitude in which forestry was dominant and nothing else really competed. When I finished high school, it didn't occur to me that I would enter any other profession, and I, of course, was encouraged consistently by my parents to enter this area.

ERM: Following the mining era, you grew up in an area where the lumber industry was its main economic life, apart from ranching, was it not?

CAC: That's right. At this time in my career, that is in the twenties, when I became available for employment, practically the only employment in forestry was in public service in our locality. There was some private employment in industry, but it was exceedingly limited. Here, again, I think probably as much as anything, due to my exposure, my contacts, and my long standing relations that dated right back to youngest childhood, I pointed toward the U.S. Forest Service as a career. So when I attended college and became available for employment, really nothing else occurred to me. I never felt destined for any other career than public forestry with the U.S. Forest Service.

ERM: Apparently, in those early years of your life the Forest Service enjoyed a very fine image in the public mind in the communities where you lived.

CAC: This was certainly true. Of course, to a degree it was a mixed image. We all know that when the national forests were established there was a period of antagonism and difficulty. But by the time I appeared on the scene, this had pretty well passed and an attitude prevailed, in my family at least, that if the Forest Service was going to do something it was going to be done right. This was an overall attitude that somehow generated through the years.

ERM: Was there a feeling that the Forest Service did their job better than some other institutions in the community? Did this reflect to some extent the old predatory lumbermen's involvement in that area?

CAC: I really don't think this related much to comparison between lumber activities and the Forest Service. I think perhaps two things might have prevailed to give the Forest Service the favorable image it had as far as I was concerned. First, were the personalities of the men involved, the forest rangers and the forest supervisors that we dealt with. They were men of distinguished character and high principles. And secondly, were the standards with which the Forest Service performed their physical jobs, such as fire protection and construction of improvements. Bear in mind, land management didn't loom large in those days. The thing that was most evident were improvements--roads and buildings--and really about the only deviation from improvements was fire protection. Most everything that the Forest Service undertook was done to a set of standards that demanded respect. I would imagine, although I can't recall precisely, that the standards used were generally somewhat higher than prevailed, say, in the local county or the state or whatever was available to us to compare it with. Our family had rather close contact with the Forest Service in many of its activities, because my father operated a small general merchandise store and sold various products to the Forest Service. One item sold in rather large quantities was dynamite which was used in construction of roads. We visited and observed what was going on in the national forests a little more closely than the average person.

I will illustrate the relation of the Forest Service to our community with another little story which has always interested me, as I look back. I can recall that as a small child I heard my father discussing with Senator William E. Borah the fact that the particular sections on which our community was located should be excluded from the national forests, and my father circulated a petition to this effect. For a period of time, this land was not in the national forest system. The boundaries were relatively close but the particular land in question was omitted.

Then I recall returning home from college one summer and found my father circulating a petition to have this land added to the national forest. I remember well, I inquired, "Why have you changed your opinion?" And he said, "Well, I changed my opinion simply because I've learned something. I have learned that the Forest Service is far more important to this community than having this land unmanaged

and unprotected outside of the national forest." So the petition was circulated and the particular land in question was annexed to the national forest and remains today. This was the general attitude that prevailed and this is what prompted me, I think, to have set my sights in this direction from the very beginning and carried me through my education and into my first employment.

- ERM: Were these contacts with R.H. Rutledge and E.C. Shepherd occasional or were they frequent?
- CAC: Here again, Mr. Rutledge and my mother were raised on adjoining ranches. They were close, long-standing personal friends, and when he would visit Boise on occasion, they would meet and visit. He would visit our home, I would say, fairly frequently. Contact with Shepherd, no; it was a one-shot deal.
- ERM: When you went into the supervisor's office for information?
- CAC: Yes. And then another thing transpired, in terms of personalities, that is worth mentioning, I think. I began working temporarily for the Forest Service at the close of my sophomore year of college. I was reporting to personnel on the Boise National Forest. The forest supervisor was G.B. Mains and I was reporting directly to J.W. Stokes who was a technical forester on Mains's staff. These two men were the highest type that any young man would be able to admire if he was at all interested in the kind of work which they were doing. So I was very much influenced to continue my already established forestry interest by the relationships that prevailed and were generated by Mains and Stokes in the forest supervisor's office. I want to emphasize the real strong impact of these dominant and high quality personalities.
- ERM: Going back just a little bit in time, you did also work as a boy on fire fighting jobs and you relate some of that experience in your personal memoirs. If you don't mind we will refer readers to those records rather than call upon you to just recite the same again if that is agreeable to you*.
- CAC: That will save time and it's probably better stated there than I can state it verbally here.

*Charles A. Connaughton, Forestry in Mid-century (unpublished manuscript, Portland, Oregon, 1973). Copy located in Forest History Society Library, Santa Cruz, California.

- ERM: What provoked you to decide to go to the Forestry School at the University of Idaho in 1924 when you were only sixteen years of age?
- CAC: Really, I can't think of anything particularly. It just seemed the normal thing to do. I had finished high school in Idaho and the university was there and available. Their forestry school had a good reputation so I enrolled. I never had any idea that I would go anywhere else nor that any time would lapse between my high school training and my university enrollment.
- ERM: Did any of your friends go along with you?
- CAC: None into the forestry school. A number of my friends went to the university but not into the forestry school. We did have forty-two students, though, in that freshman class.
- ERM: I notice that only three of you finished.
- CAC: Three of that same group finished at the end of four years.
- ERM: Why such a high dropout rate?
- CAC: You know, I just don't know what an analysis would show. Of course, bear in mind this was a time when it was rather customary for the average student to be what you might say part-time. We would work some, and a number of these that enrolled with me graduated at a later time.
- ERM: I see, it took more than four years for them to do it.
- CAC: Yes.
- ERM: What was your financial situation at the time you were going to college?
- CAC: I was adequately taken care of on what you might say a bare-bone basis.
- ERM: With help from home?
- CAC: Help from home, and I worked for my board and room much of the time. Not my freshman year, but later I had jobs waiting on tables for my board, and then I had various types of things for my room. With the availability of board and room and what money I could make in the summer-time, I did reasonably well. Of course, our demands were pretty low in those days in terms of finances. Fifteen

or twenty dollars a month was all you'd ever expect in the way of cash, over and above your board and room. I got by without any difficulty. Most of the time I never had more than two or three dollars ahead. That's all anybody had. Nobody had an automobile and there wasn't much anyway to spend it on other than the few things that students have on a small campus.

ERM: You went to school on a nine-month basis and worked in the summertime?

CAC: Yes, and this was pretty much standard. The school term was nine months and there was employment in the summer season. I worked between my high school and college years and in the early years of college for a lumber company. Then between my sophomore and junior years, I went to work for the Forest Service in the summer and continued that. This was fine. This gave me three months of employment. Incidentally, we left with a pack outfit when the season started, and we didn't get back to spend a dime until after Labor Day. So what little you did make during the summer you had in the fall.

ERM: Is that the timber survey crew that you went on?

CAC: Timber survey was the assignment. This primarily involved mapping, with a rough estimate of timber.

ERM: How would you describe the work of a timber survey crew at that time? That would have been along in the middle twenties, wouldn't it?

CAC: Middle twenties, yes, was when I was involved, although I'm sure what I have to say applied somewhat earlier and somewhat later. "Timber survey" is a pretty good term for the work of a timber survey crew. It was more a survey than what you'd say a "timber cruise" is, and it involved timber more than just a general map of the country. Basically two things were involved. First, the crew assigned in our case involved four men who were aspiring foresters. We would run lines once through a forty, pace and take sample plots, and in the course of our line we would map the drainage and timber types, and our plots would give us an estimate of volume. I don't think the estimate of volume is very meaningful and it wasn't supposed to be. But we did end up with a pretty good drainage map of the country which at that time wasn't available, and the timber type map was accurate and is still accurate and useful.

Some of the country we ran the timber survey in was un-surveyed, but most of it had had a General Land Office survey. This gave us basic control. Where we didn't have basic control, we'd have to run our own control with a plane table and traverse. This would give us enough control so we could make our drainage maps and base maps to complete our jobs. Following the summer's field work, the chief of party would remain on the job to compile the data during the winter. He would compile all the maps and the timber estimates. By the close of the winter season, a map and inventory of the timber of the area in which we worked during the course of the summer would be available. We worked out pretty well. It was extensive.

ERM: And, of course, you were just one of many crews.

CAC: We were one of several crews, yes. Several crews worked in this general area.

ERM: Working under a national forest supervisor or working under the regional office?

CAC: This was assigned to a national forest supervisor. He organized the crew and serviced it from his office. The supervisor's technical forestry staff was responsible for the technical competence of this crew.

ERM: How were the members of the crew recruited? Were they recruited by the supervisor's office?

CAC: In the final analysis, they were recruited by the supervisor's office, but I assume that certain recommendations were made to the supervisor's office. I know in my own case I was recruited by the supervisor's office. On the other hand, the first timber survey party that I was on--this happened to be when employment for foresters was difficult to get--the crew had three graduate foresters and myself, a student. So obviously, the supervisor had been asked to absorb this backlog of technical foresters. We had one graduate forester from Montana, one from Michigan, one from Iowa State and myself.

ERM: You were the junior member.

CAC: I was the junior member in this particular crew. Normally the supervisor organized the crew, serviced and staffed it.

ERM: Do you remember any of your fellow crew members?

- CAC: Oh, yes, very well. This was in 1926 when we started. The crew chief was Nathan Shultz who later became a ranger and then left the Forest Service. He moved on in the forestry scene and I don't know where. Both of the other two retired from the Forest Service later. One was T.H. Van Meter who retired and lives in Ogden, Utah, and the other was Otto E. Koenig who retired from the Philadelphia office of the Forest Service in recent years. He was from the University of Michigan. That was the initial crew.
- ERM: Did any of these men reach high rank in the Forest Service?
- CAC: Yes. Van Meter was assistant regional forester in both Missoula, Montana and Ogden, Utah in a couple of assignments, and Koenig had assignments in personnel management in his area of choice in the East. I never had occasion to work with him after this early year, but I did hear of him occasionally and know that he occupied a position of responsibility in the personnel field.
- ERM: This was your first experience with a crew on a survey job?
- CAC: Yes.
- ERM: How were the responsibilities within the crew delineated?
- CAC: Shultz was in charge of the crew. He had passed the Civil Service examination and had a full-fledged junior forester appointment which in those days was the entrance appointment. The other two foresters had not passed the examination at that time, and they were both in a subordinate capacity along with myself. We were called field assistants. The crew boss had to see that controls were established. In other words, lines were run and stations established so that cruising points could be developed. Then each of us was assigned to a certain block of ground to survey by pacing a line with a compass, taking plots at intervals on which the timber was tallied, and making a map. All members of the crew, the field assistants, had the same duties. The chief of party participated in part in this but he had some other responsibilities in addition to supervision of the crew as a whole. He had to keep the main map up to date and of course he had to plan new camps.
- The second year, it fell to my lot rather accidentally to be acting chief of party much of the time. We had a similar type of crew, and it was to be supervised by a permanent member of the Forest Service assigned to the

supervisor's staff. After we got started on this basis, he was called away to do other work--some emergency developed. This was my second time around and the other two members were new to the timber survey. One came from Purdue and I don't recall the origin of the other. That left me in charge of the crew. So in my second year while still a field assistant, I had the task of organizing and managing the entire operation. This put me in a good position when I did graduate, and I was ready to go to work full-time.

The Forest Service then hired me as chief of party. In my third season out, I was in full charge of the crew. Unfortunately, I was not old enough to take the Civil Service examination, so I couldn't take the professional examination to enter the Forest Service. You had to be twenty-one to take it and I was twenty. So I was merely assigned and hired as chief of the field surveys party for that summer. During the winter, I acted as a compiler of the data. By the time next spring came, I wanted to do something else. So they gave me an appointment as assistant ranger over near Yellowstone Park. This was just a terrific assignment because two ranger districts had been combined and you had all of one old district, the headquarters and the territory and all the facilities, and yet you had the established ranger there handy to guide you on your job. We were headquartered eighteen miles apart. I went on that job for the season, and while there I took the forest ranger examination and passed it. I took the professional examination later. I received my permanent appointment to the Forest Service from the ranger examination, as the results came before those from the professional examination.

ERM: Who was that old ranger?

CAC: The ranger was Ray Pickett and he was terrific. He was the kind of man that really made the Forest Service, both in terms of his own personal production and his impact on the young people. He did a great job. He took us beginners, led us by the hand, and showed us how to do the job. A nonprofessional, but one of the finest.

ERM: Describe him physically as well as his personality.

CAC: Ray was a native of that general area, the southeast part of Idaho. A Mormon background--rugged in way of life and appearance. He met things head-on, physically as well as personally. There was a time or two when he demonstrated with his fists to convey his particular instructions. But he did this only when he was forced. The work in those

days on the ranger district was basically custodial with lots of physical work. Here was this ranger who had risen from sheer native ability without technical training whatsoever, and he had energy to the point where he was handling a job on a large district to real satisfaction. He was certainly admired by me as a young technician. He had a large family with six small children. All through my life it has been my pleasure to be associated with competent, delightful people but certainly none exceeded Pickett in terms of dedication and effort and real accomplishment.

On this district, for example, as I recall we had about sixty thousand head of sheep under permit. I don't know how many cattle but there must have been twelve thousand or more cattle grazing on this district. This was the main task, of course, summer grazing.

ERM: Would that be considered overgrazing today in that area?

CAC: No. As it happened these ranges were in excellent condition, at that particular time, and were managed. The sheep were owned by the Wood Livestock Company which owned nearly a hundred thousand sheep. They had financial difficulties in the Depression years, and dissolved as a result of the financial pressures. But one of the things that they were committed to was maintaining their high quality of summer range. And they certainly did. They took their lambs onto this national forest range and topped them out.

ERM: What do you mean "topped them out"?

CAC: This is where the lambs grew most rapidly and got ready for market. Most of their lambs were not fat when they came off; they were feeder lambs. They had to go to the feeder market simply because they were late lambs. They weren't born until April and then went to the summer range. They were sold then to the markets mainly as feeders. These summer ranges were generally kept in pretty darn good shape. The cattle ranges were not in as good shape generally as the sheep ranges, but here most of the heavy use was spotty and there was some very good cattle range too.

ERM: At that time was there still any remnant of the conflict between the sheepmen and the cattlemen?

CAC: No, none at all. That had passed years before. I never experienced or saw any of that at all. Most of these companies, like the Wood Livestock Company, had both sheep and cattle.

ERM: What did you do next in the Forest Service?

CAC: I went on this assistant ranger job. While I was on that job that fall, I took the ranger examination in St. Anthony, Idaho. For a number of years, many of the beginners in the Forest Service came through an examination that was held for rangers; it was a non-professional examination. It came up before the junior forester technical examination and so I took it.

ERM: What did it pay at that time?

CAC: If I'm not mistaken, I got my first offer for eighteen hundred a year. This was either the last year or next to the last year this examination was ever offered, and I was one of the few fellows who continued in the Forest Service through the years that had come in through the ranger examination route this year. After I took the ranger examination and finished the season's work on the Targhee National Forest, I was at loose ends. The job was over the first of December, but fortunately the forest experiment station in Ogden needed someone to assist in a compilation of a watershed study that was being handled by C. L. Forsling. So they offered me a job in Ogden, which I was delighted to get, to assist in the compilation of these data. I went to Ogden from the Targhee National Forest and worked for the forest experiment station all winter on the data. During the course of the winter, the professional examination was given and I took and passed it. I was eligible to take the examination because I had reached the age of twenty-one. I could see the kind of experience that was being obtained by the various candidates for certain jobs. It occurred to me that in order to broaden my experience, it would be highly desirable if I got assigned to range surveys, technical range work, for a while. I had the good fortune then, after going back to the Targhee National Forest and doing an insect control job in the spring, to be assigned to a range survey job for the season. This was after my eligibility as a technical forester had been established by passing the necessary examination.

ERM: May I just interrupt for a moment on that in-between job? It is my understanding that you spent about a month with Pickett on an insect control job, is that right? Bark beetles in the lodgepole pine?

CAC: Yes. Each spring for three different years I worked on that. That's right, it would be about a month or six weeks. We tried to kill the beetles between the time of snow melt and the time the larvae hatched and the beetles flew.



Top picture, timber survey crew,
Boise National Forest, Idaho,
July 2, 1928. Left to right,
Quentin Boerner, Issac Burroughs,
Charles Connaughton, Edwin
Heacox, and J.W. Stokes.

Bottom picture, Connaughton on
an early scaling job, Boise
National Forest, 1929.



- ERM: You got to know James Evenden at that time.
- CAC: Yes, Jim, of course, was headquartered up in Coeur d'Alene, but he was providing technical direction to our work. We were trying to kill these bugs by special treatments. We didn't have too much luck but we sure worked at it.
- ERM: I'm particularly interested in the history of forest entomology in the West because I've begun a series of interviews with J. Paul Keen and Ralph C. Hall down in California recently. They are spinning out a great deal about the experiences they had in this area and I wonder if you can shed any light at all on the entomological work that was done over in your area of the West and the roles that Jim Evenden had in it?
- CAC: Yes, I can shed a little on it from the standpoint of one who was out at the end of the line. I had nothing to do with the technical determinations, but plans were made by Jim Evenden and others that we should attack the mountain pine beetle infestation in the lodgepole pine by burning the beetles in place. The infestation was widespread along the Continental Divide and Yellowstone Park westward. I believe that the particular job that we carried out the first spring was the first real big effort of this kind. It was the first to my knowledge. It may have been checked out before but this was the first on an operational scale. Jim Evenden came down and assisted us in getting organized. We had a crew of about twenty men. A few would go through the woods ahead and locate the trees that were infested with insects and stick a tack on the tree with a little tag. This would be followed by another crew of men accompanied with packhorses. Each of the men in the second wave had a garden pressure sprayer with a long extension on the hose outlet. I suppose those extensions must have been twelve feet long. They'd spot a tagged tree and they would pull the tag. Then they'd spray this tree with oil. Technically the tag would be numbered in sequence so you'd know that you wouldn't miss any then, but actually this didn't work out.
- ERM: The object being that they'd destroy the tree and turn the tag in.
- CAC: Yes. They'd light the oil and then spray it while the tree was burning, and that would raise the temperature through the bark to the point that it would kill the larvae. With this spray and this extension you could get up maybe twenty or twenty-four feet in the tree with the flame. You'd hold that flame on the tree until it

had, in effect, desiccated the larvae that was present in the inner bark. As soon as you'd finish that, then you'd move along to the next tree and repeat the process and the packhorses would be behind you.

ERM: This was quite contrary to the cut, peel, and burn theories of the people west of the mountains.

CAC: Cut, peel, and burn, of course, is in ponderosa pine. It's heavy bark and lodgepole is thin bark. We never did try to burn thick-barked trees like I'm telling about because they are insulated too well. But it so happened that, even in lodgepole, this system didn't work well. The insulating factor of the bark was such that if everything was perfect, atmospheric conditions, the thickness of the bark, the age of the larvae and the whole thing was just right and the day was warm, you'd kill them. But if you had a cold and windy day which whipped the flames around the trees and there happened to be thick bark at the base of the tree, you could hold that flame for ten or fifteen minutes and the larvae would still be cool. It didn't kill them. Nonetheless we went through this three different years in a row, and we modified our actions and tried to improve them. We made some progress but I don't think we really ever conquered the outbreak. It wore itself out like those outbreaks do. I was involved in it in 1929, '30, and '31 and I don't believe this particular approach was used after that.

ERM: Were you acquainted with the change in technology or technique in that area, what they did in the subsequent outbreaks of the pest?

CAC: The only thing that I know that has been attempted since has just been plain salvage of the infested timber which is certainly the best. Our system did not work too well, but this was an interesting development, Woody, an exceedingly interesting one. This was 1930, and it was a very major effort at insect control. There were other attempts also.

ERM: And earlier attempts in the Black Hills.

CAC: There were some early attempts in eastern Oregon on different species, of course. There was also a major blister rust program under way in the Northwest. I point this out to indicate that a major effort to protect the forest from its enemies was undertaken many years ago. We don't have many insect and disease control programs as intensive, as ambitious, and maybe as ill advised as

those were then. The biggest effort that was ever undertaken, to the best of my knowledge, in these United States to meet an insect and disease problem was the white pine blister rust. It was a terrific program. It was carried on over several years, as you know. I don't know how much was invested. It was finally abandoned as ineffective. But what this really ties into was the fact that at that particular time in the history of American forestry, the whole effort was built on the protection syndrome. Fire, insects, and disease, all got attention. Whereas management such as silviculture did not get much attention. There was not the opportunity for management per se, but protection got attention.

ERM: And fire was getting far more attention than insect or disease.

CAC: Oh, yes. After the 1910 fires, fire protection efforts began to pick up.

ERM: At this time, I presume Jim Evenden was working for the Bureau of Entomology.

CAC: Yes.

ERM: Which was not yet a part of the Forest Service but worked in close cooperation with the Forest Service.

CAC: Yes. He worked for the Bureau of Entomology at Coeur d'Alene. He was there for years, as far as I know until he retired. I don't know whether he ever did come over to the Forest Service. I just don't remember. Jim was there for many, many years, and then he went down to the University of Idaho after he retired from the federal government.

ERM: The insect control must have been a pretty messy job.

CAC: Woody, let me just describe what was involved. First, the season is the meanest season in the year. We hit this early in May at high altitude. It's the break-up season. There's snow left and thawing out but you are working in about half snow and half water and cold and its raining and storming and its miserable. Then secondly, was the oil. We tried to pack this first in five-gallon cans, two slung on each side of a horse. I don't care how careful we were, some was spilled. Well, everybody wore wool underwear. When you get the oil on your pants, it's not too bad, but once it gets on your wool underwear covered up with your overalls, that night you haven't any hide wherever that underwear

rubbed. So people began to develop these big raw patches all over their skin wherever there was an accumulation of spilled oil. With liberal use of unguentine and other items, we made out fairly well. We really didn't have any bathing facilities. There was snow all over the place and we made out the best we could. No matter how we tried, some oil would get down on the horse. It didn't bother the horse where it just got on the hair but when it would get under the saddle, the blanket would hold the evaporation against the horse. When you removed the blanket, off would come the hair. Then you'd have big bare raw patches. It was a mess!

ERM: How did you overcome the problem?

CAC: We just stayed with it and used all kinds of devices. We tried to use rubberized clothing to keep it off our clothes. We covered the horses' backs with oilcloths. We made out. We made out but, only after a lot of sleepless hours, rubbing ointments and salves on some pretty raw spots on both men and horses.

ERM: Not one of the pleasanter experiences you've been through.

CAC: No. Particularly the first year, we didn't really know what we were doing. When we went back the second year and found that the insects were just about as abundant as the first year, we had a feeling of frustration.

ERM: Did you ever again have any experience along that line dealing with a pest problem?

CAC: No. This was the only pest problem I ever tackled on the ground. I've seen lots of other efforts, of course, and participated in them, like brown spot control in the South.

ERM: You were finally assigned to the ranger station at Kilgore?

CAC: Yes. That's where I was assistant ranger, at Kilgore. That was in 1929.

ERM: This was at the time of the advent of the Great Depression.

CAC: It sure was.

ERM: What impacts did that event have upon you personally and upon the work of the Forest Service in those units in which you were associated?

CAC: In 1929, not many people in the Forest Service felt the impact of the Depression. The first impact I noticed of the Depression from a personal standpoint began to occur in 1931. In the winter of 1931, I was in Ogden. There was lots of unemployment. We didn't have any special public works, as I recall. And about the only way you observed the problem was the actual bank closures. My friends and associates lost money in bank closures. I didn't have any money. I had all of mine in my pocket. But my friends did and the community as a whole was under severe stress. I was assigned at one time to interview people in need of relief. The Forest Service donated my time to do this, and it was shocking indeed. But as I say, I didn't feel this from an official standpoint really until later.

In 1931 also, of course, we had terrific fires that were related to the Depression. I was in southern Idaho at the time. Martial law was declared in portions of southern Idaho because of the incendiarism. Job fires. Finally, though, the first real big impact internally within the Forest Service came with the advent of CCC and some of the emergency work programs. This completely modified and changed the normal way of doing business. We were geared to a whole new national program when this happened.

ERM: How did you personally respond to that new program? What was your feeling about it at the time?

CAC: I very closely related. I was in the Washington office in the winter of '32 to '33. That was the winter Roosevelt was inaugurated. I attended the meeting in which the idea of the CCC was presented. Secretary Ickes, as I remember, presided. I recall sitting with H.H. Bennett, later the head of the Soil Conservation Service. The country was obviously in great stress. Thus, programs were developed by the government to alleviate economic suffering. The CCC was a major program of this kind and very significant.

ERM: Even before the WPA?

CAC: No, no. There were some of these other programs.

ERM: Work projects.

CAC: Yes. There were some of these others, but the CCC was a project that had an impact on the Forest Service. I came back West about the time CCC started. I happened, along with another fellow--Bill Callender, since deceased--near Idaho City, Idaho, to locate what we believed to be

the first CCC camp in Idaho. An advance cadre of about twenty-five men came in and built the camp, and then a group of enrollees from New Jersey was placed in the camp. The general locations had been selected by the people on a higher level than I. We merely went on the ground and picked the exact location for the camp.

It was decided soon thereafter to build a headquarters for the forest experiment station in the locality. A portion of the CCC camp was assigned this job with a group of skilled carpenters. It was my task to assist them in facilitating construction work, and we built the Boise Basin branch experimental headquarters. About ten buildings were built by the CCC that summer. The arrival of the CCC completely changed, dominated, and modified any regular work.

ERM: What was the general attitude of men like yourself who had been in the Forest Service for some years toward this change of emphasis? Were you negative toward this?

CAC: I wasn't. I thought it was great. I didn't see any prospect of accomplishing what we were accomplishing without the CCC.

ERM: Your first work was as assistant ranger at Kilgore in quite a wide range of duties. You'd been building a barn and counting cattle and all kinds of odd jobs, hadn't you?

CAC: Sure. These were manual-type jobs which an assistant ranger was called upon to do in those days. I didn't do them the best in the world; I learned a great deal in the process. If, as assistant ranger, you didn't do them, they weren't done, because the ranger and I were the whole crew on that district. It was the only way to get the job done.

I was delighted to see the CCC come in. Of course, a year or two later, we began to get some special programs for which we were hired, at the branch experimental forest, where ten or a dozen technical foresters were assigned to research work in some of the emergency programs. It worked out well.

ERM: Would you say that it is generally true that the Great Depression actually served as a great spur and a means of growth for the Forest Service?

CAC: There's no question about it. In the area in which I was located and I think this is true in general. It was

not only true of the Forest Service but of the conservation movement generally. The Depression made possible needed work by making funds available. CCC had both a social value and a resource physical value. The results are being enjoyed to this day.

ERM: What would you say its contributions mainly have been?

CAC: You mean from a material point of view?

ERM: From any standpoint you want to choose. What do you recognize as the positive things that came out of that?

CAC: I think the biggest one is the social one. At one time there were over three hundred thousand men employed constructively, doing the kind of work that has lasted until today. There are men today that are exceedingly proud of the fact that they could be a part of that. I think that is good testimony on behalf of the program itself. To me, this was great. The crew that I was associated with was a group of boys from Jersey City transplanted into Idaho.

ERM: Urban boys, mostly, I guess.

CAC: All urban boys. These boys, as I recall, got thirty dollars a month. Twenty-five of it went home and five dollars they kept. If that isn't the right figure, it was some such base figure. They were proud of the fact that they were contributing something to their home needs. What little money they had in their pockets was adequate for whatever they needed out there. This group of youngsters stayed in Idaho only for this one summer season. But I would venture to guess, without having had contact with these men since, that every one of them is proud to say, "I was in the CCC program." This is testimony of the real merits of the thing from a social point of view. From the material or conservation point of view, one of the better fire records that we've ever had in the history of the nation was maintained during the course of the CCC, and that was because of availability of manpower. That's a specific. Then we can look about at the roads that were built--access to many areas that had no roads before, and of course, that contributed to the fire control situation. For many years, we were dependent on CCC for developments such as campgrounds.

ERM: In other words, this greatly enhanced the recreational areas of the national forest, is that right?

CAC: This installation of the experiment station that I described to you, these buildings, were all CCC construction--every bit of it. All the buildings, the water system, sewage system, the whole works were done with CCC. So the inventory of capital improvements was great.

An example of CCC accomplishment is in the Black Hills of South Dakota where at one time a large number of CCC camps were engaged in thinning timber. I was there. I looked and I saw what they were doing then. We wondered about its merits at the time, but today the results are very apparent. You can't help but be proud of this tremendous forestry effort that was undertaken in the Black Hills and achieved on low site land. This was CCC achievement in silviculture.

ERM: The same thing was also true I presume on national park lands and Bureau of Land Management lands.

CAC: I am sure this was true. I wasn't associated with these other lands. I do know there were camps in state parks, and the state forests had CCC camps.

ERM: To what extent do you think this CCC program aroused the interests of young men to make forestry or forest-related work their career?

CAC: I don't know a precise answer to that. I know that a number of my forester friends were from the CCC. The regional forester in Alaska had been a CCC boy. The recently retired supervisor of San Bernardino National Forest was a CCC boy. You can tick them off, so you know it had a lot of impact. Now whether they would have been foresters regardless of CCC, I don't know and they don't know either. But certainly the genesis of much of their thinking was their CCC relationships.

ERM: Do you think any benefits were derived in the realm of good public relations for forestry and the Forest Service by this enterprise?

CAC: No question about it. The CCC movement was a popular one.

ERM: In what ways did that good public relations develop? Was it a matter of a flow of information from these boys to their families in all parts of the country--people who had no knowledge prior to this about forestry per se who now became somewhat acquainted with it through the experience of their own youngsters?

- CAC: I am satisfied that was very real and material, but I wasn't close to that. I was on the other end, the receiving end, where the CCC program evidence was manifest in items that they had left on the ground. And here the using public knew what they were. The public could see the work, they could see the roads, they could see the campgrounds. They knew when a CCC crew fought a forest fire. They knew that here was a great constructive force operating in the interest of resource management and productivity. This was on the ground. Now, what did the families in New Jersey feel? I don't know. I've never had a direct report but they must have felt strongly.
- ERM: Do you know of any surveys that were ever made by the Forest Service or any other government agency to ascertain what benefits were developed in that way?
- CAC: Yes, there have been some surveys in the past and I've seen them. And I can't be specific in terms of quotes, but there were some surveys on the merits of CCC and the public reaction to it.
- ERM: This was a paramilitary enterprise, wasn't it?
- CAC: Oh, yes, it was and it worked. You know I was real apprehensive when I heard this plan. When I initially heard the story that two hundred men were going to be in each camp, the camps would be managed by the army, with the work to be handled by the land agency, well, I was apprehensive. You know I'd been accustomed to doing it differently, in smaller groups, with the agency responsible for everything. Well, we did build two hundred-man camps, and the army did handle enrollee welfare, the sanitation, the feeding, and they did a job that left the agency available to do the things that they should be doing--land management. In retrospect I think it was great.
- ERM: Would you assign as perhaps another spin-off benefit of the CCC the development of a whole new opportunity for land management by the Forest Service, because it was given this flood of manpower to do a lot of the nuts-and-bolts jobs that freed it, perhaps, to do some of the more sophisticated things that needed to be done?
- CAC: No question about it! The Forest Service was able to embark on things that had been only dreamed before. Just great, just great. Now one of the reasons the Forest Service was effective in embracing the CCC is it did have some advance plans. The Forest Service has

been a reasonably good agency in terms of advanced planning. I am sure there are times when we wish we had had better ones, but we did have some plans on the drawing board when the CCC started. There were places where plans weren't adequate, but we had some from the start, and this gave us a leg up in getting organized.

ERM: New ideas are not always looked upon with favor by an established corps of people who have been working at a program on a certain planned basis. Was any resentment felt by Forest Service employees that suddenly they were having to deal with a social problem that involved riding herd and babysitting a bunch of kids from the city who had to be employed somehow. Was there any feeling of resentment in that regard?

CAC: I don't remember. There might have been some, but I didn't encounter it. One reason I think it might have been at a minimum is the work crews were in the charge of the Forest Service. So although this program was superimposed, it was an on-the-job activity, with the exception of the camp welfare, which was internally controlled by the Forest Service.

ERM: Was there ever any friction between the military on the one hand and the Forest Service on the other?

CAC: Yes, there was.

ERM: Could you tell a little about it?

CAC: Well, such little things as the Forest Service thought the military kept too many men in camp for camp services, like food preparation and camp policing and this sort of thing. This would reduce the number of men available for work projects. There were some personality clashes and some pretty severe ones. Some required replacement of people. This would have happened in any kind of program.

ERM: How were such difficulties ironed out?

CAC: Well, I can tell you exactly how one was ironed out. The military had an organization, and I don't recall just what the district was, but a certain district was responsible to a commanding officer, and the Forest Service had a parallel district. I'm not sure that they had a certain parallel district, but let's say it was parallel--it certainly was another district organization. In this

instance, there was a conflict between a camp superintendent and a camp commanding officer. It was appealed, in effect, and just how it reached the district commander and the district supervisor, I don't know. But it did reach them, and the district commander checked into it. I recall he told the Forest Service, "We'll terminate our men immediately and you can terminate yours." Well, the Forest Service wasn't used to being quite that harsh. I think they appealed to the district commander. "Let's back this up a little," because the army man, as I remember, was due to retire in two months. In any event, they worked out something, I don't recall the details, but this was the way some of these things were handled. They were handled expeditiously.

ERM: The camp superintendent was a Forest Service man?

CAC: For work programs.

ERM: And the commander of the unit, a military officer?

CAC: Enrollees' welfare, discipline, food, and recreation were his responsibility. That was all his responsibility.

ERM: And it was part of the understanding that the two would work together harmoniously. When they did not work in a harmonious way, was the problem bumped up to the district officer and the regional representatives?

CAC: The district officer and the Forest Service district manager, or whatever was his title.

ERM: Would that have been in most cases a man of the Forest Service in the regional office or would it have been one in the national forest supervisor's office?

CAC: No, the fellow that had charge of the administration for several forests but not the full region. With major items, the Forest Service maintained a liaison in the Corps area headquarters like in the Presidio at San Francisco.

ERM: And personnel assigned to such responsibilities would probably have been on the prowl constantly around the circuit to pick up any signs of trouble, is that right?

CAC: Very much so. And as a matter of fact, the areas where I had contact worked out better than you would expect. Problems were worked out.

ERM: Would you say that perhaps another spin-off benefit of that program was the preparation that it gave to quite

a good many men who not too much later were called upon to perform military service for their country in World War II?

CAC: This must have been the case, because you see, the CCC program closed down right at the beginning of hostilities, so they dove-tailed right together. So much of the organizational training must have been used by the people who had been in the CCC program.

ERM: Does any evidence support the notion that taking all these hundreds of thousands of young people out of the crowded urban areas where they were unemployed had any salutary effects on the crime situation in the cities at that time?

CAC: I don't know if any studies were made of that or not.

ERM: Do you see any negative aspects of the CCC operation?

CAC: Well, some say there were. Right at the beginning, for example, we had a little trouble. We brought in some of these outside crews to camps, and we had some local boys that needed employment. Well, they had to work out a system to accommodate these local men, and they did. But in the first recruitment, this need wasn't accommodated. This was a little special problem that had to be solved with time. Some local problems developed with some of the camps in local communities--little conflicts--but these were very minor, as I remember. I can't put my finger on anything of a significant nature that was negative.

ERM: Whenever you move large groups of people from one cultural situation to another in a paramilitary situation like that, the two cultures tend to come into conflict with one another. The urban boy and the rural or small-town resident.

CAC: There was some of that.

ERM: I would imagine that the daughters got locked up at night more frequently.

CAC: I suppose.

ERM: One wonders to what extent the merits of the program have been sufficiently recognized and implemented in other times, such as the present.

CAC: Yes. One of the weaknesses of the program that has been pointed out is that in many respects the recruits

to this program were on a temporary basis, kind of like if they were in the military. Once they finished their assignment, they were not adequately skilled to go on to some other job. They were merely released back into their home community, untrained for what they had to do at home.

Now the more recent Job Corps is approaching this from a different point of view. It's approaching it from the point of view that the enrollee must be trained into one of various lists of trades. Then when he returns into his community, he will be equipped to step into some type of work as an apprentice, whether it be a carpenter, painter, mechanic, or what have you. In CCC, this was more limited. Much of the CCC program was done with common labor. And when the enrollee returned home, he was still a common laborer. This wasn't entirely true. Some came out skilled, a lot of them were inspired and interested in forestry. You can't generalize.

ERM: Some of them must have learned about carpentry, painting, plumbing, running heavy equipment, truck driving, bulldozer operating. Weren't a lot of those boys put to work doing things like that? They weren't all working on the end of a shovel, were they?

CAC: But of the two hundred of them, the average man out here on a cat [Caterpillar tractor] was not a CCC boy in the camp. He had to be a trained cat driver if you were going to get any work done. And we had a trained carpenter to do the carpentry work, but the CCC boys were helping. On this Job Corps program the enrollee is formally apprenticed, so the relationship is somewhat different. Production is not as large in the new youth programs as it was in the CCC. Production was a main item in the CCC and it was one of the strengths, by the way, not necessarily a weakness. But just the same we didn't provide as much training and skills as many think would have been desirable. Most of the enrollments were for six months.

ERM: And not renewed?

CAC: I don't know what percentage were renewed. Some were.

ERM: Of course, comparing CCC with the Job Corps, you almost have to take into account the different statistics of unemployment that obtain at different times.

CAC: Right.

- ERM: I think that during the Great Depression of the thirties, estimates of the total percentage of the populace that was unemployed ranged anywhere from twenty-five or twenty-six percent on up to thirty-four or thirty-five percent at different times. In more recent years, we have not even begun to approach that level of unemployment. Even though it's getting bad, it's not nearly the grievous thing it was during the Great Depression, so I presume at that time it was really a crash program rather than a very carefully planned and defined program. It had to be created pretty much out of whole cloth, on the spur of the moment.
- CAC: No doubt about it. Of course, we had in the CCC some very, very high level, high I.Q., high potential people simply out of work. The Jobs Corps on the other hand has recruited underprivileged underskilled, undertrained people. Some of the CCC were well-trained people when they came in. They simply had no work.
- ERM: Do you think the Job Corps is the proper and the adequate means of dealing with the present situation, or do we need a new CCC kind of operation?
- CAC: I haven't thought that social needs call for CCC. If we had CCC today, it would need to be justified on a somewhat different basis than we did in the thirties. At present we don't have large numbers of employables out of work. We have young teen-agers out of work as well as others in local areas, but they are really not in that national employment base that the CCC group were. Sure, in the CCC they took some teen-agers, but they took a lot of young men who weren't teen-agers.
- ERM: We have a tremendous number of unemployed young upper teen-age and twenty-year-old blacks that are not only unemployed but they are the base of a growing crime situation and growing drug situation. The same could be said of a lot of chicanos and Puerto Ricans and a lot of other underprivileged groups in society, especially those in the big urban centers. I wonder if there is, in your view, any merit to recapturing something of the CCC to work a social process?
- CAC: Well, at the moment, until unemployment gets worse, I think I lean toward the approach that is being taken with the Job Corps. In other words, bring enrollees on the job and train them in skills to take their place somewhere in the work structure, rather than bring them on the job basically to get the job done. The latter is

what we did in the CCC. Now this could change pretty fast. And there are places where I am sure what I am saying is wrong, right now, but I don't see taking two hundred underprivileged people out of the ghetto and moving them to a national forest to achieve what you want to achieve on the ground.

ERM: Why do you feel that way?

CAC: Somehow I just have a feeling that we're not in the same position we were forty years ago. Philosophies are different. If we brought enrollees to the forest and put them to building roads, growing trees or something, then sent them back to the ghetto at the end of six months, what good would we have achieved? Not much. For some maybe, but a minor amount. Whereas, if we put them through the Job Corps route, where we teach them to be carpenters, mechanics, painters, or whatever it is, when you send them back at least they have something to fall back on.

ERM: Isn't there a continuing need for a greater labor force in the woods and in the rural areas? Because this is the area of society from which our populace has fled with the result that we are up against it for labor.

CAC: We do need rural labor.

ERM: Can you train some of these youngsters to make a longer term occupation of, let's say, building roads, making trails, dealing with epidemic insect infestations where you've got to go in and cut, peel, and burn or whatever you do in a given infested area and where you need lots of manpower to do the job? Maybe this is the kind of job that they have to be trained to do. They are not all going to be carpenters and plumbers and brick layers. Those skilled trades will only absorb so many Job Corps trained people. Maybe we need them to work in the harvest fields and in the forests. Maybe they could be put to work there.

CAC: There's no question, we could do it with some.

ERM: This might be the means of getting a lot of those people who have fled the land back on the land.

CAC: It might be, but I don't think they will come back by any training we are going to give them. That's just a personal view. I could be completely mistaken.

- ERM: I can understand the reluctance of anyone in an administrative position to take on the responsibilities of such a job. It would be a more difficult job of discipline than probably ever obtained in the CCC days of the Great Depression. And it would be compounded by the great explosion of drug usage that has developed in recent years.
- CAC: I don't ever remember anything like that in the Depression days.
- ERM: If they had any problems, it was with beer and booze. They didn't have it with hard drugs.
- CAC: No, they didn't have much of that, but they didn't have much money. This is one of the problems today. You wouldn't have a drug problem if you didn't have money.
- ERM: Probably the worst part of the drug problem is that it is in the most poverty-stricken sections of our country. It's not that they have a lot of money to buy these things. They get hooked on the stuff and then, in order to sustain their habit, they have to go out and steal from somebody and sell whatever they can steal to keep their habit alive.

SESSION II, TUESDAY AFTERNOON, APRIL 1, 1975

- ERM: I want to go back just a little bit here and talk about your early work in the Forest Service. You had a great variety of things to do and, in addition to building a barn, counting cattle and sheep, and marking and selling timber, you surveyed boundary lines, maintained telephone lines, prepared plans and reports, and had what you describe in your memoirs as a myriad of other duties that an assistant ranger had to do in those early days. All this caused you to wonder why you devoted so much effort to an academic program in college when the work you did seemed to have so little relationship to that academic training. That was just, I suppose, part and parcel of the apprenticeship training of the Forest Service at that time.
- CAC: Yes, that's what it was, exactly. It wasn't perhaps all necessary in order to learn to do the job, yet it was pretty necessary, I think, for the individual to find himself in terms of the job ahead and his self-discipline. It wasn't all bad.
- ERM: How has that changed over the years?
- CAC: In my youth apprenticeship involved primarily doing the job, a subprofessional effort primarily. At present, much of the nontechnical work is done by subprofessional employees. And professional people are called upon to more nearly apprentice themselves in professional fields. What do I mean by that? We mentioned building a barn. There's no sense in an assistant ranger trying to build a barn--the carpenter would do a much better job to begin with, and there's no need for the professional to get that kind of training. On the other hand, to get professional training you don't start right out doing a professional job at the top level. You start out learning what constitutes the mechanics of the professional job. Gradually, then, the professional job becomes a job of making management decisions, setting up management alternatives and deciding between them. That's the professional job, and the subprofessional job is to facilitate the decisions. Today the personnel, generally from the very beginning, is assigned professional duties in contrast to subprofessional duties. It's good training and good discipline to do some of the facilitating work. In the process some folks find that they don't want to put that much effort into the job.

- ERM: People who come to the jobs today, though, don't live quite as isolated a social life as they did in your time.
- CAC: No, of course not. They don't need to. They wouldn't want to and they don't need to. I was an assistant ranger eighteen miles from the ranger. I had no car but two horses. Two other families were in this little community. Ranches were around it. Well, this was isolated, relatively speaking. But this was the way many of these small western communities were. Scattered ranches with an occasional small accumulation where the post office was located, and in several instances this is where the ranger was. This is no longer common.
- ERM: The ranger lives in town somewhere and drives to and from this area.
- CAC: Yes, he has to just to carry out his job. Another thing, if you are going to get the ranger with the ability, training, and capacity that you expect, you've got to provide some facilities that are essential to family life. This involves such things as a doctor, a church, a store, and a school. You don't get this at the end of the earth, in isolation, like many early pioneers had to live.
- ERM: What was the social life like out there in the assistant ranger's job when you first started?
- CAC: There wasn't much of any. Periodically on a Saturday night, somewhere in that general area, there would be some kind of community gathering around a dance, and that would be about the size of it. Other than that-- that was all.
- ERM: You mentioned being brought back to Washington in 1932. What was the reason?
- CAC: At that particular time, the use of biometrics was just breaking into the professional field of forestry. It had been pioneered earlier by folks such as Donald Bruce and F. X. Schumacher, but there was only a small nucleus of statisticians or biometricians in the field of forest research scattered over the nation. The Forest Service knew that statistics was a tool that should be developed. And they decided that they would follow the practice of detailing three or four young researchers with data at hand to the Washington, D.C. office for a year to work with Schumacher and to take courses in the graduate school of the U.S. Department of Agriculture. I was selected to take advantage of this opportunity, to take some data that I had in hand to Washington, and there to work directly with Schumacher. I was to analyze and develop this information under his direction, primarily

from a statistical standpoint, and to take these courses in the graduate school.

ERM: What did your data pertain to?

CAC: A survey was made of fire damage as a result of the 1931 fires. The data that I was working on at that time were just essentially an inventory that was made after the fire had occurred. We had severe fires in 1931, and in the summer of 1932 we made an extensive inventory of the condition of the land over which some of these fires had burned. The details were data that I had to analyze. Not only analyze them from their own merits but analyze them to demonstrate statistical principles that Schumacher would illustrate. It was a very rewarding experience. Four of us were there that particular year--Roy Chapman, George Jemison, Luther Schnur and myself. It was most satisfactory.

ERM: Did that assignment fall upon you out of the blue or had you actively sought it?

CAC: I don't recall that I ever sought it particularly, nor do I recall who suggested it. The suggestion for this must have come from E.N. Munns who was then in charge of silvicultural research in the Forest Service. He must have known certain of the circumstances under which I was working and he made the suggestion that I be assigned to this job. It was more or less under his broad direction that the assignment was made. And the idea for it must have originated with him, although I don't recall. I certainly didn't apply for it because I wasn't aware that such a thing was available until I had the opportunity to be assigned. It could have originated with the director of the experiment station, Clarence L. Forsling. He might have suggested it to them. Certainly he concurred in it or I wouldn't have been able to accept.

ERM: I knew Ed Munns. He was one of the old, what shall I say, Pinchot boys of the preservation or regulation inclination, wasn't he?

CAC: Well, he was colorful, dynamic; and had strong convictions in respect to conservation. And he did a great deal. He was an exceedingly imaginative man. Ideas just popped out all over. He was in the Washington Office for a number of years and in that capacity he influenced forestry in the nation quite a bit. He was a dominant influence in Forest Service research, and through that he influenced forestry more than most people would commonly recognize, I think. Because of his great mental and physical energy, he made quite an impact.

- ERM: Yes, the compilation of that bibliography of his two volumes is quite a feat, especially at that time.*
- CAC: It certainly was.
- ERM: It was a research tool of considerable value.
- CAC: Very much so. He had great capacity. And, of course, he inspired young people to do the kind of work that he thought that you were trying to do. He encouraged you and asked you to reach for a little higher level than you would otherwise.
- ERM: He was made a Fellow of the Forest History Society on the strength of the work he did on the bibliography.
- CAC: It was a very deserving recognition.
- ERM: You mentioned George Jemison as one of the people that you were associated with in this program at Washington. You've known and been a good friend of his for many years.
- CAC: Yes, of course. We were both from the University of Idaho and we overlapped there. Then we were neighbors in Washington and worked in neighboring offices. Our careers have caused our paths to cross continuously since then. Yes, it's been a fine friendship.
- ERM: Another lifelong friend noted in your memoir is Dan Bulfer, personnel officer of Region 6. How long has that friendship lasted?
- CAC: One Saturday evening in late summer, I first ran onto Bulfer in Idaho when I was assistant ranger. I'd reached the point where I just felt I had to have some company. There was a community near West Yellowstone where they had a fine community dance and there was a fellow who was going. It was about fifty miles away over poor road. I said, "Just a minute, I'll change my clothes and go with you." He said, "I'm not coming back." I said, "It doesn't make any difference if you are coming back or not; I'll get back some way. It's only fifty miles and I'll walk it." So I went to this dance, and during the course of the evening I got acquainted with another young forester who was working

*E.N. Munns, A Selected Bibliography of North American Forestry, 2 vols. (Washington, D.C.: GPO, 1940).

on an adjoining ranger district over there. Sometime about daylight when the party broke up, he said, "I'll take you home," and that proved to be Bulfer. He drove me home and when we reached the station, I recall very well that we mixed a batch of hotcakes for breakfast. He said, "I better be getting back." I thought, "What can I do for you?" There wasn't anything I could do but I happened to have a new pair of Levi overalls. I was able to give him those. That was when our acquaintanceship started. I didn't see much of him through my career until I finally worked with him here in Portland at the time he retired. He was chief of personnel when I was regional forester. It was a somewhat amusing and very pleasant and interesting way to get acquainted.

ERM: Was this Washington training that you took related to the job of assistant compiler which was made available at Ogden, Utah?

CAC: No, no that came before. Assistant compiler, you see, was an interim arrangement pending the time that I would get to professional status from the Civil Service register. Once I got professional status, there was no further use of any title of that nature. When I took the Washington assignment, I was then a genuine forester on the roles of the Civil Service.

ERM: Among those who were veterans of the Forest Service and with whom you worked is C. L. Forsling, director of the experiment station at Ogden.

CAC: Yes. I have the fondest recollection of him. He was director of the experiment station in Ogden when I was assigned there as an assistant compiler and later when I joined the station as a general forester. He was a great leader who had lots of vision. He inspired us all to try and do just a little bit more than we probably were capable of doing. He was a top man. We all respected Forsling. By "We all," I'm speaking of the staff who respected him as a person who could demonstrate the proper direction that research ought to go and looked to him for the kind of leadership that he gave us. He was really an enviable leader and I had the greatest respect for him.

ERM: Can you illustrate how he inspired confidence and respect? What kinds of things did he do?

CAC: First of all, he was imaginative. He had ideas about research projects, the kinds of studies that needed to be done to solve problems. I think he had a pretty clear concept of how you related research results to problems.

He understood the gap that exists between knowledge and practice and how you close the gap. He was able to convey this in such a way that all of us associated with him had a little better understanding of some of the relationships in research other than just plain studies and technical applications. He maintained excellent cooperative working relationships with his administrative counterpart in the national forest administration, the regional forester, Mr. Rutledge, and the various forest supervisors. I am sure, by example, he conveyed to the staff the essentials in this particular environment. Then he was director at the time that this expanded program in the early days of the New Deal occurred. Never did I hear him face up to a task and say, "This is too big for us, it's something that's insurmountable." It was merely, "How do we cope with this most effectively?"

ERM: What do you remember as being the very difficult problems that you had to cope with in that time?

CAC: Let me say one other characteristic of him that I think stood out, that he brought over to me. This really originated in research but it applies to your life as a whole. That's the need for precision and accuracy when you do a job. You don't do sloppy work. Period. You asked a question about some specific instance in the relationship that manifests his ability and interests. I don't know whether I can put my finger on just the kind of thing you have in mind.

ERM: For example, in what ways did he show the particular talent in a given situation to close the gap between what you knew from your research work and the real application of it at ground level? That's always a tough one. How did he deal? Can you think of a specific instance?

CAC: Let's take for example the problem caused by the floods from the mountains between Ogden and Salt Lake City. There was a period in the mid-thirties when some very severe floods issued from those mountain watersheds. Forsling along with Reed Bailey and others analyzed these particular watersheds. They were practically inside the communities of Ogden and Salt Lake, and with Forsling's leadership it was pretty clearly established, beyond doubt, that the cause of these floods was overgrazing at the higher altitudes-- these were small areas in the high altitudes, not promiscuous widespread overgrazed areas because the topography did not lend itself to this. So he related this to the

circumstances of the climate in the valley below and provided the base upon which a complete rehabilitation program for those watersheds was developed. CCC camps were placed on the watersheds and terraces were dug.

This is the first place that I am aware that terraces to hold water on the slopes were constructed in the United States. This was done, I think, in Italy before, but to the best of my knowledge, this was the first place in the United States. The idea being that any water that fell on these overgrazed areas would be held in place rather than running into the channels. As this program proceeded, the water was held in place, revegetation was done, grazing was controlled and, to the best of my knowledge, flood hazard has completely disappeared. Forsling was assisted in this program by several others, but he was the dominant force, not only in organizing the program but providing the basic information on the relation of grazing and the land and water to the problem. A terrific job.

ERM: What do you recall as some of the other difficult problems that you faced at that time?

CAC: The main emphasis in the Intermountain country at that particular time had to do with the impact of livestock, primarily, on the watershed. This was the current point of interest. There was a widespread interest in the conditions of the watershed in the Colorado River. A major survey of that was made in those days. There's a tremendous amount of normal erosion in the Colorado River, and there is also some accelerated erosion of material due to man's use. There was a very major job undertaken on the Boise River watershed, where grazing was related to adverse water conditions. I spent one summer assisting in making a survey of the relationships of grazing to watershed conditions on the Boise River in the watershed above Boise and the irrigated valleys below. Fire got top attention. The late twenties and up to the mid-thirties were some severe fire years. In central and southern Idaho, 1931 was a very bad fire year.

ERM: That was a drought year too, wasn't it?

CAC: Oh, yes, very severe. This was superimposed on the Depression years. We had "job fires," and it eventually resulted in martial law in parts of Idaho. The countryside was badly disrupted because of fire. I started fighting fires that year on the 5th of July and was on fires continuously until sometime after Labor Day. Timber management, as such, didn't loom too large. We

hadn't large pressure for production of timber in the public lands. Yes, they were cutting some timber in various places, but the problem associated with timber harvest wasn't a big regional issue.

ERM: You were concerned with range management.

CAC: Yes, this is the point I made earlier--range in relation to watershed. Grazing and watersheds were in conflict.

ERM: This was and still is an area of the country that is heavily influenced by the Mormon religion. What impact have Mormons had upon the Forest Service in that area?

CAC: I don't know as the Mormon culture has had much of an impact, yet I don't think it would be fair to say that it hasn't had some. After all, in southern Idaho and Utah, the Mormon culture is significant and dominant. It's essentially wholesome. I don't think it influenced the Forest Service's general policies particularly, but the mere fact that a large number of Forest Service employees in that area had their basic training and philosophies related to the Mormon Church must mean that the church would have some relation to some of the things that happened in the forest. But as I say, I don't think Mormonism and the Forest Service philosophies and principles have much relationship.

ERM: Were Walter Mann and George Craddock Mormons?

CAC: No, neither one. They were close friends and early associates. They worked in Ogden. They both live in Ogden yet in retirement. One was from California and one from Montana.

ERM: You don't think there has ever been any serious clash between the Forest Service and the Mormon culture then?

CAC: No, I'm not aware of any.

ERM: To what extent do you think the Mormon community had impact on Forest Service personnel who worked among them but who were not of them?

CAC: I never encountered anything adverse myself. I've heard some stories that would imply that there might have been some adverse incidents in the small way with families, but I can't verify it from personal experience. They didn't bother me. I got along fine.

ERM: It was at this point that you met your future wife?

- CAC: Yes. I met my wife in Ogden and we were married there.
- ERM: Where was she working?
- CAC: In the Forest Service.
- ERM: What was she doing there?
- CAC: She was a clerk in the regional office of the Forest Service in Ogden. She originally came from Wyoming. She went to work for the Forest Service first in Wyoming.
- ERM: Then she knew what she was in for when she married a Forest Service man. She knew that she was destined to live a parapetetic life.
- CAC: She knew the pattern. She didn't know the details.
- ERM: What was your wife's name?
- CAC: Myrtle Snyder.
- ERM: And what year were you married?
- CAC: In 1932.
- ERM: Right at a low point of the Depression, right?
- CAC: We weren't deterred by the fact that the economic conditions weren't right.
- ERM: What would you have to say about your early years of married life there in Utah?
- CAC: It was very enjoyable to us. My wife worked quite a bit of the time and we were on a seasonal basis. We were in Ogden in the winter and in Idaho in the summer for two or three years. We enjoyed this. We were associated with a number of other young Forest Service families and this happened to be right at the period of time when new people were being recruited under these various programs we discussed earlier. This meant we had a lot of folks around about the same age and with the same interests, so from a social standpoint, we had a real friendly and happy time. From a professional standpoint, it was equally as good. We had this opportunity to expand in terms of our work, and this was a challenge and a great pleasure. We were very happy in headquarters in Ogden and summer headquarters in Idaho. We left there with real reluctance. It was a real pleasure for us. Left good friends we still have today.

- ERM: Under whose direction were you serving at that time?
- CAC: At the time I left Ogden, Reed Bailey was the director. He had succeeded Mr. Forsling a year or two before, and he remained there as director until he retired not so long ago.
- ERM: Do you have anything to say about Reed Bailey?
- CAC: Reed Bailey was a great addition to the Forest Service. He came to the Forest Service from a professorship at Utah State College where he taught geology. He became involved in the Forest Service by working with Forsling on watershed problems. He was very adept at relating plant and soil relationships from a geological point of view, and made a lot of sense in his analysis and his interpretations. This was home country to him also. He worked on an intermittent or seasonal basis for the Forest Service over a period of years, so when Forsling left, he was asked to take the directorship. I think all of us were very pleased to have this transition, because we admired Bailey as a scientist and as a real producer in the field in which we were all tremendously interested, that is the soil-watershed relationships. He went ahead and became a very successful director for his entire career. It was a very wise choice. Even though, as I say, he had no fundamental training in biology, he acquired a good working knowledge on the job.
- ERM: What was the first research that you devoted yourself to once you became equipped with this new experience and training back East?
- CAC: I guess my first bit of research resulted in a publication called "The Accumulation and Rate of Melting of Snow as Influenced by Forest Cover."
- ERM: Was that your first publication?
- CAC: Yes, it was the first one. This was a study that was undertaken by Lyle Watts and myself at McCall, Idaho. There had been a history of some erratic stream flow in the south Idaho area and the Idaho state legislature, due to circumstances that I don't remember in detail, had passed some kind of a memorial to the U.S. Congress asking that further timber harvest on the Boise River watershed be terminated, because it was adverse to watershed conditions. This memorial was adopted without any evidence. It was merely an opinion of someone who had seen the results of erosion and other things accumulating in the reservoirs and streams.

Watts and I set out then as a team of two to study the effects of timber cover as it might be related to harvesting. In the spring of 1931, we started the study at McCall, Idaho. We began work in the snow at the time it accumulated at its peak in March and then continued until it disappeared in the spring. We did this for three years in the same general location, and I analyzed this and wrote it up and it was published in 1936, I think.

ERM: Was this something that you authored with Watts?

CAC: No, by this time Watts had long since gone. Although he was really the organizer of the study, he had long since disassociated himself from it and counseled me to just go ahead and handle it. So I authored it alone. It was published in the Journal of Forestry.* It's a perfectly logical set of conclusions that prevail today as good as they were then--that ground cover intercepts snow. No ground cover lets it fall and accumulate.

ERM: Would you provide a good thumbnail picture of Lyle Watts?

CAC: That's easy to do because I was closely associated with Watts. I am pleased to be asked to comment on Lyle Watts. I feel qualified because I spent many days with him; the two of us worked on various projects in the field.

ERM: When was the first?

CAC: The day I went to work for the Forest Service. He showed me how to set up a compass in 1926. He was in charge of timber surveys out of the Ogden office. He happened to be with the crew that I described earlier to you, and that was the day I met him. I worked intermittently with him the rest of my career. He was a real top hand by most every set of standards. First of all, he had a deep-seated personal conviction that related to the forest and the Forest Service, in terms of their meaning to him and to the nation as a whole. I'm thinking primarily of his own personal management. He felt throughout his career that the forests were here to be properly used and managed and that they could be, and that he would do all he could to bring this about. He believed in intensive management. He was a long way from being a custodian. He was an intensive manager and he visualized intensive management, way out and beyond where we were at that time and even maybe where we are today, I don't know. He believed in refinements of intensive management. I can remember, for example, long discussions I had with him about the merits and

*"The Accumulation and Rate of Melting of Snow as Influenced by Vegetation," Journal of Forestry 33, No. 6 (June 1935), pp. 564-9.

demerits of the technical refinements, such as pruning. I would say that he brought to the Forest Service a great deal in terms of its technical base. One of his great contributions was his technical base.

Then superimposed on that, of course, was a set of convictions of truths and right that he brought to the Forest Service. Whether you agreed with him or not, you had to agree with the courage of his convictions. There were people that didn't agree with him. But I don't think anyone ever disagreed with the sincerity of his convictions; they disagreed with the end product. He was human, understanding--little things were meaningful to him. He was realistic, conscientious, without ever being stuffy or obnoxious.

- ERM: Can you remember any anecdotes that would illuminate his character?
- CAC: It's hard for me to just pull out individual instances.
- ERM: You were working on a day-to-day basis with this man in the field for an extended time in Idaho, weren't you?
- CAC: Yes. I sure was. I worked with him there.
- ERM: Were you just two men working together or were you part of a larger working team?
- CAC: No, the two of us worked together.
- ERM: Were you out in the field together for extended periods of time?
- CAC: Yes. We spent the day and the evenings together. We got to know each other really well. I learned his philosophies. I just hope a lot of him rubbed off on me.
- ERM: How did he relate, for example, to the people who were living in the area in which you were doing your research?
- CAC: I don't know that there was much. Watts was a fellow that was just naturally part of this western scene. He liked to characterize himself as an Iowa farmboy, and he was, no doubt about it.
- ERM: An Iowa State University man?
- CAC: Yes. He was married in Idaho. He was the forest supervisor at McCall, Idaho. He was just as much part,

philosophically, of the western scene as anybody. Speaking of Idaho, here is one little incident he told me one time. He went way back in that Salmon River country which is remote country. He stopped somewhere overnight at a ranch. This was during the time it was out of season to kill deer. He was served venison at the table and it was apparent what he was served. They made no effort to disguise it. These were in the days when all forest officers were deputy game wardens. The question was what to do about it. He said, "Here I was, in this back country, and yet if I let it go, all law and order which is connected with the Forest Service officer goes with it. On the other hand, if I do something about it, we develop a set of animosities in relation to a forest officer. What do I do about this?"

ERM: It was a real dilemma, wasn't it?

CAC: It was a real dilemma. Well, it posed an interesting question, and maybe I shouldn't give his answer.

ERM: Why not?

CAC: As I recall, he served some kind of a warrant or subpoena for this game violation. I don't remember the outcome.

ERM: You mean he served this on them at the time of the meal or later?

CAC: There was more to it than the meal. It was an obvious violation. Maybe the deer was hanging on the porch. But in any event, there wasn't any question that a violation was there. So he, rather than ignore it, took action. I don't know what became of it, if anything, but he did. I'll tell you another little incident. I can think of many of them as time goes on. I thought of this one many times.

The first time we were out with this crew, we'd been out without much of any contact all summer and Watts came to visit us in September, just about time to close up for the season. Well, we hadn't had any storm all season and about the day after Watts arrived, we were due to move camp. And our moves were with six or eight pack mules for six or eight miles. This was a perfectly normal thing to do but during the course of the night, it rained--the first rain of the season. When we got up in the morning, it was still raining, not hard but significantly so. The tents were wet, some of the ropes

that we were using to lash the packs were wet, and of course all the rigging was wet. Generally, it was a lousy day to do anything. Here was this young forester in charge with a decision to make. It was his first year out, and here was the boss from the Ogden office standing there around the fire. We got through breakfast and the boss said to Watts, "Well, what will we do?" Watts said, "It's up to you. If you want to move, it's all right with me. If you want to stay, it's up to you." I was standing there and watching. Here this young boss would like some advice, yet if Watts made the decision for him, he would never learn to do his job. I could see the position he was in. We stood around another hour or two. During the time there was some conversation, and Watts made it clear once more during the course of it that he was just a visitor there. Finally about ten o'clock it was just a drizzle, so the boss said, "Let's move." So we knocked the tents down and one way or another we got them on the horses. We were way up there in the high altitudes; it was pretty chilly. We got to where we were going, but we didn't get there in time to set up camp. We rolled out our beds under a tree to sleep that night. Watts never said a word. That was fine with him. I've thought many times since, "What should he have done? Should he have advised that young fellow or should he just let him make the decision?" But that's what happened. That's an illustration. You can judge for yourself what he should have done.

ERM: What do you think would have profited the young leader more--following the line that Watts did and leaving it entirely up to him to make the decision or to advise him?

CAC: I don't know. As I say, I don't know which would have been better. I am a little inclined to think that he might have counseled him, as I look back on it.

ERM: What would you have done?

CAC: I don't know. As I look back on the whole thing, I am a little inclined to think that the boss might have counseled the young man.

ERM: You must have been in similar circumstances as the boss yourself over the years?

CAC: I suppose I was and probably just didn't even remember it, but I sure remember that one. Those are a couple of early incidences with Lyle Watts. He was a fine

asset to the Forest Service. He was a very human person and whether you agreed with him or not, you had to admire his convictions.

ERM: You were one of his assistants then at Ogden, were you not?

CAC: Yes, I was his assistant. He had one, and I was it.

ERM: For how long were you under his direct leadership?

CAC: I don't suppose it was more than two years at that time.

ERM: What would you say about Watts's influence on your career as time went on? Watts himself had a rather mercurial rise to the top of the Forest Service, did he not? He became chief of the Forest Service.

CAC: Yes. I don't know that it was mercurial. It was steady. He went through all the chairs. I like to think that he had a major impact upon me, in values, technical interest, honesty, dependability, and respect for the organization, its obligations and duties. These are the kind of things. Watts was the kind of fellow that wanted to review particular technical problems--why this reproduction wasn't growing or why that disease was occurring--all these basic matters. He was basically a technical forester and a very sound one. He had a very sound knowledge.

ERM: You mentioned that Watts went through all the chairs to become chief. What does that mean--going through all the chairs?

CAC: By that, I meant that he began as a forest assistant. In those days it was a junior forester; that's a beginner. I know he was assistant forest supervisor. He was a forest supervisor; he was a staff man in the regional office. He was the director of an experiment station. He was a dean of a forestry school which is a sideline, of course, as far as the Forest Service is concerned. He was regional forester in two regions. There weren't many more opportunities he might have had, with the exception of the fact that he never was assigned to the Washington, D.C. office. However, just before he became chief, he was assigned to the secretary's office--working on war manpower.

ERM: Secretary of Agriculture?

- CAC: Yes, so he, in effect, had left the Forest Service on a temporary basis, and he was really working out of Washington when he was made chief, although his family was still in Portland. He hadn't moved to Washington. But he never was in the Washington office of the Forest Service until he became chief.
- ERM: Usually there is a transitional period in Washington before a man is brought up to the chief's position.
- CAC: Very common and very desirable too. I'm sure a candidate can do the chief's job better if he has been exposed to it in a Washington office assignment. Watts went from the secretary's office to the chief's job. And he had been in the secretary's job only a very short time.
- ERM: A question or two about the research you did on snow melt. You indicated what the study results were, and what you learned from it. As far as you know, was this the first study of its kind, or had there been many more before?
- CAC: Not many, but there had been one in Switzerland and the Wagon Wheel Gap study by Carlos G. Bates in Colorado. It was strongly related to this study. The Wagon Wheel Gap study was done, if I remember correctly, in 1912 and I think was reported in 1920. I think the study in Switzerland was done about the turn of the century. Both of these studies relate to the one we did. Not an organized study, but observations that relate very much to what we carried out were done by a professor named Church, at the University of Nevada over a period of a long time on Mt. Rose. In fact, he had built a tube that is used to measure snow. Church was at the University of Nevada for many, many years and he made observations and wrote them up, much the same kinds of observations we made.
- ERM: Was the first study that you were aware of the one done in Switzerland?
- CAC: That's the earliest one I'm aware of. There could have been others, but I remember the Swiss study as first.
- ERM: Did your methods in conducting this study parallel those that had been used by other scientists in the earlier studies?
- CAC: No, as I remember, they didn't particularly.
- ERM: You used some kind of a grid plan?



Rocky Mountain Forest and Range Experiment Station Staff, 1943. Left to right, C.A. Connaughton, D.F. Costello, Clyde Maxey, Paul Ginter, E.M. Hornibrook, H.G. Wilm, W. M. Johnson, Marie Garwood, E. Klipple, Noel Wygant, E.G. Dunford, and Bert Læxen.



Henry R. Koen Experimental Forest, Arkansas Ozarks, March 4, 1952. Left to right seated, Lyle F. Watts, Henry Koen, C.A. Connaughton, and Harold Mitchell. Standing, Ozark Branch Staff, Ralph A. Read, Eugene Shoulders, W.S. Smith, Clement Mesavage.

CAC: I don't remember that anybody used this. I think that this was the system that was devised by Watts and myself.

ERM: Was it a plan that was particularly applicable to the terrain in which you were working?

CAC: Yes and no. The plan could be adapted to most any terrain, but in order to eliminate the effects of exposure, which is very pronounced, we said that we would conduct our study on flat ground. The design of the study, then, was particularly adaptable to a flat area. Later, I participated in developing a study of a similar nature but on a much more extensive scale on the mountains in Colorado. That was not on flat ground at all. There were so many more samples taken that they tended to iron themselves out in terms of exposure.

ERM: Did you have any contact with the state legislature at this time?

CAC: No, I was just participating in the study designed to shed some light on the problem.

ERM: I presume that the problem had been brought to the attention of the station from where--Washington or Idaho?

CAC: Idaho. I'm confident that it was that way--I don't remember.

ERM: To what extent were you able to establish in your own experience very clear evidence that fires were manmade during this period of the Depression. A great deal of circumstantial evidence supports this. Were any people apprehended in the act?

CAC: I never saw anybody set a fire, Woody. But, for example, I recall reaching the top of one rather high promontory near Cascade, Idaho one afternoon. I looked out and saw five columns of smoke rising about a quarter of a mile apart. No doubt somebody had just gone through the woods and set five fires. These were the only circumstances. I never saw anybody actually set them. I just saw the circumstances.

ERM: At that time how did you mobilize your manpower to fight fires.

CAC: There's always a certain number of full-time Forest Service employees that are called first. The next line

of defense is the local labor force--loggers, road crews, mill crews. Then for the third line of defense in those days, you went to the open labor market in the first population center you could reach. In our case, why it was Boise. Go on the streets and try to hire somebody, get a truckload and load them in, and away they would go. Then they would get another truckload. Put their name on a time slip. That's all there was to it.

ERM: The Indians were pretty good fire fighters.

CAC: We didn't have any Indians in those days in our area. Somebody might have had them. We didn't have airplane transportation.

ERM: That's right. You didn't have these specially trained units like they have down in the Southwest where the Indians would fly all over on special assignments. What about prison people? Were they ever employed to fight fire?

CAC: We sure used a lot in California, later. But I don't know whether we used them in the early thirties. I just don't remember. But in my more recent experience in California, we used lots and lots of prisoners very successfully.

ERM: What about military troops?

CAC: Of course, in 1931 there weren't any troops around either--darn few troops. I never saw or heard of any, but they did call out the National Guard.

ERM: What experiences do you recall most vividly in regard to the fire problems that you had to deal with?

CAC: The most critical was 1931. By the Fourth of July, the forests were too dry and ready to burn. We had a fire and I started to work on it. By the time that was over, a lightning fire had occurred over in the Salmon River primitive area. I went to that. By the time that was over, I returned to the Boise Basin fire which was a sixty thousand acre fire that kept us busy pretty much of the rest of the summer.

We had very little machinery to fight fires in those days. It was nearly all hand work. Nowadays we use bulldozers and airplanes. I can't remember seeing a bulldozer or anything in those fires. There wasn't such a thing in 1931; I don't think the bulldozer was

developed until 1934. It was an axe and shovel job, a young man's job, and we worked rather foolishly long hours. We didn't settle down to, say, twelve-hour shifts that you try to do on an organized basis now. It was not uncommon to put the first crew in for at least twenty-four hours. Then we'd begin to get them strung out on a twelve-hour basis. We had the usual loss of life. I don't really know anything else that was unusual. It was just the drudgery of getting a line against the fire and burning it out so that there's no fuel between the fire and you, and staying with it until you get around it. By the time it was over, I had a severe cold which tends to develop if you stay about half-undernourished for a long period of time. I was in kind of tough shape.

ERM: Did you have any close calls?

CAC: Yes. One day I took a crew of about six loggers and twenty locals into an area to fight this fire off an old road. The fire was roaring down the canyon below the road. I left these locals along the road to kind of watch what was happening and took the loggers up into the head of this area to try to cut the fire off. It wasn't long until we could hear that fire roaring below us. We knew something was wrong, so we came back down to the road. It was a mining road--barely passable--and our friends had long since disappeared. The fire was in the process of jumping the road on a very steep hillside. We scrambled up the bank and tried to corral a few spots that had crossed. We soon could see that we were completely outflanked by the fire. So we went back to where we had been. We were able to find a cool spot, and we got into where the fire had burned. Of course, that's the safest place in the world to be in a fire, once it's gone by. That was in the morning, and we walked until afternoon to get out of the place. I ruined a pair of shoes getting out of there.

We got out and found that this crew of locals had left us for hopeless and reported to camp that we were burned in the fire. Fortunately, the supervisor knew all of us. He said, "I'll take my chances; I'll wait a little while." We showed up, and he didn't have to report it.

But we always had the fire whipping around us. In this same run of the fire, two fellows down the road further on in another crew were lost--burned to death. You get into a certain amount of these rather tight spots, but there is some way to meet it if you can just reason

it through. If you try and outrun it and panic, there isn't much chance.

Another time in a fire not too long after that, we were in a slashing area which blew up and burned violently. It made a very severe run. We had CCC boys this time, and as we came down a road we were cut off. We then tried to climb a mountainside out of the canyon. It was very loose and steep ground. We were able to claw our way up this thing. But nearly at the top, an older man said, "I can't go any further. Just leave me here to die." Well, that doesn't help you any, when you are trying to get out of the way of the fire. Actually the fire was across the canyon from us and getting kind of hot, and here's this fellow saying he can't go any further. Two or three of us pulled him over the top of the hill. Once you are at the top you have pretty clear sailing going down. We got all the kids up there. The CCC boys were all kind of excited. We lifted the old man, got the boys out, and finally reached a truck. And the CCC boys said, "We are never going to fight fire again. We're through!" God, they were excited. The next morning we went back to fight fire with a crew. We went in at 4 a. m. A truck arrived, and who was on this truck? This same bunch of CCC kids, full of life and ready to go. They'd already forgotten. That's one thing; it made them good fire fighters. They just had a lot of pep and vitality and courage. They were scared one night, but it took them less than twelve hours and they were right back on that job.

ERM: You were placed in charge of forest management research work following Lyle Watts?

CAC: Yes. He transferred to Missoula as director, and I continued the project.

ERM: What do you suppose was his impact on your getting that position?

CAC: I don't know what influence he might have had. If he'd spoken unfavorably, I wouldn't have gotten it. On the other hand, he had no responsibility in designating me because he was on another assignment.

ERM: What has been your experience in that regard as you have moved from one position to another in the Forest Service? To what extent do you feel your recommendations for a successor have been taken into account, or are they not solicited?

- CAC: Yes, I think that the Forest Service is glad to have your comments. I have never really felt that it was my obligation to make suggestions for successors for myself unless asked. I like to make recommendations for men that are working with me, but I never quite felt that it was my function to choose successors for the job that I was in.
- ERM: What is the tradition in respect to appointing people to positions of that kind? They are appointed, right?
- CAC: They are assigned.
- ERM: How are the judgments made as to their assignment? Let's assume, for example, that you are leaving the directorship of a research station. What now begins to function in the Forest Service by way of replacing you in that job?
- CAC: There is available in the Forest Service a roster of potential candidates for each position. For example, in the case of directors, there would be a roster of potential directors available that is on file. In this case, the chief would choose a director from the roster in his office.
- ERM: Who makes up the roster?
- CAC: It's made up by the chief and his staff. They would gradually accumulate the names that appear on this roster with recommendations that they have received from their other directors and from any source that may come to them. "So and so is recommended for this roster." A chief will have a selection committee that will examine this roster and it will say "Jones is recommended." They look at this once or twice a year. If for some reason the committee says, "This recommendation is not consistent with the other people you've got on here; somebody is out of line," then the proposal would be reexamined. Finally only qualified people are included for consideration. In the field the regional forester has a roster for a forest supervisor. For each level there is a roster for the next highest level.
- ERM: Are those rosters made up at the levels at which the appointments are made, or are they always held at the chief and staff level? Would there be a roster, for example, at the regional office for personnel who would fit into any slots in that regional office, other than the regional director? I would presume that the roster for regional directors would be maintained in the chief's office.

- CAC: Yes, it would have to be.
- ERM: But where was the roster for anyone below the regional director?
- CAC: I imagine that the roster for any assistant to the regional director would be held in the chief's office too. This varies by grade. The ranger's roster would be held at the regional level. For assistant regional forester and regional forester and some supervisors, depending on grade, it would be held at the national level. For some supervisors and rangers, it would be held at the regional level.
- ERM: Is this a function of Civil Service or is this a function of the Forest Service?
- CAC: The Forest Service has to prepare a promotion plan and submit it to the Civil Service for approval. Then the Civil Service approves it and the Forest Service uses it.
- ERM: So as the rosters are made and amended or reduced in their membership by promotions or demotions, the Forest Service registers these facts with the Civil Service and gets a new roster approved, is that right?
- CAC: No, the Civil Service doesn't have anything to do with the roster, except for the very top grades at the national level. Those can go on a national roster with all agencies participating. But up to those very top grades, the rest of the assignments are made in the Forest Service for the Forest Service. And the Civil Service Commission doesn't tinker with it, except to approve the plan under which it is developed. The Forest Service can list men and leave them on or take them off. It's the agency's own responsibility. These things change, and by the time this is published there may be a new system.
- ERM: Is there a level of administration below which recommendations for roster recognition does not go? Can anybody make a recommendation for somebody to be put on the roster, or does the recommendation have to come from the research station directors, the regional directors, and the deputy chiefs?
- CAC: It's an obligation of every supervisor to screen the personnel reporting to him for roster placement.
- ERM: Up to what level?

- CAC: Everybody that reports to him. In other words, everybody from the janitor to the ranger's first assistant stands for a roster placement.
- ERM: Yes, but roster placement for a promotion to what level?
- CAC: He will recommend him for a roster only one grade above where he is today. In other words, suppose a ranger has an assistant ranger that he thinks may be chief of the Forest Service some day, he doesn't recommend him for that. He merely recommends him to the next position in rank.
- ERM: So in the Forest Service it's a matter of climbing that roster ladder, one step at a time, right?
- CAC: Yes.
- ERM: And to do that successfully, one must achieve recognition from your immediate superiors that causes them to recommend you for the next higher rung on the ladder.
- CAC: Right, it's a very orderly process.
- ERM: Do you think generally the system works satisfactorily and with fairness?
- CAC: I think so. You've got to recognize, Woody, that any time you are dealing with people, you are dealing with unknowns. And those unknowns are there, but the system is sound, I believe. The way in which it is carried out has merit. As a whole, it's a good system.
- ERM: To any considerable extent, does politics ever enter into this realm?
- CAC: I've never encountered it.
- ERM: What about in Earle Clapp's case? Would you consider that a situation in which maybe politics did enter in?
- CAC: Apparently it did. Of course, I was not in a position to observe this directly, but I was told that President Franklin Roosevelt was willing to continue him as acting chief and not as chief. That was four years--which is a long time, frankly. Well, at the end of four years, the secretary of agriculture--I think with real justification--must have said, "I must have a chief of the Forest Service, not an acting Chief." I don't know whether he did or whether he didn't, but he must have said something like that. That's when he put

Watts in and sidestepped Clapp. Of course, by this time, Clapp was getting pretty well along in years. I guess there isn't any question that you could say that Roosevelt, as a politician, wouldn't approve Clapp, but party politics wasn't what stopped that.

ERM: No?

CAC: It wasn't party politics, at least not as I define it.

ERM: Well, Clapp evidently appeared to cross Roosevelt on certain policies.

CAC: That's the story.

ERM: I am very much interested in reading Earle's own interpretation of it in his written memorandum. He left a considerable volume which is now locked up in somebody's basement in Washington.

CAC: According to Gordon Fox, it's down there.

ERM: I understand there was a lot of ill feeling within the Service about it because, even though he was never named chief, he was considered chief.

CAC: Well, he was the acting chief; there was nobody above him. He was it.

ERM: There is no differentiation made on the walls of the present chief. Clapp's picture stands with all the others who were chief before him.

CAC: It should. He had all the responsibility.

ERM: While we are on the subject of chiefs, you've had the experience of serving under many of them.

CAC: I've known them all--everyone of them. I never served under them all, but I've known them all.

ERM: That goes all the way back to St. Gifford, doesn't it?

CAC: Yes, sir. I didn't know him well, but I attended a party or two at his house.

ERM: You had a baked apple?

CAC: Yes, and that's about all I can say about it--I was there. I knew Henry S. Graves very well and sat in his class at Yale. I was very fond of Graves. I knew

Robert Y. Stuart a little bit. Of course, not on a first name basis; I never worked with him.

ERM: You worked under Stuart, Silcox, Watts, Clapp, McArdle and Ed Cliff too, didn't you?

CAC: Oh, yes. Ed and I started together. We were on a range survey together; we were kids.

ERM: If you were to appraise them all in the roles that they had played in Forest Service history, how would you rate them in their separate performances?

CAC: I think that's a fair question and my regret is that I can't be as specific as the question really calls for. But I'll make a stab at it. I'll qualify what I have to say by the general statement that each man seems to fit a particular time in history. There's some kind of an old adage, I believe, that men rise to their particular time in history or occasion, and I think this applies to the chiefs of the Forest Service.

Let's just work backward on this. Ed Cliff was appointed by Orville Freeman and served during a period of fair stability as far as Forest Service direction is concerned. A period which complemented his temperament as a courageous, conscientious and almost stubborn administrator. Yet he served during this time of the environmental crusade in which he took quite a shellacking in many respects. A lesser man would have backed up, crawled, twisted, modified, and changed a lot more than Ed Cliff did. Look what Ed Cliff did with the clearcutting controversy and what he did in a number of other controversies.

If I were to criticize Ed Cliff for one thing, it's supporting his subordinates in the field too well. He took too much of the load on himself. When we made some mistakes--and we did make some mistakes--he didn't back off and say, "Look we've gone wrong here. We are going to have to get you reoriented to do some other things." Instead he defended us to the last ditch. There isn't a member of the Forest Service that didn't get the loyal defense of Ed Cliff. Amazing defense. And during the rather trying times of this environmental crisis, Ed probably could have made more changes than he did. I think as Ed looks back on it now, he might say, "Maybe I should have changed a little bit here and a little bit there, and maybe I should have bent a little bit in this direction." But whether he did or whether he didn't, you must give him real

credit for determination. Ed has been criticized as not being realistic enough in relation to the environmental crusade as he might have been, and I think he'd be the first one to say this himself. Then you go back to McArdle who preceded Ed Cliff. Now, McArdle was a product of the Eisenhower administration which called for great tact.

ERM: Didn't he come in just before Dwight Eisenhower took office, at the end of the Truman administration?

CAC: Yes, right at the time of transition. McArdle is a very brilliant and clever man. He had the capacity to foresee, in many instances, the administration changes. He anticipated where they were going to be next week, and he would be there to meet them. He adjusted to pressures and changes which was essential in those days. The chief had to make these adjustments. Otherwise he would have been out. You see, a clean sweep was demanded when the Eisenhower administration took over. This reached into some of the bureaus, like the Forest Service. And they called on us to make new policy changes on land acquisition and forest regulation. McArdle made these changes. Even though he'd lived with them all of his career, he adjusted and changed. If he hadn't, he wouldn't have lasted.

ERM: On what particular issues do you think he reversed his stance?

CAC: The first one he had to face up to was public regulation of privately owned forested lands. He had to change on that or get out. There wasn't any question of it. Public acquisition, land exchange, tripartite exchange, that is, a three-way trade of land for stumpage--these are things that occur to me offhand.

ERM: You were saying that McArdle had a very sharp sense of the change in the political climate of the country and the demands of the new Eisenhower administration for change in matters of national forest policy.

CAC: He anticipated. In my judgment he did it in the interests of forestry in general and the Forest Service in particular.

ERM: Was there some fear at that time that, if this had not been done, the Forest Service might have been confronted with the appointment of a chief of a nonprofessional order?

CAC: This was always possible.

ERM: But was there some more talk about it at that time?

CAC: Yes, and it was all talk, even then.

ERM: Were threats made?

CAC: Yes, threats were made. And I can name some of the people who were involved and I shouldn't repeat them because they are only rumors. But there wasn't any question that there was discussion, I'm sure. But I don't know whether this originated in some backyard or if there was anything to it. I don't know that it ever came out of Mr. Eisenhower's office. To my knowledge, it did not.

There was another thing that I think McArdle did a tremendous job in. Ervin L. Peterson was the assistant secretary of agriculture during this time. He probably has done as much for the Forest Service as any man in modern years. In many respects, while he was assistant secretary, he called the shots in the operation of the Forest Service. He was interested in the Forest Service, and he acquainted himself with the Forest Service; and he made decisions on the day-to-day operation of the Forest Service that assistant secretaries don't normally make. I don't think we should criticize McArdle a bit because he made it possible for Peterson to make these kinds of decisions. He needed Peterson. Peterson was in a position to go way beyond where the chief could go in making decisions. Peterson, for example, went to the Bureau of the Budget and insisted on certain forestry actions. He insisted also that the Forest Service develop plans for recreation needs. He insisted on us doing things that we conceived ourselves but didn't have the muscle to get off the ground. But by placing him in the position where he was making these kinds of decisions, McArdle attained his objectives better than if he'd tried to retain them himself. I thought that McArdle did a masterful job in marshalling all the forces to get the end product better and subordinating himself to the need. He did a hell of a good job. I thought it was statesmanship. Peterson also certainly deserves great credit because he was the man who had the muscle. He was in a position to and he's the one that wanted to.

ERM: Does that obtain through the end of the Eisenhower administration?

CAC: Peterson stayed on that job until the administration changed.

ERM: Until President John Kennedy came in.

CAC: Yes.

ERM: Then he was out, is that right?

CAC: Then the whole show changed pretty fast. Cliff was appointed not too long thereafter.

ERM: And Cliff inherited a whole new setup vis-a-vis his relationship to the department and to the Bureau of the Budget.

CAC: He sure did. Cliff's relationship, then, was directly with the secretary of agriculture. I don't think Cliff's relationship was with the assistant secretary.

ERM: His went straight to Freeman.

CAC: Straight to Freeman. That's my size of it.

ERM: Of course, Freeman was a pretty staunch friend of the Forest Service himself, wasn't he?

CAC: He started slow. He started under a mountain of wheat and a few other surplus issues, but after he was on the job awhile and became sufficiently familiar with forestry and the Forest Service in particular, he became probably the most vigorous advocate we've had in the secretary's position for quite some time. I don't think he did for us anything more than Mr. Peterson who was terrific, but Freeman did a splendid job. He did a hell of a job and, as chief, Ed worked with him. I think they had a very compatible and close relationship from the standpoint of those of us in the field who were on the receiving end. It worked out well.

ERM: You were in a position to see what the results were.

CAC: Yes, I was pretty close to this thing right along. I became regional forester before Watts left and I was pretty close to this thing, politically and otherwise. Now Watts is a little different. He had prevailed during a period of new philosophies, call it the New Deal if you wish. He had a reformist's kind of approach, an awareness of the place of public lands in the economy, their social values as well as their material values. Of course, one of the very dominant things during Watts's time was the war years. He was appointed right about the time the war began. It must have been right about then, but the precise time escapes me. So, he was chief through the whole war effort which dominated during his early period. Then the immediate postwar period. In fact, his whole service was really dominated by World War II.

The real sharp evolutionary period in Forest Service history, I think, came in Ferdinand A. Silcox's period. It was a very short period of six years. This was the early days of the New Deal, you know, when the whole nation was gripped in a series of social change. And Mr. Stuart fell from the window and was killed. Roosevelt picked Silcox up from the International Typographical Union in New York City, put him in this job, and he responded beautifully. He just went out and said, "We are going to rise to the occasion. We are going to make these forests part of the great social structure of this country." He did a great job, really. I thought he was outstanding. It was nice to see the agency that I was affiliated with forging ahead.

ERM: Getting up to the top of the heap in the eyes of the president.

CAC: Yes, sure. I thought he was really terrific. Of course, he had a terrific personality. He was in a class by himself.

ERM: He was not a person much beloved by the people in the industry, as I recall. I've heard him damned by some of these men.

CAC: They damned him in terms of some of his social judgments, but as a personality they probably enjoyed him more than anybody that had ever been in the job, I think.

ERM: Mac got along pretty well with them, didn't he?

CAC: In his way. He had a very quiet way. No better, I think, than Ed Cliff. This Silcox was excellent. If the industry held a convention, he was the last man to leave the convention hall and the first man in the meeting the next morning. He was in there with a crusade for forest regulation too. He was quite a guy. Of course, he just killed himself.

ERM: Worked himself to death?

CAC: I don't know whether it was work. It was physical, I think. He didn't take any care of himself. His heart just quit on him. But he was surely a personable fellow. He did the little things beautifully.

I was a beginner in Ogden, Utah when he came there. He didn't stay in the room in the hotel. He had a suite of rooms--living and bedroom. I don't know how he paid it out of his own pocket. The government didn't pay for anything of that nature. One night

he had all the beginners, all the young fellows, come to his living room there and sit for an hour or two while he visited with us about the state of the nation. I don't remember what was said, but it was impressive. It was bound to be impressive when the chief comes along and asks you to visit with him for awhile that evening in his room. He did things like that. Colorful things.

ERM: Didn't McArdle also have that kind of quality about meeting people and remembering their first names? I seem to recall that's one of his things.

CAC: He didn't have near the memory that Cliff had. McArdle was a pretty handy fellow with families and things like that and was personally very thoughtful. He liked to go to picnics with Forest Service people. He liked a picnic. I worked with him for awhile in Fort Collins.

ERM: Didn't you succeed him at Fort Collins?

CAC: Yes.

ERM: What was your experience in working with McArdle? Give me a little picture of McArdle, the man, as you knew him.

CAC: As I indicated earlier, McArdle has a keen mind, great perception--a highly creative individual. I probably learned more about the mechanics of doing my job in the two years I sat in the room next to him than I did any other two years during my entire career. He was not a very efficient fellow. It took quite a while to get anything done.

ERM: Yet you say you learned more.

CAC: You learned the mechanics, like report preparation and things like that. He had ideas about presentation of data and this kind of thing. He had a good spark of human kindness as far as his fellow workers were concerned. He was more interested, I think, in the mechanics of the research program than the program itself. By that I mean he would be more concerned with the manpower and the money to do a research job than in the field requirements that were involved on the job.

ERM: His period as chief involved some important legislative action. The Multiple Use Mining Law was passed in 1955,



Society of American Foresters meeting, Atlanta, Georgia, October 1962. Pictured left to right are former presidents E.L. Demmon, DeWitt Nelson, Charles Connaughton, George Garrett, and Paul Dunn.



Seventh World Forestry Congress, Buenos Aires, Argentina, October 1972. Pictured at a reception of the United States Embassy are from left to right, Thomas Nelson, Herbert Fleisher, Mr. and Mrs. C.A. Connaughton, and Mrs. Thomas Nelson.

two years after McArdle came in.* Then there was the Multiple Use-Sustained Yield Act.**

- CAC: Yes, that was right in the middle of his tenure.
- ERM: That was just before the World Forestry Congress up in Seattle in 1960. That was a landmark event in his career. Crafts, I think, was one of the principal architects of that, wasn't he?
- CAC: No doubt about it. I really don't know enough of the inside to know what McArdle's role was. I'm sure it was significant. But on the outside, Crafts was the one that we dealt with. Most of the day-to-day mechanical work of getting out the legislation, developing it, and carrying it through was done by Crafts. What McArdle may have done didn't appear on the surface.
- ERM: I think you were a regional forester at that time. What was your attitude toward the creation of a multiple use act?
- CAC: I can tell you that precisely. This thing wasn't something that just happened overnight. It was discussed quite a little bit before it ever saw the light of day--way ahead of 1960. When it was first discussed in our own inner circles, I wasn't very enthusiastic about it. I thought we were really going to knock ourselves out over an issue that was not very significant. I thought, "We are doing multiple use now; why do we need it to be ratified into legislation." I remember very precisely. It's very clear in my mind. As I look back, I think I was wrong. I think it is well that it was ratified by legislation. I think that I was too presumptuous to feel that the Forest Service could go right on with multiple use without the benefit of legislation. I reached this conclusion long before the bill was passed. I don't know how long it was before the bill appeared that this was first discussed, but my guess would be as early as 1957. I wasn't particularly opposed to it; I just didn't think it was worth the effort.
- ERM: What was the rationale of those who were arguing for such a plan?

*Multiple Use Mining Act of 23 July 1955, 69 Stat. 367, as amended.

**Multiple Use-Sustained Yield Act of 12 June 1960, 74 Stat. 215.

CAC: I don't believe I can remember that, precisely.

ERM: Was there any feeling there needed to be a law with the authority of Congress behind it to tighten up, in a sense, the application of the multiple-use principle in the policy of the Forest Service? Were there some divisions or were there certain cliques within the Forest Service that had a stronger hold than others on both policy and funding, and there was perhaps a desire to equalize this somewhat? Did that enter the picture at all?

CAC: I don't remember that it did.

ERM: Do you feel that the Multiple Use Act succeeded in its purposes?

CAC: No, I really don't think it changed a thing. I think it was just like we were doing; it ratified what we were doing. That's the way I always thought. Maybe some people feel that it has, but I didn't think it changed anything.

You see, this came into sharpest focus in Region 5 where I was working. I think it was in 1957 that Ed Crafts said when he made an inspection of Region 5, "The activities here in Region 5 are probably what will develop elsewhere in the United States."

And this is pretty well true in relation to the environmental issues which were then coming into focus. This Multiple Use-Sustained Yield Act in many respects anticipated the environmental crusade. It really did. When I felt lukewarm to the idea, I wasn't adequately anticipating the environmental issue. I don't know of anybody who was. I've read McArdle's statement on how he said that we ought to go ahead and not go ahead and so on. Whoever made this decision to go ahead was inadvertently anticipating an environmental crusade. I don't think they knew it but they were, and they did a hell of a job. Good idea, I think, I really do. It put the Forest Service on record, you see, to make a required consideration of all uses, whereas up to that time there had only been administrative authority.

ERM: If you were to be asked to define what you saw as being the purposes of the Multiple Use Act of 1960, how would you define it? What would you say were the purposes?

CAC: The purposes of the act were pretty clear to me--to show the American people that it is the intent of Congress

that the lands we manage are for all their uses and services, not for just one or any small group of them. I think this is a good policy. It's good direction and it's good to have it on the record. Originally I didn't think you had to have this in writing. I thought we, as policy makers, could make this as a policy statement, but I've since changed my mind. As I look back on it, I think it's good that it's a legal statement for the administrators to follow.

ERM: Do you think multiple use is a concept or principle that the public can really understand? Or do you think it's difficult for the public?

CAC: I am very glad to comment on that because periodically I hear the statement made that multiple use is not understood or that it's garbled in concept or some other strange qualification. Actually, to me, multiple use is a perfectly clear concept, easy to understand and easy to state. I see absolutely no reason why we should have any feeling that it's difficult for the public to conceive of. The reason I think there has been some problem with the public understanding it is we as technicians haven't explained it properly. First of all, we haven't explained that multiple use is simply a concept, not a method. And the concept is simply as outlined in the bill, which is a very clear statement. It's not difficult to understand that all the uses and services are to be used in combination to make the maximum contribution.

ERM: I think that's where the confusion arises. It is that the uses are to be made in concert but not necessarily all equal in application on a given piece of forest land.

CAC: Nor on the same acre. In the same unit, but not on the same acre. Multiple use is like a house. A house is a multiple-use unit with a series of rooms for which you have different purposes. That's all it is. A ranger district is the same thing, a multiple-use area. A house is a multiple-use living area. In each of its units you may do one of several things. In the living room, you may sit and visit. You may eat lunch and you may do some other things, but you don't bathe in there. In the bathroom, you do certain other things. This applies to multiple-use of the land. A perfectly simple concept. I don't see anything complicated and yet sound capable students of land use occasionally make the comment, "Oh, it's too vague, a meaningless

concept," and try to change it to some other term. The term is good as it is. It's been used for years. Let's keep it. It's got a legal definition now. That's more than it used to have.

ERM: Do you suspect that perhaps that argument is put forth to undermine the applicability of the term in our present day?

CAC: I think anybody that uses that argument doesn't understand the principle themselves. That's the only thing I can say.

ERM: No, I don't think you get the thrust of my point. Do you think that the arguments that multiple use is meaningless are contrived to undermine the word or the term?

CAC: It must be, otherwise why would they say that? Then we have good friends that try to define it their way, and that's just as wrong as the person who attacks it if they are not defining it properly. The legal definition of multiple use is a perfectly workable one and easily understood. It's right in the legislation.

ERM: We were talking about the various chiefs that you have worked under and some of whom you have known even though you haven't worked under them. I wonder if you might go on with that.

CAC: I think the last I referred to was Silcox. I am not in a good position to make on-the-job comparisons of Greeley, Graves, Stuart, and Pinchot because, although I knew the people, I wasn't associated with them on the job.

ERM: First of all Stuart. He was in for a very short time, from 1928 until his untimely death. His impact upon the Forest Service was probably the least of all of those you've mentioned.

CAC: I would say so. That's reasonable. He certainly didn't have much impact on my associates and myself.

ERM: He had been a career man in the

CAC: Oh, yes.

ERM: I think he must have been Greeley's handpicked successor.

- CAC: I don't know this. He followed Greeley, of course, but I don't know where he would rate in the scheme of things. I don't think the chiefs necessarily pick their successors, although I think they quite commonly influence who they are, and this could have been very easily the case with Greeley. I'm sure Greeley added a great deal to charting the course, the direction, the history, the tradition, and the philosophy of the Forest Service--one of working in cooperation particularly with the forest industry. He'd been known for this. I'm sure he deserved great credit. He was a courageous, colorful man himself. He must have emerged at a time when the sort of temperament, attitude, and philosophy that he had was needed. Just like Graves. Graves came right at the time when Pinchot had been fired. The conservation movement was upset as the result of the scandal.
- ERM: Graves was a great consolidator.
- CAC: Yes, he was a consolidator.
- ERM: He consolidated some of the gains that had been made.
- CAC: He must have, and of course, he was a very sharp, keen individual with tremendous capacity. One of the greatest experiences I had was being able to sit across the table from him periodically during the course of a year and hear his experiences. They were tremendous. You could just sit there and reflect on what his in-put must have been in the situation. It must have been great. That was while he was dean, of course.
- ERM: Now, in what sessions were you privy to such reminiscences?
- CAC: Well, he was dean when I was at Yale. I spent a year in graduate work at Yale that I began when I was at Ogden.
- ERM: Did he teach forest policy there?
- CAC: No, we didn't have any special course. Two of us were a little bit older than the rest. We had an agreement, and at a time he would suggest, we would periodically visit his office. He would discuss some issue of history in which he was interested. It was fascinating, just great. I think this should be done a great deal more, if young people got out of it what I did.

ERM: Charlie, how many years were you in the Forest Service?

CAC: Forty-three.

ERM: What in your mind are the real milestone events that stand out above all others as peaks of Forest Service history in that time?

CAC: I don't know, Woody.

ERM: Just pick out one of them to start. You don't need to feel obliged to make a spur-of-the-moment response, but give it a little thought. Is there an accomplishment of your own or one that the Forest Service has as a whole achieved that you are particularly proud of?

CAC: These are good pertinent questions. They deserve a pointed and concise answer and this is what I'm trying to delineate in my mind, but I just don't sort something out. It just all runs together, personal as well as official.

ERM: Do you think of any particular event or act or administrative order as having signal importance in this whole time?

CAC: You know, one of the reasons I have trouble with this is that a public organization like the Forest Service, dealing with big and diverse resources, doesn't make sharp turns. It trims, it develops direction over a period of time, but to endeavor to delineate a sharp point at which this took place or that took place which was different from something else, it's pretty hard to do. A public organization just doesn't function that way.

ERM: Let me give you some examples. Prior to your time or only a few years after your birth, the Weeks Act was a landmark act that had profound influence on the future of the Forest Service, right?* I think the establishment of the forest products research station in Madison that followed thereafter was an

*Weeks Law of 1 March 1911, 36 Stat. 961.

important milestone in its history. Certainly the Clarke-McNary Act was a vitally important landmark event.* McNary-McSweeney Act in 1928 was a landmark event.** Things of that order, I think stand out as watershed events, things that change the tenor of things and start the ball going in a little different course--perhaps less obviously to a person in the service than to some layman on the outside.

CAC: You could take the Multiple Use-Sustained Yield Act, but it didn't change anything. All it did was confirm what we were doing. It's really not earthshaking as far as I am concerned. This Humphrey-Rarick Bill we had last year, I think, may turn out to be a pretty significant piece of legislation.***

ERM: Has Hubert Humphrey been a good friend of forestry and of the Forest Service?

CAC: I don't think, particularly, of the Forest Service. I think it is simply because his interests have been so diverse, but his presence on the Agricultural Committee makes him to a degree a responsible spokesman for forestry. He often speaks out constructively for change with pretty practical, economic and social values involved. I think Humphrey is all right.

ERM: He seems to have come into greater favor with people of conservative political inclinations only in recent years. Prior to that he was, I think, one of the "devils on the Hill," wasn't he?

CAC: Yes, he has quieted down since he ran for president. He's a little more "middle of the road."

Oh, I participated in a number of interesting developments but they just all run together.

ERM: What participation did you have in regard to that Humphrey-Rarick Bill?

*Clark-McNary Act of 7 June 1924, 43 Stat. 653.

**McSweeney-McNary Act of 22 May 1928, 45 Stat. 699.

***Forest and Rangeland Renewable Resources Planning Act of 2 August 1974, PL 93-378.

CAC: That all developed since I left the Service. Of course, there has been widespread disapproval of the lack of financing for management of the national forest lands, particularly for timber production. Proposals were made that the receipts for timber be ploughed back into management, and legislation was introduced to this effect. It was called the Timber Supply Bill. This must have been 1969 or '70, and it was defeated rather soundly. It was basically supported by the forest industry, but the Forest Service gave its support too.

Then more recently, this was discussed again. "How in the world can you get adequate management of these lands?" There was considerable discussion in industry circles, and finally the conservation associations were called in to sit with industry. There were the Wildlife, Sierra Club, American Forestry Association, Fisheries, and others. To make a long story short, out of that evolved the Humphrey-Rarick Bill. Humphrey's own office had an in-put into this. When you put all this together, Humphrey's office, the forest industry, and the conservation associations produced the ultimate product which is the Humphrey-Rarick Bill. I think the Humphrey-Rarick Bill has prospects of doing quite a job, in the way of getting the needs of the national forests before the Congress. Then the Congress can do something about it.

ERM: In other words, it will provide larger funding for tree planting, road building, and such things?

CAC: No, it doesn't provide anything. It provides a better review of the funding needs.

ERM: Is this an endeavor to clip to some extent the power and the wings of the Bureau of the Budget?

CAC: It doesn't clip it, but in one sense of the word it partially bypasses the budget, because the secretary of agriculture is requested to submit the program for the forest needs to Congress. The law doesn't say anything about the Bureau of the Budget. Then the president is supposed to submit his budget, and if he doesn't satisfy the needs of the secretary, he's to tell Congress why.

ERM: Now the secretary is a member of the cabinet of the president, and I think in recent administrations, the cabinet members have almost become backseat members of the administration.

CAC: Yes.

ERM: This has been particularly true under Nixon. Is this an endeavor to restore the prestige of cabinet officers or cabinet appointees?

- CAC: No, it doesn't have that intent. It may have that effect.
- ERM: What do you see it most hopefully accomplishing?
- CAC: First of all, it calls for an assessment of the forestry situation in the nation to be presented to the Congress. This will get before the Congress the forest needs of the country. Out of this, then, a budget for the national forests is to be presented to Congress. Then the president is to tell the Congress, "All right, this is a four-year budget for what I'm going to do this year." And if the president doesn't ask for full needs, he's got to tell Congress why. For the first time, it ought to be very clear where the responsibilities are for evaluating the needs of the nation's forests and why they are not being met if they are not being met. I think it's a good approach.
- ERM: What relationship has this to the work that Bill Towell is doing to raise the sights of Congress relative to the total forestry needs of the country? Are the two intimately related?
- CAC: They are parallel. They don't superimpose one on the other nor are they in conflict. This is a legislative process that has been prescribed for the administrative branch to follow. The activity that Towell has been chairing is a committee of multiple-use interests that goes to Congress to tell them what is needed in the way of finances on the national forests. Now when this particular Humphrey-Rarick presentation has been made, all Towell's committee will need to do is go up and say, "We support the Humphrey-Rarick Bill." They won't need to go up with their own figures. Up until now, they've had to provide their own figures. But when Humphrey-Rarick figures go in, they can say, "We don't agree with these figures." They can say, "These figures are too low," if they want to, because Congress has to hold hearings on this presentation by the administration. I think it's good, although there'll be some false starts.
- ERM: You've been an observer of a good many presidents of the United States during your career. In your mind which presidents had the greatest understanding of forestry and what it's trying to do? Who are the presidents that have understood forestry?
- CAC: I don't know whether he understood it or not, but the fellow who did the most for forestry was Franklin Roosevelt.
- ERM: Why do you say that?

- CAC: Look what he did. Start with CCC, the public acquisition program, the general position that he took throughout in relation to conservation as far as the American scene is concerned. I don't stick just to trees. TVA. He was in office long enough to translate ideas into action. Where he got his ideas, I don't know.
- ERM: Some of them evidently coming from his governorship of New York.
- CAC: Yes, some. He articulated them, at least, so I would certainly put Franklin Roosevelt at the top of the list, without qualification. Theodore Roosevelt might come after him, I suppose, because his interest and desires were equally as strong. He just wasn't around that long, so he didn't have the opportunity to do the job. Now take Truman, for example, who in my judgment was a very effective American leader, wasn't interested in conservation. It just wasn't a field of his interest.
- ERM: How would you evaluate Eisenhower's role?
- CAC: I don't think he was interested in conservation, and for good reason; his whole life was something else.
- ERM: He wasn't really cut out to be a political leader anymore than most other generals have been in the past.
- CAC: No. They have no background to appreciate the place of conservation in the American scene.
- ERM: What was Kennedy's feeling?
- CAC: Well, I don't really know. I don't think that Kennedy personally had any appreciation of this. But Kennedy was astute enough to appreciate that conservation, as part of the American political scene, was a very fine issue, and one that he should be aware of.
- ERM: He made a little political capital out of it.
- CAC: He sure did. And as a result, he was on the right track. There isn't much to indicate to me that Kennedy personally had any deep-seated convictions about conservation needs. But believe me, he knew the nation's needs well enough to know that conservation ought to get far more than passing interest. He accepted some of this kind of advice and showed some of this interest. A ten-year plan for the forests was made in the Kennedy administration.*
- ERM: That's right. That was a pretty important piece of legislation.

*Revision of 1959 National Forest Development Program, sent to Congress 21 September, 1961.

- CAC: Extremely important, one of the most important things that was ever done. It hasn't been given as much attention as it should have, because it immediately fell into disuse and obsolescence. But the mere fact that the administration accepted a ten-year plan for the public lands was very significant. Peterson really got this off the ground during the Eisenhower administration, but he didn't get it accepted by the administration and sent to Congress like Kennedy did.
- ERM: In other words, that was something that Kennedy inherited.
- CAC: Well, basically, the idea of a ten-year plan was inherited by Kennedy. I don't know as it was called a ten-year plan, but some kind of a development plan was in the making. The Forest Service had worked on this under Peterson's direction. It got translated into the ten-year plan after Kennedy arrived, and the administration accepted it. An administration rarely accepts any plan that commits itself into the future like this does. This is quite significant.
- ERM: Who besides Peterson engineered that plan? There must have been a good many people in the Forest Service who had an important part in the formulation of that?
- CAC: Yes, I'm sure there were a tremendous number of people that played a role, but I think Ed Crafts was the main liaison in the Forest Service with the assistant secretary in both administrations. He was in this legislative liaison role--a planning role. It was his job, and I think he did it.
- ERM: I don't think there have been many people in that job in the Forest Service that have carried it out with the aplomb that Crafts did.
- CAC: No. He did it well. He was an exceedingly competent man in anything he undertook; I don't care what it was. He's a competent man.
- ERM: He is very articulate. He could go before any committee and stand his ground with his rhetoric.
- CAC: His thoughts are clear so his words are clear. He's a top man. He's a tough operator.
- ERM: I wonder if Crafts did not feel some chagrin and personal hurt or something or another when he failed to become chief of the Forest Service. I can't pin that question down.

- CAC: Well, he may have, but I couldn't pin it down either. He was kind of there standing in the wings.
- ERM: He was in the same roster group, as you indicated.
- CAC: Yes, that's what I mean when I say standing in the wings. Crafts went over to the Bureau of Outdoor Recreation right after Cliff took the job. I imagine it was within three months. I'm sure that it was very short. He did a great job there.
- ERM: Crafts has always struck me as a brilliant, but very brittle man. A person who is not always diplomatic in his dealings with people.
- CAC: Oh, he doesn't drip with diplomacy, but he's right nearly all the time. He is a very clear and orderly thinker. He would nearly always come out with the right answer in respect to the tangible merits of a case. He didn't have much time for evaluating and injecting the intangibles into cases. And in many decisions, these should be the final determinants.
- ERM: You mean weighing the intangibles and trying to take them into some account before a final decision has been made?
- CAC: Before a final decision, yes. But he was a great operator--a careful and good operator. He did a fine job for the Forest Service. He was effective with McArdle, I think. The two of them worked well together.
- ERM: How would you appraise Johnson's administration?
- CAC: I think Johnson's administration generally was constructively pointed toward domestic needs. Of course, Mrs. Johnson was touted into conservation early in the administration. I don't know how much she influenced the administration as such, but she often appeared as the spokesman for certain administrative decisions and actions. I think Mrs. Lyndon Johnson, along with such people as Stewart Udall and Orville Freeman, did some materially constructive things in the field of forest conservation for this country. Generally pretty darn favorable from the domestic side of it. It was given pretty favorable consideration.
- ERM: Well Lady Bird's main thrust and interest was in the beautification of America, wasn't it?
- CAC: Yes, I'm sure it was. The esthetics, yes.
- ERM: I hadn't any feeling that she was a hardcore preservationist.

CAC: No.

ERM: Her interest was mainly in making things look nicer and prettier. She did some pretty nice things down along the Potomac River.

CAC: Absolutely wonderful, nationwide. She was gearing the nation's thoughts to natural beauty. Terrific.

ERM: Did you ever feel that President Nixon had any real sympathy toward or understanding of forestry's problems in this country?

CAC: He didn't exhibit any interest that I detected in such things as forests and conservation matters. This didn't seem to be in his interest and background.

ERM: Of course, it is much too early to make any judgment on the Ford administration.

CAC: The president's got his hands full with other things.

ERM: You were studying in Washington, D.C. under Earle Clapp who was then assistant chief of the Forest Service. What do you recall of Clapp and the report you worked on under him? I think it was called a National Plan for American Forestry and published as a Senate document.

CAC: That's correct. I am anxious to comment on Clapp because he is almost in a class by himself insofar as his ability and his contributions to American forestry are concerned. He's an unusual man, a quiet, reserved man--introverted--with a tremendous mental capacity and physical drive.

Now, I'll relate to this plan. To the best of my knowledge, back in the early thirties, Mr. Clapp conceived the idea of picturing the needs of American forestry between two covers. It was called "A Joint Plan for American Forestry." He developed an outline for this plan. This developed into a twelve-hundred-page document, so it wasn't just a brief overnight effort. He outlined this twelve-hundred-page document by himself. In effect it presented the forest situation in the nation and what needed to be done about it.

Now, once he had done this, he called together into Washington the men in the Forest Service that he thought were best qualified to do this job. A hundred of the best qualified people were assigned by him to various

parts of this outline. He started with all parts at the same time. By this, I mean that he didn't start with chapter one and go right through it. He started with all chapters simultaneously--a writing job!

I happened to be there in a subordinate capacity and assisted with the compilations of some of the chapters. It was at a very advantageous point for me to watch how all this was developing. The key people in the Forest Service were the regional foresters and the directors, and he used the best-skilled people that he could lay his hands on. First, they outlined their respective chapter, and this would be presented to Mr. Clapp. He would personally revise and eventually approve the outline. Once his outline was approved, the author would then use it as a basis to write the text. Now this took all the way from three weeks to six months. Once it was written, Mr. Clapp then edited and reviewed it, and he either sent it back or ultimately accepted it.

Finally, when all the chapters were written to his satisfaction, it was placed between two covers. It then became a question of publishing it. Senator Royal S. Copeland of New York then introduced a resolution in the Senate asking for such a report, so it was sent up to Senator Copeland and was published.*

ERM: Was it one of those situations where you just happened to have what the man asked for?

CAC: Yes, fortunately. There is a whole list of authors in this report. Bear in mind, it's forty years old. Some people have now even forgotten that it exists. But it could very well say on the front page that it was authored by Earle H. Clapp. Not only does it have all the inventory information, but there is a national program for costs of doing all of the various things that were felt necessary to achieve desirable development in forestry.

ERM: For a period of how long?

CAC: I've forgotten how long a time was projected. In 1936, Clapp decided to do a similar job for the American range.

*A National Plan for American Forestry, 2 vols., S. Doc. No. 12, 73d Cong., 1st sess., 1933. Also known as the "Copeland Report."

He called in a group of people and put them through the same process. By this time, I was included as an author. I worked on The Western Range report which later appeared as a Senate document also.* It's an exhaustive study of the situation on the American range in 1936 and what to do about it. He made essentially the same start for recreation, but it didn't work out so well.

ERM: Didn't Dana pick that up and do a study on recreation later on?

CAC: It was finished, yes. I think they hired a professional author--Russel Lord--and he finally finished it.

ERM: I thought Dana wrote that.

CAC: Well, yes, I think he worked on it. But this professional author ghostwrote the whole thing. Now, I only describe these two things to indicate the capacity of Clapp.

ERM: He saw things in the broad spectrum.

CAC: When you say he saw things in the broad spectrum--he did just that! He saw them broadly. Clapp, I'm sure, was the architect of the McNary-McSweeney Act, the forest research act, for this nation. Of course, later he became the associate chief of the Forest Service and provided a certain amount of stimulation, I'm sure, for the New Deal days that Silcox talked about. Silcox, again, was the front man and Clapp was the architect. But I don't think there's any question that there is probably no other American forester who has played a greater role in shaping forestry in America today than Earle Clapp. No one--I don't care who he is or where he is.

ERM: That includes Pinchot and all the rest of them?

CAC: That includes them all.

ERM: That's a tremendous tribute.

CAC: I don't know how I could pay a higher one.

*The Western Range, S. Doc. No. 199, 74th Cong., 2d sess., 1936.

- ERM: To what extent do you feel your contemporaries in the Forest Service might confirm that?
- CAC: I would think that those who had the opportunity to see Clapp function--there were a few like McArdle who is still active and Dana--would agree. Henry Clepper would confirm this. They may not state it as strongly as I have, but they'd come very close to it--very close. If you didn't have the privilege of having seen Clapp, of actually being there and looking at him personally, you couldn't have felt his contribution because there was no other way of ever detecting it. He didn't transmit this in any way whatsoever, because he worked in such an introverted fashion.
- ERM: Then Clapp never projected a public image at national meetings in the same way that Silcox or Watts or any of the other chiefs did?
- CAC: No, Clapp didn't project a public image. Now, his official demise, if you want to call it that, was associated with public acquisition and public regulation.
- ERM: He got into the wars with Harold Ickes.
- CAC: His real battle with Ickes was over where the Forest Service should be in governmental structure.
- ERM: Isn't that the thing that really got him squirreled-up with Franklin Roosevelt?
- CAC: That got him crossed-up with Roosevelt, but Roosevelt let him continue as acting chief, in spite of that. But Clapp's position as acting chief called for public regulation of the private lands.
- ERM: He was staunchly for that.
- CAC: He believed it. He not only believed it, he continued to advocate it. He expected the men that worked for him to advocate it. For example, Crafts made a speech later at Yale where he was criticized for his advocacy position.* All Crafts was doing was speaking the boss's voice who was Watts at the time. I don't know what Crafts personally felt. That was beside the point. He was working for the Forest Service, and unless he supported the agency policies, he'd better quit.
- ERM: So Crafts was just presenting his boss's philosophy when he spoke at Yale.

*Edward C. Crafts, "The Case for Federal Participation in Forest Regulations," paper presented before the Yale Forestry Club and the Yale Conservation Club, 5 December 1951. Published in American Forests 58, no. 5 (May 1952), 26, 38, 40, 43-4.

- CAC: What he may have felt personally, I don't know. I don't think that's an issue. When I worked for the Forest Service, I worked for the Forest Service. I don't have a lot of personal opinions. I have an obligation to support my boss's position or else get out. Well, I think Crafts did too. If he was called upon to make that Yale talk and if that's what he was supposed to talk about, he had no alternative. As I say, I don't know what his ultimate personal opinion was but I thought it was always unfair to feel that he had to carry this forever as a personal. . .
- ERM: . . .albatross around his neck.
- CAC: Yes. Because after all he was reflecting the position of the Forest Service.
- ERM: Wasn't there some really ardent socialist sentiment among some of those in the old Pinchovian group which included Raphael Zon, who was another real important person in the realm of research in the Forest Service?
- CAC: Yes.
- ERM: And Ed Munns was in that same boat too.
- CAC: Oh, sure. He was outspoken.
- ERM: And I have an idea Ray Marsh was.
- CAC: He wasn't outspoken but he was a contemporary.
- ERM: Now, I gather from what you are saying, Clapp was also a part of that phalanx.
- CAC: He wasn't a part of it; he was the leader for a period of time.
- ERM: The leader of it?
- CAC: Yes, he sure was. He was the acting chief. If he hadn't believed in it--perhaps he didn't--and had changed the policy, then other fellows would have changed or gotten out. But Clapp didn't feel that he should change policy. He was reflecting a long-standing feeling.
- ERM: I think there may be room for a better understanding perhaps of Roosevelt's reluctance then to make Clapp full chief because of all the acrimony that has been heaped upon "that man in the White House" by, you know, the conservative community. By the lights of historical

judgment of the Roosevelt administration, FDR really stayed off a socialist revolution in this country. I don't think he wanted to go all out that route.

- CAC: I really don't know. I don't remember his position on that, if any. He didn't stop Clapp from continuing to advocate. I mean his secretary of agriculture didn't. Henry Wallace was secretary and, I think, Henry believed basically in public participation in the private sector. So Clapp continued to advocate this action, and it just might have had something to do with his long tenure as acting chief, although I had the impression that this was not the reason. That it had to do with government organization. But I can't verify this because I wasn't that close to it. But since then I've heard and read some of the statements in the biographies that have been written.
- ERM: Samuel T. Dana has also been widely acclaimed by people in forestry as having been a force of some importance.* How do you appraise the importance of Sam Dana?
- CAC: I welcome the chance to comment on that because Sam Dana's role has been an enviable one in the forestry game. For what it's worth, my observation from my exposure to Sam Dana is that he played his greatest role in his later years, when he reached the position to which he seemed to be accepted as a judge and arbitrator by all parties on all issues. I can't go back and put my finger on it precisely, but there was a certain period in forest history which expired maybe eight or ten years ago and was good for ten or fifteen years before that. It was a time in which issues arose, and the first person you thought of to develop a judgment, regardless of what side you were on, was Sam Dana. It was the most remarkable position that I ever saw accumulate on the part of any man. No matter which side was involved, Sam Dana's judgment was sought.
- ERM: More than any other man who ever had a similar role?
- CAC: I don't think any other man ever had that role in forestry.
- ERM: Certainly no man today.
- CAC: Of course, this disappeared as Dana has become inactive. He hasn't been in this role for ten years. Nor did

*Samuel T. Dana, The Development of Forestry in Government and Education, Oral History Interview conducted by Amelia R. Fry (Berkeley: University of California Bancroft Library, Regional Oral History Office, 1967).

this exist thirty years ago. This really happened after he retired as dean of the School of Natural Resources at the University of Michigan. He did serve on commissions and he served on committees and reviewed issues like the redwood park issue.

ERM: And he was on the alert to them.

CAC: Oh yes, to the whole variety. As I say, for anything that came up, he was the first one you thought of. A lot of his support came from the American Forestry Association. His great integrity and good judgment always prevailed in his many efforts. There's only one Sam Dana, and no one else has ever seemed to have accumulated the unbiased position that so characterized the Dana attitude. As a result, everyone is welcomed by Sam Dana for his review of a problem. I don't know that it was necessary to accept his judgment, but it usually prevailed. This is surely an enviable position. He played a great role in American forestry--a great role.

When I first went into the field with Sam Dana about 1938 or '39, we looked at some cuttings in lodgepole pine and how it had been handled. As I recall, we spent the better part of half a day. I don't remember what we concluded, if anything, but he provided a great stimulation to me as a young forester who was still struggling for advice and counsel. He took the time and showed great enthusiasm--the kind of thing that Watts would and did do. We went right out there and looked at the individual trees and what their response was going to be and what it wouldn't be. He gave me a tremendous lift. At that time, of course, he was still at Michigan, but Sam Dana has occupied a great position in American forestry since then.

ERM: He had a rather broad range of experience in his career. He was state forestry commissioner in Maine. He was the first director of the Northeastern Forest Experiment Station at Amherst. He was active in the Washington, D.C. office of the Forest Service in various capacities. He was dean of the School of Forestry and Natural Resources at the University of Michigan. He was a vital factor in the affairs of the Society of American Foresters and of the lay group, the American Forestry Association. There is hardly a forest-related organization that he hasn't been in some way or another vitally involved with sometime in his life. In all this broad experience, he brings together a wealth of knowledge and personal contact with the American people and with forestry policy on all different levels that must be just fantastic.

- CAC: He's a tremendous man--a great fellow.
- ERM: In his early years Dave Mason was a member of the Forest Service and worked at Missoula and on various other assignments in the West. He went to teach at Berkeley and then into the Treasury Department or the Commerce Department--I've forgotten which it was--and worked out the tax problems for the forest industry. Then he went into private consulting.
- CAC: He was secretary of the Western Pine Association.
- ERM: Yes, secretary of Western Pine before it became Western Wood Products. He was head of NRA's lumber code authority--a man also of rather broad experience and involvement. I don't know that you might say that Mason ever had the same influence that Dana had or Clapp had, but it certainly must have been important.
- CAC: I'm sure his influence was important and significant. My association with him came only in late years after the main impact had been felt, so I can only speak with knowledge about things that you are more familiar with than I. I do know that his field of taxation, his consultation with industrial people here on sustained yield, and some of these impacts that he's had are enviable ones that certainly point in the right direction. But they are well-recorded by people that know him better than I do.
- ERM: You must have know William B. Greeley?
- CAC: Yes, again only after he was out here in the West. I became acquainted with him mainly at meetings and this sort of thing. I never worked with Greeley. I learned to greatly respect him, of course. We all did. A tremendous man and he left a fine mark wherever he went. The fellows that worked closely with him speak highly of him, but I don't know him that well.
- ERM: Probably a man you've known better is Bill Hagenstein.
- CAC: I know Bill, yes.
- ERM: I understand Bill was a protege of Greeley.
- CAC: When he was a young man, Bill worked with Greeley. He was kind of Greeley's assistant. Bill was very fond of Greeley and respects him highly.
- ERM: How do you appraise the role that Bill Hagenstein has played in recent forest history?

- CAC: I've been a long time friend and associate of Bill's. He does a constructive job. He has an active and a strong desire to get good forestry on the land. By good forestry, I mean, keep the land productive. That's a sincere drive on Bill's part. I'm sure that's good sound work.
- ERM: I've never heard anyone express the opinion that Bill Hagenstein was reluctant at any time or place to express his opinion. Isn't he regarded as the curmudgeon of industrial forestry?
- CAC: I don't think so. Bill speaks out sometimes when nobody else does, I guess, and he does it forcibly and colorfully.
- ERM: I'll never forget a story that Bill Greeley used to tell about Bill Hagenstein. Bill burst into the Colonel's office while he had another visitor. And Bill used his usual pungent language in making some comment to the Colonel and then as quickly left the scene. The Colonel said something to the effect, "Well, there goes Bill out to get another bushel basket full of God damns." The Colonel had a very warm spot in his heart for his young colleague.
- CAC: Well, Bill reciprocates that, I'll tell you that.
- ERM: Yes, very much so.
- CAC: Greeley is close to perfect as far as Bill is concerned. Bill does a good job. The American forestry picture is going to be better as a result of having Bill on the job through the years.
- ERM: Did you know Donald Bruce?
- CAC: No, I didn't, but I knew two of his sons.
- ERM: You have known Emanuel Fritz and observed him for many years. How would you appraise the role played by Emanuel Fritz?
- CAC: I came to California twenty years ago, and there was no one in the state that gave me more support, advice, assistance, and actual help outside of the men in my own office than Emanuel Fritz.
- ERM: Is that right?
- CAC: In everything he knew, he helped.
- ERM: That's interesting because I don't think Emanuel has always carried the kindest thoughts toward the Forest Service.

- CAC: Well, toward certain individuals in the Forest Service.
- ERM: I'm sure from my knowledge of him, he does not share your judgment of some of the men we've talked about.
- CAC: Perhaps not.
- ERM: In his interview he expressed pretty strong notions about some people. I think it's partly because he got cross-wise with them while he was in the Service.
- CAC: He has terrific likes and dislikes--no shades of gray for him. But he was helpful to me. He really was.
- ERM: In what ways did he support you?
- CAC: Of course, he is interested mainly in the redwoods. At that time, he was manager of the Redwood Logging Association, or something like that. He had some official connection. First of all, on my way to San Francisco there was a meeting at Jacksonville, Florida that I attended and on the morning I left for San Francisco, my wife and I had breakfast with Emanuel. He gave us some advice and counsel with respect to the Bay Area, just personal things. I don't remember the details, but it was helpful.
- When I got out there, he made it a point to get hold of me for lunch. He introduced me to the usual bunch of people he knew, and he knows a lot of people in the Bay Area at the club and elsewhere. He did a nice job in presenting me. Then the Redwood Logging Congress occurred. He invited me and insisted that I attend that. He arranged that I participate in some way. I've forgotten the details. I think it was a kindness. Personal things he didn't need to do, you see, at all. It was not in an official capacity; he was just being helpful.
- ERM: I can say the same thing, Charlie. He's done that for me, too, in California and it's been a real help to me.
- CAC: Yes. I liked it. Then I took him on a trip for a couple of days up on the forests. He went along with great pleasure. We talked about things. We had a dandy time.
- ERM: He's really a remarkable person for his age. He still gets around at age--is it ninety?
- CAC: Close to that.

ERM: I'll never forget, my wife and I were flying back to your AFA meeting in Lake Placid about two years ago, and we happened to be on the same plane with Emanuel. We didn't notice each other until we got off the plane at Albany. I rented a car to drive the rest of the way up to Lake Placid. Emanuel was kind of adrift and didn't know how he was going to get up to Lake Placid. So I said, "Why don't you come along with us? We are going to stay over here tonight and drive up in the morning." So he stayed over too and we all piled into this same car and drove up to Lake Placid the next morning.

Well, the autumnal shades were just magnificent that year, as you may recall, and all along the way Emanuel told us about this tree and that tree and the other tree.

CAC: He knows a lot.

ERM: I should say he does. And in his early days he used to work back there in New Hampshire, you know. Every once in awhile he'd say, "Stop the car." So I'd stop the car and we'd all pile out. Emanuel would trot us over to a bush or a tree or something he wanted to explain to us. We got quite a lesson in trees; it was a very interesting thing.

CAC: Yes, he's got quite a fund of knowledge.

ERM: You have been a longtime member of the Society of American Foresters which will be celebrating its seventy-fifth anniversary this coming fall. How do you see the history of your profession in this country.

CAC: Restricting this to the forestry profession, we are gradually maturing in forestry from what amounts to a profession with strong trade tendencies to a profession dedicated to the basic purpose for which it was organized. That's the practice of forestry. Now why do I say this? I think the fact that we are maturing professionally manifests itself in such things as the type of training our professional people are now obtaining. By this, I mean the specialization that they are able to pursue, and this is due not only to the fact that they are interested in specialization but to the fact that the fund of knowledge is there. When I entered the forestry profession, if you had wanted to specialize in many fields that exist today--forestry genetics is a case in point--you couldn't have gotten more than one course because there just wasn't that knowledge.

Well, now we are accumulating and developing it. I think this is a mark of professionalism and professional maturity.

We are beginning to direct our interests and efforts as a professional society, at broader things that should interest us rather than the mechanics of how foresters should eat and dress and sleep and this kind of thing and, as a whole, I think that we can compare reasonably well with other professions. By other professions, I say medical, legal, engineering, accounting, and those kinds of businesses. At the same time those professions, as a whole, have developed a prestige that I think we still have to reach up a little bit to grasp, from our point of view.

Part of this is going to come when we are better paid and can satisfy ourselves and our professional needs better. This will call for such things as clinics and special training and this kind of business that some of our other professions are able to enjoy. It's a mark of professionalism. I say again, as a generalization, that I'm not dissatisfied with the progress of the forestry profession. There are times and places where we've got quite a way to go. We've got a few things in the society yet that maybe we'd like to change or should change. I don't think we ought to get very excited about these. Take licensing, for example. Ultimately, we'll have universal licensing for foresters. But why worry about rushing it. Let it come gradually. Let's not create animosities in the process of getting it. We've got it now in two, three, four, or half a dozen states.

ERM: Do you think it has created animosities in those states?

CAC: No, but if you pushed it too hard you would. There's always somebody that is going to be opposed to it. If you work it too hard, a crusade will develop against it and then you've got sides drawn up. You don't have to. Just take a little longer and it will all come along. I'm confident this is a sign of professionalism. Not that it makes better professionals, but simply that in the public's mind, it's a sign of professionalism--good or bad.

ERM: Charlie, do you see any negative aspects at all to the trend toward specialization in forestry?

CAC: No, I don't see any at all. I do think I can express some negativism in terms of undergraduate specialization. Perhaps "disappointed in" is the word. I rather "deplore" the proliferation of specialties at undergraduate level in forestry because we are just not equipped to do this. We are not this skilled and not this broad gauged that we can do this well. I personally very much favor a

minimum of five years, with a master's degree as a minimum entrance requirement into the profession, with the specialization to come at the graduate level. If this is observed, I see absolutely no reason to oppose it. In fact, I support it strongly. Then we can have managers with general training together with a staff of specialists to assist them.

The ranger, for example, in some respects would be a good deal like the superintendent of a hospital. He'll have a staff of specialists that will assist him in silviculture, hydraulics, genetics, esthetics, and all that goes with it.

ERM: And entomologists.

CAC: Yes. A superintendent of a hospital doesn't operate. If you have a sore brain, he gets the brain specialist. Our trend in forestry is the same. You're going to have a general land manager who can bring all these specialists together and integrate them and bring them through the eye of the needle, but he's going to need support. I think it's working; it's coming. You don't need to rush it. You don't even need to worry about how fast it comes.

ERM: In application, where do you see that idea catching on most effectively so far?

CAC: Territorially speaking?

ERM: Or institutionally.

CAC: I think it's coming. I think some of the schools are tending to go away from it by a proliferation of specialties at the undergraduate level, but I would rather they wouldn't. But on the national forests, I can see this trend coming on the ranger district. At one time we used to think that the ranger district should be so small that the ranger would be competent in making the technical decisions in all fields on that one area. We don't look at that anymore now. We look at the rangers as managers, staffed by a group of specialists.

Weyerhaeuser also thinks pretty much in these terms. Their land manager is fortified and supported by a staff of specialists in the research field and various other fields. I think it's working out all right. The trend is right.

ERM: Do you see any other private groups doing it on the same basis or the same level that Weyerhaeuser is?

- CAC: To the best of my knowledge, Crown Zellerbach right here in town has equally as strong a program as Weyerhaeuser.
- ERM: Clarence Richen is quite an outstanding man.
- CAC: He is very competent and I am confident his program measures up well. Some of the other companies might have equally as good a program that I'm not familiar with, but those are two large ones that I do see here and I think are very good.
- ERM: Your concern for the greater sophistication and the greater public recognition of your profession comes at a time when all professionalism seems to be undergoing a great loss of public confidence. The public is losing its confidence, it seems, in the medical profession, legal profession, the accounting profession, or the profession of politics. So this seems to be a time when the whole trend of public reaction toward professionals is on a downward trend. How do you see the profession dealing with that?
- CAC: Gee, I don't know how we deal with that, Woody. I assume that these things may tend to be cyclic. There are some some reasons for this drop-off in public approbation. Such things as Watergate in the legal profession and some things in the medical profession cause the man in the street to feel that any professional approach is subject to something undesirable. I do believe, though, that this will pass and that ultimately, in the conceivable and not-too-distant future, the real strength of professionalism will again assert itself. Real leadership and integrity will again appear to be one of the great attributes of professionalism. And when it does, the public will appreciate it and bring it properly into focus.
- ERM: Isn't greater public approval and support of professionalism somehow related to the emergence of articulate spokesmen in the professions who can speak as broad generalists? Those within their profession who are acquainted with things that are outside purely professional interests in the same way that years ago Pinchot was? Whether you call it charisma or whether you call it generalism, it's something that grabs the public's imagination.
- CAC: No question about it.
- ERM: When a profession becomes more and more a group of highly trained specialists, you get guys that amongst their

peers are brilliant, but as far as dealing with the public, they have no pizzazz at all because they look at the world through blinders. They have the tunnel vision of things. They don't have this broader view. Their reading is limited by the very multiplicity of publications in their narrow field. They are almost obliged to spend all their free hours just concentrating on what's being done in their field. How much chance do they have to really take in the mainstream of what is going on around them? Now, I know there are some men that do, but I think it's that kind of man that the profession has got to have and who can really speak not only to his colleagues but to the world at large.

CAC: I'm sure you're right. And, of course, the people associated with a profession present its image. You could have the finest lawyer in the world speak today, and after Watergate, many will be suspect because we've seen the reputation of the legal profession sink to the bottom in the last eighteen months. They've got a lot of living to do to live that down--a lot of record to improve. There must be great people in the profession, but they sure demonstrated some weak spots. We in the forestry profession have to demonstrate too that we can manage land properly and keep it productive, and we just have a big task to do in this respect. We made some claims a few times in the past that we haven't fully substantiated. This has been tossed back to us. We've had to eat it on a few occasions. But on the other side, we are demonstrating that our success is strong and evident.

ERM: I think a case can be made to sustain the argument that the forester has been the primary steward of the forest lands of this continent, or certainly of this country and to some extent in Canada.

CAC: Of course. You see, when I first started in this game, as a whole we foresters were staff officers to nonprofessionals. This was our function for quite a number of years. This has changed now. This was true in the Forest Service and was truer in industry. They hired a few foresters to begin with both in the Forest Service and the forest industry. We all reported to nonprofessionals. I greatly admired these nonprofessionals. It took awhile for foresters to reverse the position to where we were making the decisions. Now we've got to take full credit or blame, whichever it is. If we go out and harvest some tract of land and don't get regeneration promptly, it's nobody's fault but the forester's. We just can't blame some nonprofessional for having made the decision.

- ERM: Some of the other professions that we've talked about, like the law and medicine and things of that kind, are professions that go far back in time compared with forestry.
- CAC: Well, this isn't so true. You don't go too far back in medicine until you get back where the barbers were doing the bleeding. We had foresters operating at the same time as that in Europe.
- ERM: But they were primarily at that time gamekeepers for the royal families. They were not foresters in the sense that we think of them today.
- CAC: That is probably right.
- ERM: What I'm thinking is that forestry, as you said, is a relatively young profession in this country.
- CAC: Our first native professional forester was Pinchot. We know exactly when it started.
- ERM: Yes. Well we had Bernhard E. Fernow who was an import. What I am suggesting is that forestry is obliged to push forward to its maturity as a profession at a very time in history when change itself is accelerating at a fantastic rate.
- CAC: That's true.
- ERM: And part of the whole picture of that acceleration is that there are emerging new professionals or quasi-professionals--whatever you want to call them--who are beginning to challenge the forester's position as the principal steward of forest land. That's where I think the problem lies. These people do not call themselves foresters. They call themselves landscape architects or ecologists or what have you. I think they are supported by a lot of so-called conservationist-preservationist organizations who support the claim that they ought to be more in charge of this resource and its management. There's where I think the real challenge lies to the profession of forestry. All of this has happened in the last thirty years or forty years of the twentieth century, at the time in which change--the one thing we know is inevitable--is going on at an accelerated pace. So I think the two things are kind of hooked up together. In the rush to reach greater professional status, forestry has a tremendous barrier to overcome which I think some of the older professions didn't have. They had a longer time and less pressure to grow up and had a chance to

establish themselves a little more firmly. You see what I mean? I'm afraid I'm not putting it very clearly, but I think you get the drift of my thought.

CAC: Yes, I'm sure that's true, and that's quite a task.

SESSION III, WEDNESDAY, APRIL 2, 1975

ERM: Charlie, you've served in a number of capacities within the Forest Service. What do you consider as the most important requirements of some of the positions you've had--director of a research station, for example, and regional forester? What subtle differences, if any, are there that might require differing talents?

CAC: I think this is a fair question to relate the two jobs of, say, the national forests' administration as reflected in the regional forester's position and research administration as reflected in the director's position. In many respects, the qualities required of an individual, I think, are the same. Yet there are some different emphases--there must be because the jobs are different. The job of regional forester is concerned much more with the choice of administrative alternatives. You are faced constantly with either making or advising on a choice of alternatives in relation to the allocation of land, whereas at the experiment station this is not involved at all. There are choices in the experiment station, but the choice there is largely a choice of efforts to organize studies and what study approaches are needed to meet forestry needs of the community, region, or nation, however we may be oriented. The pressures are more intense on the regional forester; he's called upon to make more pressured decisions.

On the other side of the coin, the director, of necessity, should be much more deliberate because more frequently he's dealing with a set of scientific principles and facts and he usually has a little time to complete his decision. Research directors' decisions are mostly scientific determinations based on the best evidence at hand.

So I would say, in summary, that in many respects the two jobs deal with the same thing--men and money to get a task done. But the approach of getting the task done in either case is different and they call upon a different set of interests and training. I think there's a great premium, for example, in the regional forester position on his judgment in dealing with situations as they arise. Whereas, the premium on the director's judgment would be in dealing with deliberate situations as he develops them in terms of time. In many cases, I think individuals in these jobs could be used interchangeably, depending upon their basic training. There isn't any question they could be. I enjoyed the opportunity of both assignments,

in one case as director for ten or more years and as a regional forester for more than twenty years. They were both happy and rewarding experiences. The director's job calls for more precise training in such things as writing and technical competence, perhaps, than the regional forester's job. Whereas, the regional forester's job calls for innate requirements in terms of evaluation of alternatives and arriving at the right one. If you don't arrive at the right one a fairly good share of the time, you are not going to succeed, regardless. That's an axiomatic fact.

ERM: The regional post, of course, is one that is in the public eye all the time, too, as compared with the director's job, is it not? The director is more in the ivory tower area than the man in the regional office.

CAC: Very much so. By the very virtue of the demands being made upon the land itself, it places the regional forester in a position where his acts are being publicly scrutinized constantly. They have to be. This is the way he will test the adequacy of his decision in the crucible of hard, cold public opinion. Whereas, this is not the case with the director. Most of his decisions will be tested, more or less, over a long term in relation to their scientific accuracy rather than in terms of public reaction and response.

ERM: In what ways do the two positions relate differently to the central administration of the Forest Service?

CAC: On paper, organizationally, they are the same. The relative position on the organization chart is the same. And they are independent--one to another--as both report to the chief. In actual practice, the mere fact that the regional forester's position is responsible for much of the public interest activities--current day-to-day reflection of public judgments in the agency's effort--automatically means that the chief of the Forest Service must be more sensitive to what the regional forester is doing than what the director is doing, on the average. More urgent issues are handled by the regional forester than by the director.

ERM: Are regional foresters weather vanes for the chief?

CAC: Certainly, they have to be. And so is the director, in this respect. The director has a very unique role. The director doesn't have the administrative responsibilities for land-use decisions, but he's one who observes the impact of these decisions. So he, too, is a weather vane for the chief. He counsels directly with the

regional forester, and he counsels with the chief on Forest Service policies in general and overall. His impact may be equally as strong or even stronger in certain instances than the regional forester, depending on how he relates to a particular set of circumstances. From his position the director can be an exceedingly effective individual in relating broad servicewide policies to regional and local situations in a more or less nonpressured, detached way.

ERM: Of course, he has a very close affinity with the academic world because of the nature of his work.

CAC: This is his assignment. The Forest Service research program is intimately interwoven in the academic field--local, state, and national. In this area, the director is closer personally and officially than the regional forester because this is his assignment. This is his job.

ERM: From your involvement in those jobs or as an observer of others in those jobs, have you noticed that the character of either of these positions has changed materially over the years?

CAC: Oh, yes, they are changing. I don't think the principle of the job changes particularly, but the magnitude of the job changes tremendously, just due to the mere fact that the population pressures are changing. I'm speaking primarily of the regional forester now. As population pressures increase, land pressures increase. And when you get increased pressures on the land, you get increased pressure on the man administering the land. The regional forester today has a more demanding job than the regional forester of yesterday. It has to be because he's got more people concerned with what he's doing. This land that he's managing is playing a greater role in the economy than it did yesterday. This obviously places him in a more significant role.

Now in terms of the experiment station, the principle is essentially the same from year to year, but the program has grown larger and, of course, the fields of interest have expanded tremendously. The old original research work that we were involved in was primarily concerned with applied research. By this, I mean analyzing in a systematic way the results of alternatives of doing certain jobs on the ground. This was the research program. Well, now research has shifted over to the

point where the job is being broken down into its scientific components. No new answers may be learned as to how you do the job any better on the ground, but information is obtained on why developments occur. We are dealing with many new things today in the research field that we didn't even think of a few years back. Such things as many of the chemicals, the use of atomic elements, and the computerization of modeling. The research job has grown far more complex and perhaps should be much more rewarding than it was before. Yet the principle of the director's job is still the same--directing a program to solve the problems of the forest areas.

- ERM: To what extent in earlier times--perhaps as recently as your own involvement as the director of a research station--the director was not only an administrator but he also had his own field of special research which he continued to pursue? Does the luxury of being able to perform your own research still obtain in that field today or has the administrative job become so complicated that the director must forego research?
- CAC: I have the impression that on paper some directors still make an effort to maintain a research project. Realistically, I think the point you raise is well taken. The administrative job has now reached the point where any research effort that the director makes is so minor that it's not consequential. In fact, a director or two in recent years has decided it isn't worth it and wants to go back to research, and he has. As he moved into the director's job, he found it was taking him completely away from the area in which he had trained himself and in which he had associated himself--that is, scientific research. He wants to be a part of it himself rather than supervising others. So he reverses his trend, removes himself from the director's job, and is now part of the director's staff.
- ERM: Here we get into the area of self-fulfillment, don't we?
- CAC: That's right.
- ERM: For some men, self-fulfillment lies in research itself.
- CAC: The mechanics of doing it yourself, and this is the reward of experience. The great advances, I presume, in the scientific field today have been made by men who have been dedicated to this sort of thing. As directors, many of us can supervise the work of others. We could

provide the facilities for a phalanx of scientists. We can provide all the necessary equipment, personnel, and facilities that they need to do their job. And they can move forward and have a very adequate research program as a result. This could make the whole unit very successful, including the director. Whereas, the director himself may or may not be oriented at all toward the research job. He does need a basic appreciation of the research methodology, research requirements, and what it means to do a good research job to produce a final product. If he hasn't got that, regardless of how good an administrator he is, he won't be a good and successful director. He must have this appreciation of research values.

ERM: Have you observed consideration of that fact in the area of the selection of new directors in recent years?

CAC: I hadn't really thought about that and haven't observed any of the newer directors closely enough. I haven't been in a position to judge. I've had the pleasure of dealing with a new director or two that I consider exceedingly competent in achieving the research programs that they inherited and in reorienting themselves toward successful efforts. But I'm not privy to factors considered in their recruitment in relation to their assignment.

ERM: Faculties of universities exercise a fair amount of in-put into the choice of a person to head a particular discipline on a campus. Is there anything comparable in the selection of new directors of stations?

CAC: I take it you say, does the personnel at the station have anything to do with recruitment of the director?

ERM: Or the choice.

CAC: No, very little. I think this decision is primarily made by the chief and his research staff. They maintain rosters for directors and when a vacancy comes up, they refer to the list of candidates. It includes, nationwide, all the rosters, and they take a look at it and bring it up to date if it needs to be.

ERM: Of course, the structure of the Forest Service provides for regular meetings at the national level of directors of stations and regional foresters.

CAC: Yes, it does.

ERM: Would you explain how those functions are actually set up--how they take place?

CAC: I was a part of this approach for a long time. I saw it work differently with different personalities. I'll tell you how I think it worked best. Meetings--the collective strength of regional foresters and directors--are most useful when brought to bear on developing national policies or directions, in other words, before they are crystalized. You discuss them with this group, either in the experiment station or administration, who are members of the chief's staff as the regional foresters and directors are. Let's say policies are in process. Before these are crystalized, if a meeting can be held at which the pros and cons can be discussed, much can be done to improve the results.

Let me illustrate, to be specific. I thought the last such meeting of this type that I attended worked beautifully. The meeting was held in Denver not too long before I retired. The purpose was to discuss the standing policies in fire control. Were the existing policies adequate? If not, where should they be revised? We had the regional foresters there and whatever supplement they needed in terms of qualified people in the Service. We brought out all the old policies, discussed them pro and con, and made decisions on their adequacy. The chief [Edward P. Cliff] left that meeting with a pretty clear understanding of the attitude of his personnel on whether he should retain old policy or should change it. I think that was an excellent approach.

Now, I've seen meetings work in which the group has been assembled and certain policies are discussed and after the group begins to belabor it a bit, they finally learn that this is somewhat of a futile exercise they are going through--the decision has already been made as to which way the policy is going to go. Now this approach has a value to inform perhaps. You are not playing a role as a member of the chief's staff, as a decision maker. You are merely there to receive information. And on that score maybe one of your assistants could have done as good or better job than you were doing as regional forester or director.

These national meetings, to me, have had at least two other very real purposes. One was to introduce into the chief's staff concerns and directions that you might have from your particular local area. For example, the environmental movement in California came into prominence before it did elsewhere, and we were able on occasion to point out some pressures and some items to the rest of the West, particularly, the direction in which we were probably going to go. This served to show a new course of emphasis.

Of course, the meeting always served as an endeavor to bring together points of view. If you take eight or ten directors or six or eight regional foresters, you've got diverse opinions as to how you do certain jobs. You can lay these out around the table and discuss the values of them. When meetings were put on this basis, they proved to be pretty successful; the time was well used. At the close of the meeting, you achieved a goal that was on relatively common ground for everybody--a new base. Our meetings tended to fail, in my judgment, when they were primarily informational.

ERM: Under which of the chiefs did you find that that obtained most?

CAC: I don't know that it went by individuals. It would shift more by periods. Probably the field played less of a role in policy determination in the McArdle regime than at any other time. In other words, the decisions were more centralized during that time. This had to do with the fact that decisions were being made in the office of the secretary of agriculture, you see. Peterson, as assistant secretary, was playing a great role in directing the national forests.

I think probably the strongest and most vigorous and inspiring debates that I have heard in the Forest Service meetings of this kind were during Watts's period. Cliff's period was always most open to any available suggestions. Whenever a meeting was set up so that questions could be presented and discussed, it was fruitful. Like I mentioned earlier, the last one on fire that I attended not too long before I retired was exceedingly constructive and helpful to the Forest Service.

ERM: Do these meetings parallel what we know as the seminar?

CAC: No, I don't think so. The seminars that I have attended would be to more or less take a topic, maybe broad, maybe quite specific, and treat it quite exhaustively from many points of view. And perhaps endeavor to establish a broad position or recommendation on it. But this was not really the case in the regional foresters-directors meetings. In these meetings, you sit there as members of a chief's staff; you are subordinate in authority to the chief.

ERM: Is the chief usually in the chair?

CAC: Nearly one hundred percent of the time. In fact, the meeting weakens and has little significance if he's not. He doesn't necessarily need to conduct the discussion,

but he must be in attendance, otherwise you don't have the level at which you want your discussion projected. So this is not a seminar at all.

Now these meetings vary, of course, with the persons involved. Some fellows are quite outspoken in their points of view and others are quite reserved. Some are quite subservient and others may even seek points of difference. This is a reflection of personalities and changes with time and subject matter. I don't know that it fits any one particular person but, as I say, through the years I have attended meetings that I thought achieved a lot, and I've attended some that, in the final analysis, we tried hard but we didn't really get what we were driving at. I don't know that it was anybody's fault, particularly, but that's the way it just worked out in terms of subject matter.

ERM: An agency generally moves from a cycle of high concentration of power at the center to diffusion of that power to the field, the drawing of that power back into the central administration, and maybe sometime later spreading it out to the field again. Have you seen that process at work in the Forest Service in your time?

CAC: I've seen a lot of differences through the years. In a forty-three year history it varies quite a bit. This is completely a reflection of personalities. Again, you know, we went through periods, for example, when in my judgment the regional foresters were dominant in determining much of the action of the Forest Service. Their personalities were the strongest. They registered strongly. We went through other periods in which the regional foresters have, in effect, merely carried out the instructions of the central level. We have had periods when direction has been pretty tight and periods when direction has not been adequate. I believe I see a pretty full cross-section of the situation you describe right in the years that I've been on the job.

ERM: Could you be a little more specific about those different periods?

CAC: Well, here's a case in point. When I first began to sit on the chief's staff, Clapp was the acting chief. Mr. Clapp called the field together on short notice rather frequently for specifics, and he would have the broad outline of which way he wanted to go. He would hold a discussion of what he had in mind or maybe the mechanics of it. He had a strong complement of field people who expressed themselves vigorously, and strong and vigorous debates occurred.

ERM: And he encouraged these?

CAC: He encouraged this. I don't know how much it influenced him, but he certainly encouraged this. This seemed to carry over into the Watts regime.

Then we entered into a change in administration in which changes were called for. It wasn't a question of whether the Forest Service was going to make these changes, the changes were called for by the fact that the presidential administration changed. The Forest Service had to change direction. It wouldn't make any difference whether the chief called in the field and discussed with them or whether he didn't call them; the change was going to be made. As a result, you'd sit with the chief mostly to learn about the changes that were occurring or about to occur. These meetings then became pretty much of an annual or fixed affair. There wasn't any point in calling special meetings because there wasn't any real special reason for them. Yet, during the course of this, we debated certain things.

As a case in point, I remember long and extended debates as to whether there should be charges for recreation in the national forests. We had strong differences of opinion in the staff on this. The multiple use - sustained yield bill was debated and, regardless of who may have carried the ball later, this was discussed sometime before the action was finally taken. And judgments were rendered, good or bad, as to what was happening.

In more recent years the pattern was followed of rather regular meetings and they varied as to their quality. By "quality," I mean the character in terms of the subject matter discussed, but in the main, if time permitted, we did discuss issues that were faced in the Forest Service. But by virtue of the fact that we were not really functioning on what you might say a "call basis" but rather on a "fixed-schedule basis," policies would often be pretty well set in the interim period before another meeting would roll around.

ERM: From what you've said I gather that during the Clapp and Watts regimes there was encouragement on the part of the central authority, the chief, to counsel with the field, to draw forth out of the field the best thought from that source. Then with the Eisenhower administration, there came a new climate with a different kind of approach. The McArdle administration in the Forest Service responded to that signal. In consequence

the people in the field, you among them, found that your counsels with the chief were now structured differently and they brought forth a different response. Things were of a much more cut and dried order. Policies seemed to be made before even the discussion at staff levels with the chief took place. Is that a fair picture?

CAC: Reasonably accurate.

ERM: Have I gotten off the track in any way?

CAC: No, of course, there are exceptions to this as you go along, but as a general rule it is correct.

ERM: At the same time, there seems to have been in the Eisenhower administration the thought, "Let's give back to the states the responsibilities for a lot of these problems of land, forests, and so on, rather than let the national government take them all on." In one sense there was a pulling back of power into the hands of the central authority and at the same time there was a handing out of responsibility back to the states. Do you see the dichotomy of this situation?

CAC: Yes.

ERM: Or is that a false notion that I have?

CAC: I don't think it did work out that way. There was discussion that would lead you to believe that, but once the policy makers of the new administration learned where they stood, the drive and desire to shift these responsibilities to the states seemed to get less and less. Finally at the close of that administration, I don't think there was any more pressure to shift to the states and less so than previously.

ERM: Then wasn't it resumed again under the Nixon administration in an even more exaggerated way? Wasn't Nixon's initial time in office inclined toward sharing the responsibilities with the states, as he put it, and assigning federal monies to assist the states in carrying out these responsibilities?

CAC: This happened in many activities, particularly in the welfare and human needs programs. I don't think it happened very widely in forestry.

ERM: It didn't happen there?

- CAC: I don't think so. I can't remember that it happened. I can't remember it happening at all. Although the announced policy of the administration was to encourage grants-in-aid to states and cities, I don't think it changed the forestry approach any.
- ERM: In your view, it hasn't had much impact?
- CAC: I don't think so. Now the Forest Service approach to state and private forestry has always been one of dealing with the state foresters as the agents on the ground and to build the state forestry program as strong as possible--never to usurp the position of the state forester. I think this has been effective and realistic, and as a result we can look about the nation and perceive the trend through the years toward strong state forestry programs. Today I think we have very creditable state forestry programs in the nation and it's in no small part--but not completely--due to the constant encouragement on the part of the U.S. Forest Service to build strong state forestry organizations. McArdle had a big role in this. McArdle exhibited great leadership in building strong state forestry organizations through the state forester. He deserves great credit.
- ERM: What is the relationship between state and private forestry and the regional management of the Forest Service? Do state and private function under the regional office or separately from it?
- CAC: In the West, the regional forester is responsible for state and private activities, so technically speaking, they are fully coordinated with national forest activities. These two phases of Forest Service effort are under the same supervision. In the East, this is not true.
- ERM: Or the South.
- CAC: I include the South in the East--the Northeast and the South. There is a state and private unit that reports directly to the chief. One in Philadelphia and one in Atlanta. I have never worked under those conditions. This developed after I left that part of the country and I am not intimately familiar with it.
- ERM: Of course in those areas, state and private bulks are large, but national forest management is rather minor because of the small amount of land involved.
- CAC: This is quite true.

- ERM: Whereas out here in the West, it is quite the other way.
- CAC: Right, quite the other way. It's a different situation. Probably that arrangement is workable back there, whereas out here, it would not make much sense. I don't think anyone thinks it would. I don't know how long the present organization will last in the East. I've just never heard anyone say whether they think it will continue.
- ERM: From time to time over the years you have seen the whole system go through the trauma of changing geographic units--different boundary lines being assigned to regional areas or what used to be called districts. Could you provide any insight into what that involved and what it meant to you at the time? How disruptive was it?
- CAC: I never have been in a situation in which it was personally disruptive. But periodically through the years, someone invariably raised the question of improved efficiency by change of administrative boundaries of some kind. This is not recent. I remember during the Franklin Roosevelt days, it was at its peak. The old National Resources Planning Board devoted much of its attention to redistricting the entire United States. Periodically this has arisen. I think, perhaps, with modern transportation, changing populations, shifts in resource interests and desires, either our system of Forest Service regions was way ahead of its time in 1908 or it is sure wrong today. One of the two--I don't know which one.
- The Forest Service has made some effort at change of districting--change of regional boundaries. For example, there have been recent changes in which the state of Washington was consolidated, whereas it was previously split up. Mostly, however, politics prevail, and the existing organization has prevailed in spite of determined effort on the part of the administration to change. I think you would have to say, without any qualification, that the regional boundaries of the Forest Service are held in place primarily by political considerations that relate somewhat to resource needs.
- ERM: That relate more particularly to political loyalties that have been established in the Congress and elsewhere.
- CAC: You can't read it any other way after the recent events in which an effort on the part of the administration collapsed completely because Congress called it off.

- ERM: That effort was fomented, I presume, to considerable extent by the Bureau of the Budget which was trying to get all agencies of the government that operated in the field to utilize central service facilities, computer transportation, etcetera, etcetera.
- CAC: That's where the pressure came from.
- ERM: In other words, it was an argument based upon economy--methods and means of economizing.
- CAC: Yes, sure.
- ERM: But it did not take into consideration the other things that might be more heavyweight in the final decision. A far deeper actual execution of the order.
- CAC: That's right. Sure as we are sitting here talking, efforts will be made again sometime in the future to make some modification of boundaries. Whether they'll materialize or not remains to be seen.
- ERM: You have been witness to the rise of the so-called wilderness movement--the demand for land in a wild state. This is a trend in our society that comes up from the bottom, in a sense, doesn't it? How would you explain that?
- CAC: This is an interesting phase of American conservation in the first half of the century and it's good to talk about briefly. The Forest Service originated the concept of wilderness designation, or whatever you want to call it. This was land dedicated to a special or nonuse status because of its primitive values.

There's been some debate about who in the Forest Service originated this--whether it was Aldo Leopold or Arthur Carhart or someone else. I don't think that's really too important. In a big organization such as the Forest Service, ideas of this kind rarely originate and come to fruition in one locality. They grow with people. However and wherever it originated, I don't think anyone questions that the wilderness concept originated in the Forest Service.

We went through a period in which each of the regions had a certain autonomy, under general guidance from the Washington Office, to set aside what were called a variety of things. In the Northwest they were called "limited areas" in which there were to be studies, with time for eventual classification as "primitive areas," or "exclusion." A big network of these limited areas

was in the Northwest. Most of the other regions had made the "primitive" classifications directly. This proliferation of primitive areas came during the time that Bob Marshall was chief of recreation in Washington, D.C. He gave a lot of guidance to it.

So scattered throughout the system, then, was this network of primitive areas set up by administrative action or order. We in service began to feel that the security of these areas needed secretarial action. We had primitive areas; we had wild areas that varied by size, and so on. We gradually studied these primitive areas and locations and wild areas, and we were having them classified by secretarial action. There were no deadlines on this action, but it was gradually being done.

Then a movement developed to designate the wilderness by law. The concept of the wilderness law is normally attributed to Howard Zahniser who was then executive director of the Wilderness Society. And to the best of my knowledge, this is where it did originate.

The first draft of a bill that would have set up a wilderness system--I can't remember the details of it--was exceedingly expansive. I remember that I was concerned with this kind of a bill. It was far too expansive. I didn't see much point in a legal wilderness system. And certainly I didn't think that the Zahniser concept--if that's what it was--was in the public interest. The Forest Service didn't as a whole. We had discussions of this. This was in the McArdle-Craft days--I can't remember the exact years. I remember these two individuals were involved.

ERM: What was the expansiveness of it?

CAC: As I remember, it covered a great deal more than I felt that it should. But I can't remember the details of it. There was an effort to have such legislation considered, and the Forest Service was called upon to take positions and discuss this thing. We did discuss the merits of this type of legislation in our regional forester's meeting. I don't know how long this took; it was months, not weeks--maybe even years--but over a period of time, a version of a wilderness bill was drafted which the Forest Service decided to support. I thought this was all right.

ERM: Who drafted this?

CAC: Obviously it was the work of a group. Somebody had one version and somebody changed it, and my guess is that

the administration--this means the Forest Service--had something to do with modifications of it and probably committees in the Congress. The Wilderness Society, the Sierra Club, oh, lots of people had in-puts into this bill. Finally a draft was developed that the Forest Service said it would support. There may have been some details of it that they didn't particularly like, but in the main they supported it.

ERM: Was it supported by any other groups?

CAC: I know that it was. You mean other than the preservation oriented groups?

ERM: I'm speaking of groups other than the Forest Service. What about other agencies of the government concerned with land management and other organizations?

CAC: My guess is that it ultimately ended up with administration's support. I just don't remember this precisely, but I suppose that it probably did have full support of the administration. The AFA debated this at great length, but I can't recall whether they supported the final version of the bill or whether they didn't. I wouldn't want to take a guess. But regardless of the circumstances, it passed.* There were some trade-offs made with some of the congressional committees, and the bill passed.

It froze into the wilderness system the areas that had been previously classified by secretarial order. It set the remaining primitive areas up for study over a ten-year period which has since expired. All the designated primitive areas now are covered by legislation which has either been acted upon or is before the Congress as of today. This is the evolution of the circumstances, and all through this, of course, there was a kind of growing interest on the part of the public in wilderness--to set it aside. It's a part of the whole environmental crusade of the sixties. It's a part of the manifestation.

ERM: You indicated a little earlier on today that you felt that that surfaced first in California.

CAC: Oh, there is no question about it. It wasn't exclusively there, but it was in sharpest focus there.

ERM: Who do you assign the responsibility for that sharp emergence in California?

CAC: Probably the Sierra Club as much as any one thing. Its headquarters were right there.

*Wilderness Act of 3 September 1964, 78 Stat. 890.



Connaughton in the Trinity Alps Wilderness Area,
California, 1963.



At lunch in the San Juan National Forest,
Colorado, July 1973.

ERM: What about the University of California at Berkeley which has always been in the forefront of such things?

CAC: I don't think it had much of a role, except that some of the Sierra Club directors came from the university. At least two of the presidents during this time were from the university. The executive secretary came from the university. From that point of view, it was the source of much of the Sierra Club's driving power, but in terms of organization that existed on the university campus or that sort of thing, I didn't experience anything.

The interest in wilderness grew and continued to grow nationally to the point where there is now legislation introduced for a wilderness system in the East. The system is somewhat different than the original concept of wilderness, but it nevertheless has that term attached to it. So we have, then, this network which prevails on the public lands and wilderness is a public land proposition.

I have always been exceedingly interested in and supportive of the wilderness classification. I'm antagonistic, however, toward promiscuous proliferation of wilderness designations. I think wilderness, somewhat like national parks, should meet a certain set of standards. And these standards are judgment factors to be sure, but they should be established and should be known, and we ought to stay with them. I have a very firm conviction today that the wilderness system is about large enough. I don't think that we ought to continue to add to the wilderness system merely to get acres into it. I have no objection to adding additional land to the wilderness system if it's been essentially noncontroversial. In other words, has general support. But I don't believe in continuing to add wilderness land involving controversial decisions and resources that can be used for other purposes. We have got lots of resources now in wilderness. Fine. Let's keep them there. I don't want to encroach upon the present wilderness system one acre. Neither do I want to add to it, except for noncontroversial areas.

ERM: Is there a danger that if the wilderness system is enlarged to what might become an unreasonable size that the first resource calamity that the country faced might produce a breaching of the integrity of the wilderness area in one place or another and in so doing undermine the integrity of the whole thing?

CAC: Very good possibility, isn't it?

ERM: In other words, perhaps the integrity of wilderness may in the long run be better preserved by moderation in its size.

CAC: Well, this is my concept and it's a very considered concept. It's based on years of association with wilderness establishment and many wilderness controversies. I've arrived at this decision. I feel that it's defensible. No policy, no law, no basic criteria of any kind specifies how much wilderness we need, what size we need. The determining factor is every man's own personal judgment. There is no other criteria. So you arrive at a decision based on a certain set of values that you have yourself. I have arrived at my decision as I have stated here. I think it's defensible and I think it's in the public interest.

ERM: There would be those among them, your critics, who would say, "Charlie, you are walking hand-in-glove with industry on this thing."

CAC: I have tried to show the industry that this is the right position. I've tried to show everybody else.

After the Wilderness Bill was signed, then it became necessary, of course, to implement it through a process of regulation. The Forest Service then sat down with the best qualified they had and developed a set of management regulations for wilderness. Once these regulations were developed in the rough, they were then submitted to a group of us in the Forest Service and we held a meeting in Ogden, Utah to discuss them in detail. It was not hard at all to defend many of the proposals, some things were proposed that we challenged. These same regulations were submitted at that time to groups that were intimately concerned with wilderness management, like the Sierra Club, and they commented on these policies. The reason I mention this is to show that the policy of management of wilderness on the national forests followed a very orderly process. And once the regulations were reviewed in response to all the suggestions that had been received, they were adopted and accepted as Forest Service directions, and all Forest Service stations and offices use them. They haven't been modified materially since.

I think the time is coming when, as with any set of regulations, they will be modified to some degree. I've always had a feeling that, as population pressures build up, we are going to have to be a little less pure

in our wilderness areas. We are going to have to accommodate larger numbers than we would normally like to see enter a wilderness. I think of some of those in southern California. When we accommodate people in large numbers, we are going to have to provide certain things like sanitation and maybe some water improvement--a few simple things that are in relative harmony with wilderness use, and yet there will be some evidence of the presence of man.

ERM: Isn't the argument of those who want more wilderness that ultimately and not far off the pressures on present wilderness areas will become too great for them to bear unless there is some escape hatch into new wilderness areas?

CAC: That's been used, yes.

ERM: How do you reply to that?

CAC: I don't think there's validity to it. You could make the whole state of Montana a wilderness and you'd still have overcrowding on the wilderness area near San Bernardino, California. The mere presence of wilderness in a remote location from where a person lives and visits has little to do with distributing the pressures on wilderness. So I don't think that that's a very valid reason. It may have some effects. But wilderness, I think, along with everything else at a certain period of time is going to be less than the demand. This is true of most of our natural resources. We are going to have to ration, in effect. This is being done to a degree now in several areas, particularly in California. And nothing is wrong with this.

This doesn't mean that wilderness should have the first demand and proceed completely fulfilled and let the other requirements be rationed. I think wilderness, along with everything else, should be defended and the area that we've got now maintained at all costs. And that involves some exceedingly highly productive land, too. I think it should be retained in wilderness. But that doesn't mean they ought to keep adding wilderness area, in my opinion.

ERM: What percentage of the national forest land has gone into wilderness areas?

CAC: I haven't got that figure handy, but it's less than ten percent. The total area of the national forests is around one hundred, eighty-seven million acres and the area in wilderness, including what's provided for in

current legislation, I think would be less than fifteen million acres. So it's somewhat under ten percent.

ERM: Is it your feeling that that is an adequate percentage?

CAC: It may not be adequate but it's about enough. There's a little difference in the terms of my opinion, according to the set of standards that I've developed. As I say, there are no fixed standards, no law, no policy, no guidelines that say this nation needs so many acres of wilderness in relation to so many acres that aren't wilderness. This is your judgment against my judgment. My judgment says "Let's go with what we've got." And we need to make some additions if they are noncontroversial, particularly in parts of the country other than the West. I don't think there is much of any wilderness, as I know it, other than in the West. Where is it? Some wilderness study areas in the East are recognized; but, according to the criteria that we use in the West, the definition must be stretched.

ERM: I presume my concept of wilderness departs from the doctrinaire definition of it. For example, when I was at Yale, I lived in a rural suburban town of Bethany about twelve miles from my office at Yale. My home at Bethany was about a two hour drive or less from Times Square in New York City which I suppose is about as heavily concentrated a population center as you might find in the United States. Yet, my kids and I could go out into the back areas of our little town of Bethany and walk and tramp around for miles and miles without ever seeing another human being. And indeed, if you didn't know where you were in that area, you could get lost. Now that was mainly hardwood forest, a mixed stand of trees that had grown up on what had once been agricultural land in early colonial times. The old stone fence lines were still to be seen. You could find remnants of chestnut fence posts. You'd find the ruins of old farm buildings. I would consider that, in my book, a wilderness area because it has gone back to wilderness--it's natural. But I don't suppose it would be an acceptable idea.

CAC: You've got to read the law. The law defines the wilderness.

ERM: Oh, yes, I know.

CAC: All right, but that's the point. You've got to start someplace. If you want to make your own definition, it can be forty acres in your backyard, but that isn't what the law says. The law says what wilderness is, and it's a definition of wilderness that we didn't have before.

- ERM: I would like to see in the wilderness needs of millions of people that live back in that area and in the South and in the Midwest taken into some account. Where, if necessary, the government would buy back land which can then be allowed to return to wilderness at its own pace. Let's say in northern Wisconsin or Michigan or Pennsylvania or New York or Connecticut, etc., you'd create easier access to millions of Americans that don't now have a chance to visit a wilderness unless they come all the way out to the West Coast or to the Rocky Mountain areas to do it.
- CAC: Yes. I don't think you'd get much argument on that. And, of course, that is your set of values. Somebody else has a different set. That's what makes the subject so terribly difficult to put sideboards on. Very difficult.
- ERM: What are the objections to this other concept that I have about wilderness? Within the Forest Service, for example, how would that idea be received?
- CAC: It isn't wilderness under the law. The Forest Service just follows the law. Now maybe it's a natural area, a rural area, and there are a whole lot of other classifications that could be applied to the things you are talking about. Yet Congress just passed a law this last session which sets up several study areas in the East which don't qualify under the original wilderness bill. Some of them may. At one time before the law defined wilderness in terms of a dictionary definition, the presence of beautiful natural areas was equally as good for you as it was for me. But once that law passed, insofar as the Forest Service is concerned, it tells them what wilderness is. Yes, it does that. It's reasonably workable, and the wilderness system is a great system. It's one that the American people can be very proud of and it's pretty well handled. I don't think you can fault it very much. There are some areas that have to be added yet. They are essentially non-controversial areas. I can think of a number of them.
- ERM: Where, for example?
- CAC: Oh, Alpine and Enchantments Lakes in the state of Washington. These will be added to the wilderness. Probably some of the Cougar Lakes area in the state of Washington.
- ERM: There is a growing push for the addition to wilderness areas in the redwood region, is there not?
- CAC: I haven't heard anything on wilderness. More park has been proposed. There's a question of how much land is

wanted in a park. You could put a million acres in or you can put in twenty thousand.

ERM: Of course, the parks are the areas in which the greatest number of American people will seek their recreational experience. Not in wilderness areas, but in parks.

CAC: This hasn't been true until now. National forests have more recreational visitors than the national parks do. This may change.

ERM: But I'm talking about the use of public camping facilities in the national forests and similar facilities in national parks. Those are the facilities and the areas to which the great majority of American people are going to go for their leisure time and relaxation.

CAC: Yes.

ERM: They are not going to go to wilderness areas because the wilderness area requires of the user a whole different set of characteristics. First of all, he's got to have the physical stamina. He's got to have the time and the money to provide the equipment that he would need to go into the wilderness. And not everybody can do that. It's far easier, I think, for people to hop in their car and go up to the campground and spend a week or two than it is to invade the wilderness.

CAC: Much simpler.

ERM: So isn't it really more reasonable to expect that national forest recreational programs will expand to meet these needs of the citizenry who want to get out of the cities and into the woods?

CAC: They will. They'll have to because the pressure will be there.

ERM: Let's talk a little bit about the development of a recreational land use program in the Forest Service. There again is something that had its development probably starting earlier than your time, back in the twenties, but accelerated during the thirties when you came in, and has developed apace ever since. How would you define the development of that policy in the Forest Service?

CAC: Public interest in the national forest land has, of course, been continuous since the national forests were established. I know this to be a fact because I lived right there against one national forest, that interest

has been exhibited first by local people primarily. They used the area for hunting, fishing, and the usual little wild land camping. Increased pressures came about as population increased and as access improved. This means, of course, that the pressures are the highest and the greatest where the population is the highest and greatest--California being a peak in terms of the West.

Now, public lands have been used for nearly any kind of recreation for which they were best adapted. By this I mean, this might be camping, picknicking, skiing, a resort development, or what have you. I'd like to illustrate a couple of communities in which recreation has been dominant and in which I think the Forest Service has played a great role. One happens to be the Bishop area in Owens Valley in California. The other is the Deschutes area in which Bend is the center in Oregon.

Let's take the first one. In Owens Valley, as you know, water is the most valuable resource which is transported to the city of Los Angeles, primarily. There is a little timber there which is harvested, but it's a dry site situation, and regardless of the acreage involved, production of timber doesn't amount to much. Because of the altitude and the climate, generally, grazing is feasible, but not on an intensive basis. There is some meadowland but it has relatively light capacity as water is short. There has been a little mining. Other than that you come to recreation. Now, like all western communities, this one started, of course, based on its natural resources--grazing, basically, and a little mining and a little timber. There wasn't any particular use of recreation except by a few local people. As the roads improved from there into southern California, this became quite a mecca for the six to eight million people that are in that area. They began to use the Owens Valley area very intensively for summer use. In the early 1950s, the first ski lift permit was granted on the national forest. And again this was pitched primarily to the local people, but this was a sign of the times. It caught on. Now Mammoth Mountain has developed which literally serves thousands of southern Californians. In respect to winter and summer use of this area, one is about as heavy as the other. The Bishop community and the several other small towns in the general vicinity of Owens Valley are completely oriented to recreation and that recreation has its main base on the national forest, the Inyo National Forest. Its summer use is primarily camping; it's the gateway to the John Muir Wilderness. Much wilderness travel goes on, and of

course more than one ski development has occurred since the beginning.

ERM: Pacific Crest Trail goes right through it, doesn't it?

CAC: Pacific Crest Trail goes right along the divide. So here's a community that is one of the pleasanter and more attractive communities in the entire nation that's geared completely to national forest policies, management, and utilization and to the best of my knowledge, is growing and thriving.

ERM: Is this where Disney is?

CAC: No, Disney is interested in the area over on the other side, on the San Joaquin Valley side. That's also on the national forest. It's an area called Mineral King near Sequoia National Park. Now the other area that had great similarity with the Bishop tract has been the Deschutes area around Bend, Oregon. This is a modest western community--very attractive. It has an established sawmill doing the very responsible job of maintaining a payroll. This is Brooks-Scanlon. Bend, of course, had dependent ranches around it, and it was on a fairly stable basis and had a good deal of summer recreation use. The population wasn't changing particularly. And along comes winter--skiing--and Bachelor Mountain developed. This particular development completely changed the pattern. Whereas, motels and restaurants were needed for a short period during the summer, it was not feasible to build them for that short a period of the year. The investment couldn't be realized in the three months season that a little outdoor use would give it. As soon as winter use was assured, a year-long proposition developed. There were periods in which less than full use was contemplated, but there was enough promise so that the community could support needed facilities. Development has taken place until Bend now is quite an oasis in the eastern high desert country. It's an exceedingly attractive area. Not only the local community but immediately tributary thereto are very attractive resort areas, such as Sun River which as a series of private homes as well as a lodge with rooms to rent. This is all geared primarily to the national forest recreation resource. It's the Forest Service policy and principles and facilities that are making these communities feasible. It's working well. Perhaps you can find others, but these are two that I am intimately familiar with, and I'm real proud of them.

- ERM: A man by the name of Sawyer had a lot to do with the developing of that whole thing, did he not?
- CAC: Most of the development came since he died. But his vision, his constructive approach to this community as a whole should have been an inspiration to everyone. He was a great person. He was a local publisher there. Not only was he a visionary individual but he was a man of highest principles and just a great asset to that community. I'm terribly sorry that he's gone. But in spite of that, as I say, most of this development has come since his death.
- ERM: His newspaper has continued and remains to be quite a positive force in the community, though, under its new management.
- CAC: Chandler runs it; he's the publisher. It's a small paper and it's quite effective in its community. They've got a little college there. They've got most of the facilities of an up and coming thriving town.
- ERM: I agree.
- CAC: It is very similar in Bishop. The biggest difference is that Bishop's real main stable resource, water, was moved right out from under them and they had to build basic income on completely new vital recreational facilities without benefit of the on-site use of water.
- ERM: To what extent has the rapid mushrooming of the Bishop area's recreational use put a heavier burden on water resources of that area that have been wholly going into meeting Los Angeles' needs, and how is this having an effect on the water needs of Los Angeles?
- CAC: I don't know the detailed answer to that, except that most of the recreation development involves primarily nonconsumptive use of water. There is some, but it is minor. And apparently the Los Angeles water rights are being satisfied in spite of this. I haven't enough background in the relationships of the water rights in that community to answer this point. The continuing development of the recreation enterprise in the community as well as in the field does not seem to be limited by the availability of water.
- ERM: You were the regional forester, San Francisco office, during the whole struggle over the Disney proposition, weren't you?
- CAC: I was there when it started.

ERM: Not at the end?

CAC: It's still going. It's still in progress.

ERM: Is that right?

CAC: Yes, I was involved at the beginning of this.

ERM: How did this whole project become initiated?

CAC: This is something that I know intimately because I was there and a party to it. There was a survey made of the skiing feasibility of various locations in the California mountains. This particular location of Mineral King was recognized as a real superlative opportunity. This along with local knowledge led to a public hearing on the matter which was held somewhere in the San Joaquin Valley, I forget precisely. As I recall, in the early 1950s the idea was presented and strongly supported by everyone that I'm aware of who would express a judgment on this--local government and the Sierra Club strongly supported it. Still nothing happened, but it was not feasible to develop access to the skiing area. Several years passed, then a fellow named Brandt came along; and he was looking for a real major ski development site. He is from Hollywood. There was some discussion with Brandt and the Forest Service and it involved Mineral King and the fact that if this site was offered for development, arrangements could be made for adequate access. In other words, the motivating force should be the presence of a development permit, and then a road would follow, instead of the road first and the permit later. We were tinkering with this idea of Brandt's when we learned about Disney's interest. Disney had already been exploring this possibility and, if I'm not mistaken, had acquired a little private land there. One thing led to another and the decision was made that the Forest Service would offer the development of this for bid. So we advertised the Mineral King tract for development.

ERM: How large was the tract?

CAC: I don't remember and I'm not sure that the acreage was spelled out. An acceptable development was defined in the prospectus. If I remember correctly, we received six bids for development of the area.

ERM: Were these bids to be based upon year-round use or just winter use?

CAC: The detailed plan was up to them--how would you develop this area. So they came in with their proposals--six of them. Well, we examined them and it was pretty evident that two of them were real possibilities. The other four didn't have near the opportunity for development that the first two--Brandt and Disney--had. They had their development plans laid out and they had good potential plans. The way you bid on these opportunities is to make the government an offer for the privilege of developing the facilities. In other words, what certain percentage of receipts will the government receive? By comparing one against the other, one is selected that is in the best public interest. We looked at all proposals, but as I say it was quite apparent that two of them were in kind of a class by themselves. Brandt had some pretty strong connections at the top level which he may or may not have used. I didn't know whether he would use it or whether he wouldn't.

ERM: Top level, do you mean in the Congress?

CAC: No, I mean in the administration. I don't know exactly who they were, but let's assume it was the president on down.

ERM: Was this under Eisenhower or Kennedy?

CAC: No, Johnson, if I remember correctly. I know Freeman was the secretary. I sized up the situation and said, "Why should I make a decision on these two because it's going to have to go to Freeman ultimately on appeal anyway, so why doesn't Freeman make it in the first place?" So I got in touch with his office and said, "We've got these two offers." Thousands of dollars had been spent making the proposals, relief models, and all.

The plans that these two presented weren't done on the back of an envelope, so they weren't going to be turned down by just stating that one was better for the public than the other, based on opinion. We made what analysis we could, but in the final go-round there had to be a basic choice, a basic judgment of the prevailing factors.

Freeman agreed to make the decision. He could see that he was going to have to make it eventually anyway. So the displays, proposals were transmitted to his office, and the office of the Forest Service studied them thoroughly. I don't know what examination Freeman's own office made of them, but he personally met with the representatives of the two proponents. After reviewing their prospectuses

and discussing all of their ramifications, he decided that Disney offered the best alternative. We awarded what amounted to a temporary contract to Disney to proceed with what you might say a "final plan." The whole thing was continued upon a commitment of the state to build a road. We did issue this permit for Disney to begin his final planning. He immediately put a crew of people up there winter and summer, located a man down in the valley to represent him, and began working with the state. The state then scheduled this road from the valley to the site. Disney got snow information and he decided where the lifts would go and other information. I met up there on the ground with the governor and Walt Disney and others. It was most informative--a pleasant set of relationships. I never worked with anybody more constructive than Walt Disney.

ERM: This was Governor Brown, I take it.

CAC: Pat Brown who was also a pleasant, constructive fellow to do business with. This thing was rolling along well and it looked like the state was committed to build the road. Disney was developing his final plan, and he was going to meet the requirements that we had. He would be given a full permit.

As this was all crystalizing, a suit was filed by the Sierra Club to block the development of the tract. I can't remember exactly at what stage a suit was filed. This was on various grounds. They had a whole list of things. As I recall, they got favorable consideration in the District Court and it went to the United States Supreme Court. The Supreme Court rejected the suit on the grounds of "standing to sue." But the Sierra Club was advised how it could so arrange their suit so it would have "standing"--the details of this, I don't know. The suit was rejected, but in the process the way was open for a new suit. Meanwhile, the state was grinding along with road plans but, due to pressure, withdrew from the project.

ERM: Pressure from where?

CAC: I can't tell you what brought that pressure on because I wasn't close enough. This happened after I left. The state decided that they would pull this from their plan, their schedule, and it's not on their schedule now. This doesn't mean that it can't be put on, but it hasn't been carried along year after year. There's a pretty good reason to take it off. The suit had this project in a moot status, so why leave the road with the money committed in such a status, so the state took

it off. I don't know what the state's ultimate disposition of this might be, nor can I guess the ultimate disposition of the court. The suit is now in court again and I don't know exactly what level this is.

In 1970, the Environmental Protection Act passed.* It was decided that under this act an environmental protection statement would be needed to cover the proposed development. The Forest Service has gone through that process. A major volume is now available which is the final environmental protection statement covering this development. You might gather that this is another policy step toward ultimate installation of this resort center. Disney has never completely backed out. It's been rumored that he might locate elsewhere in the Sierras and he has certainly good grounds for backing out but hasn't. At least he hasn't announced it officially. The Forest Service is continuing with the proposal, so the whole development at the present time is in a moot status. The opponents are achieving their goals and objectives. They are holding it up. I don't know whether their ultimate ends will be served or not. Only time will tell. But they have been very successful in holding it up now for nearly ten years.

ERM: It's rather interesting to note that a former head of the National Park Service, Horace Albright, has been a strong supporter of the Disney development.

CAC: Has he? I'm glad to hear that.

ERM: Of course, Horace was also for many, many years a very staunch participant and supporter of the Sierra Club. I think he and the Sierra Club have gotten into quite a hassle over this and other matters.

CAC: Probably. I think Horace Albright's judgments on land-use matters have been pretty solid. It's been my experience. I've been involved with him in a number of them. I haven't seen him for the last four or five years. I used to see quite a bit of him just before he retired and right after he retired. His judgments, I thought, came out pretty well.

ERM: A few weeks ago I was in contact with Horace by telephone, and he was quite exercised over the policy to permit unchecked fires to burn in certain national park areas, particularly Jackson Hole.

CAC: Yes, there's many of them. I've been concerned.

*Environmental Quality Improvement Act of 3 April 1970, 42 U.S.C. 4371-74.

- ERM: He has taken the view, at least in conversation with me and I'm sure publicly, that this is a very unwise policy. First of all, it really isn't good for the park in the long run. And secondly, it is discomforting to the thousands of people who come there for recreation. They found it extremely unpleasant last summer and fall evidently because of the smoke.
- CAC: I think Horace has got a point. I've been concerned about this. We both have. Both Horace and I have been quoted on this.

SESSION IV, AFTERNOON OF APRIL 2, 1975

ERM: Charlie, we need to examine what might be called the "southern" years of your career--the years you spent in the South both as a director of a research station and as a regional forester. Can you give the time perimeters of both of those services and tell a bit about what you consider to have been the important aspects of Forest Service history and of national forest history?

CAC: I went south in 1944 and remained there until 1955 which were eleven key years in my career that I greatly enjoyed. They were rewarding years from a career standpoint as well as a personal standpoint. I first went to the forest experiment station which was engaged in carrying out a special set of programs but getting ready to embark on a big public education program on the need for forest research in the South which was triggered by the work at two locations, Lake City, Florida and Crossett, Arkansas. By primarily using work at Lake City and at Crossett as evidence of the contribution that research can make to the knowledge needed in the forestry field, an organized program of public education was undertaken in a short period of time aiming at greatly expanding research finances. This was primarily spearheaded by the Forest Farmers Association which had recently been organized with headquarters in Valdosta, Georgia. It was in the charge of an executive secretary, Wayne Miller.

By acquainting primarily the congressmen of the South with the possible contributions research can make, a very major research program was voted by the Congress. This was particularly interesting and gratifying to me because the program was voted without any support on the part of the budget, without any support on the part of a congressional committee. It was offered on the floor of the House. This research program for the South was added to the Agricultural Bill.* This was shared between the Southeast Forest Experiment Station where Ted Haig was the director and the Southern Forest Experiment Station. This effort made it possible for us to move forward with a greatly expanded program in the immediate postwar years. It was the kind of thing in which I immediately became involved in the South.

One of the things that hit me soon after I was there, but it really didn't dawn on me until I looked at it in retrospect, is that I was experiencing or enjoying what I later termed a "great American revolution in forestry." Because, right here at the close of World War II is

*Department of Agriculture Organic Act of 21 September 1944, 58 Stat. 736-7, 741-3, as amended.

when, in my judgment, a real revolution in American forestry occurred. It was centered in the deep South.

Why did this happen at this particular time? There were a number of reasons some of which are as follows: one, a whole strong set of markets were available which made it economical to grow trees as a crop. Another point was that we began to get a wide range of markets--in the pulp business particularly with opportunities for small products--which made thinnings possible. We didn't have that prior to widespread use of pulp. This made intensive management feasible where it wasn't before. Then there was a whole fund of new knowledge becoming available. The early research which was undertaken in the South in the late teens and the early twenties was bearing fruit, and this was showing that you could practice forestry profitably; it could be done and forestry could be organized. Then the results of forest protection were beginning to show up. It was by no means universal, but there were a number of places where state programs on privately owned lands were demonstrating that we could protect forest lands. They didn't need to be burned at will. Then lastly, perhaps, a whole new generation of managers was entering the picture, a group that replaced the old group that was basically oriented toward exploitation of the virgin timber crop.

All these things combined at this particular time in the immediate postwar years to bring about what I term "a revolution in American forestry." Since then, of course, it has moved ahead tremendously, way beyond where it was then. Forestry in the South today is typified by much improved forest protection both from insects, diseases, and fire as well and forest planting on a large scale; these things followed this period that I was just describing. But it was stimulating to be a part of this development because of the many challenges that were offered. At the experiment station we were constantly pushed into new fields, with new requests for knowledge, and I was delighted to be a part of this research effort. I was seven years at the station.

Then it fell to my lot to transfer to the regional office in Atlanta as regional forester in 1951. In Atlanta there was an opportunity to shift into administrative work and concern myself with the state and private program and the national forest program. Although some of the work was related to the research activities in which I'd been engaged, this was mainly a task of applying the research data in such a way that we got new results, and the South, of course, is so responsive. The ecology is so rapid, that we were getting tremendous stimulation

anytime we undertook anything that was constructive. We forged ahead in American forestry, and when it finally came time for me leave the South, it was with tremendous reluctance. It seemed that on all points of the compass the progress was so rapid and so real and so wholesome to be a part of it. I couldn't help but be delighted with this phase of my career. Although I very much enjoyed the prospect of transferring to California, I did it with great reluctance from a personal standpoint.

ERM: You were transferred then in 1955. What was the rationale for your transfer from one regional office to another?

CAC: Let me say this. At the outset, the decision was not mine, nor do I think it should have been. It was the chief's decision to view his forestry program nationwide--and to try and place his people where they would be best suited to the requirements of the program. Obviously he sized this program up, and from a nationwide point of view, he decided that my particular talents, my background, my experience, my age, my interests would best equip him to do the job that he had to do nationwide if I shifted to California from Atlanta.

ERM: Who followed you into Atlanta?

CAC: Otto Lund followed me from Albuquerque. McArdle was the chief and he offered me this opportunity to go to California. He said, "Here's a job we'd like you to consider. I wish you'd take it." But he didn't put it on an "or else" basis. He left that option up to me. As I indicated earlier, although we were exceedingly happy in Atlanta and enjoying the work, we felt that it was our obligation as part of an organization to play the way the chief orchestrated it--not the way we orchestrated it from our level. So we went to California with enthusiasm.

ERM: Who did you follow?

CAC: Clair Hendee. He transferred to the Washington office and I followed him.

ERM: How was the job in California different from the one that you had had in the South? Was revolution in forestry also taking place there or not?

CAC: No, there wasn't--not in the sense that I am talking about this technical revolution in the forests in the South. Not in the least. The California job was very different than the one at Atlanta. First of all, more

pressure is involved in California which is the most populous state in the West. Twenty percent of it is in the national forests, so obviously the activities on the national forests are keyed to much of the development in this very important state. Because of the relative relationships of the national forest in the state, I was very heavily involved in much more than I was in the deep South where the ownership of lands under public administration is only five percent at most. So with this very significantly higher percentage of publicly owned lands within the national forests of California, it made quite a different job.

In terms of forest fires, the job was different also. Most of the forests that still remain in California were old-growth timber whereas in the South the old-growth timber had been removed and we were bringing about the management of the second-growth timber. Fire, of course, was an exceedingly dominant feature in California. In the deep South, fire loomed large but in a different way than it did in California. It didn't have the dramatic relationship such as exists in the mountains of southern California with huge populations nearby. The environmental crusade in California was in the process of surfacing, even back in 1955. I didn't appreciate this when I arrived, but it didn't take me long to see that Forest Service activities were being viewed by the general public from many, many points of view in relation to what we have done since termed environmental values, environmental considerations.

ERM: This was a whole new ball game, wasn't it? Up to that time the Forest Service had, by and large, enjoyed rather generous support from the public.

CAC: I don't think that even when the environmental crusade started we failed to have support. We merely had more interest in what we were doing. Most of the things we had done previously had been in the face of public apathy. And nothing pleased me and, I think, my associates more than that the public was finally interested in what we were doing. They disagreed with us in some areas.

One of the sharpest points of contention arose in what we termed the Kern Plateau controversy. This was one of the sharpest early environmental controversies in the United States, as to whether timber would be harvested on the Kern Plateau or not. This is a plateau area on the Sequoia and Inyo national forests in central California. Here is an area about which we did have some strong differences of opinion with some of the environmentally oriented people. This was at the beginning of environmental awareness. Actually it was a very wholesome experience

to enjoy this environmental buildup. When the preservation interest dominated thinking, multiple-use policies seemed to be open to question to some sincere people. This caused some differences such as over the Kern Plateau or Mineral King or some of the other somewhat similar situations; but acreagewise and in the percentage of decisions made, these controversies were very small. However, they were difficult and aggravating. I think that has changed some with time, because here again I think the environmentally oriented people are saying, "Sure we are concerned about the environment, but land properly used can be fully compatible with environmental requirements."

ERM: When you were transferred from Atlanta to San Francisco, were you being shifted into a trouble spot where your administrative skills were needed--a region that was beginning to have more problems than in the South?

CAC: Well, yes. I can't remember the precise words.

ERM: Did McArdle ever approach you on that basis?

CAC: Yes. As I recall, McArdle and I discussed this prior to this assignment. He pretty much outlined the fact that the region in California was faced with a set of problems or decisions on alternatives. He felt that my experience and aptitudes would best qualify me for that place to work. From the standpoint of the whole Service, he had decided that this was a wise move to make. And he conveyed to me the thought that these were environmental questions. I don't think he or any of us anticipated that they were the forerunner of this large environmental movement that was just around the corner. But he certainly felt them in the making.

ERM: There's a certain pattern of rung-climbing to the top in the Forest Service which involves eventually a shift to the Washington, D.C. office. At the time, did you regret that you didn't move up into the Washington Office from the regional level?

CAC: I was very happy with my assignments in the field, and at no time did I ever feel any disappointment, any resentment, any desire to be moved in any different direction than I did. I can say this without qualification. Another way of saying it is I had absolutely no desire whatsoever to be assigned to the Washington Office.

ERM: You had no ambitions to be either chief or assistant chief or deputy chief in the Washington Office?

CAC: No, I was really interested in field assignments. That's what I had an opportunity to do, and I was very pleased with it.

- ERM: I suspect, too, that your strong talents of relating to the public were recognized, and that really works far better at the regional level or the station level than it ever does in Washington.
- CAC: One is certainly closer to the public and the ground. I was very happy with the way this worked out. I was pleased with the recognition given me by my superiors. They did a good job.
- ERM: Before we proceed with your career which went on then for some time here in the West, is there anything more that you would like to say about the period in which you served in the South?
- CAC: I could spend quite a bit of time discussing many phases of my Southern years, but I think probably we had better dispose of it by just saying this was a most wholesome and happy period in my career, not only because of the job opportunities but because it really opened my eyes to what intensive forestry meant and what was possible with intensive forestry. I hadn't had that experience previously. Not only that, but I made wonderful friendships among my colleagues in that region--men in the Forest Service and men in private industry equally. They continue today. Probably more in private because there were more of them.
- ERM: This was at a time when relationships between the Forest Service and private industry were indeed beginning to show measurable improvement.
- CAC: I thought so. There were stresses, but those were because of personalities, not because of situations.
- ERM: In part they were. The improvement was a result of several factors that were changing.
- CAC: Oh yes, many factors.
- ERM: There had been a change of policy at the national level which was more conciliatory toward industry.
- CAC: Sure.
- ERM: Certainly another factor was a very strong influx of new professionally trained men into the field of forestry in the South. This was a period in which employment in both industry and public service in the South was mushrooming very fast. And probably, thirdly, another factor was that the management of the private sector

was undergoing a radical change. The old entrepreneur was beginning to loosen his grip on the control of management and the new young professional people were moving into positions of responsibility. Their impact was beginning to show in the various trade associations and professional groups which their people were represented on, such as, Southern Forest Products Association. What one did Henry Malmsberger head?

CAC: That was the Southern pulpwood group.

ERM: Also headquartered in Atlanta. One close at hand to you, I imagine. What would you say about that organization and Henry Malmsberger? What about the Forest Farmers Association that you mentioned?

CAC: The Southern Pulpwood Conservation Association was organized and, I believe, originally staffed by Frank Heyward who was formerly the state forester in Georgia.

ERM: And formerly located at Bogalusa.

CAC: He was a state forester. I think he was associated with the organization in Atlanta, and then Malmsberger who was state forester in Florida took this job. Of course, Malmsberger is an absolutely delightful fellow to work with. He's constructive and you can't complain about his goals or objectives nor his methods of obtaining them. It's a pleasure to be associated with men and associations of the type that he would develop. I enjoyed this very much. Of course, by this time, I was in Atlanta. The Forest Farmers Association was also in Atlanta under the direction of Walter Meyer.

ERM: Isn't he still head of it?

CAC: Yes. He does a very good job.

ERM: When you were down there the old Southern Pine Association was still flourishing.

CAC: Oh, yes.

ERM: Herbert Berckes went out in the fifties sometime.

CAC: Yes, he retired and Stanley Deas took his place.

ERM: There was a revolution within the membership of the Southern Pine Association that kind of forced Berckes into retirement.

- CAC: I never knew the full story. I knew that they had decided to make some changes. Deas handled it then for a number of years. He's now retired. I had excellent cooperation from most of the people of the Southern Pine Association. Certainly with the industrial members. From men like Quincy Hardtner, you couldn't have asked for better support.
- ERM: What would you say was the influence of a man like Stanley Horn in the total picture?
- CAC: I saw Stanley Horn at various meetings and saw his participation in policy matters. From where I sat, I would say that his voice was heard, but not too loudly. He was the editor of the Southern Lumberman and it was widely circulated and widely read. His voice had an impact, I'm sure.
- ERM: Did others outside of the forestry group have a particularly strong impact? Can you think of any publishers or editors?
- CAC: Yes, lots of them. Like Neeman, an editor of the paper in Memphis. A fellow like Ralph McGill, the editor of the Atlanta Constitution. These were forceful influences--excellent.
- ERM: Ralph McGill is now deceased.
- CAC: Yes.
- ERM: How did he relate to you when you were in Atlanta?
- CAC: Not very closely. Once in awhile he would express himself on a conservation issue. I thought that he always took a very strong public opinion viewpoint.
- ERM: Was he well informed in his viewpoint?
- CAC: Yes, very well. He was on the advisory committee to the Forest Service in Atlanta, but he wasn't active so he didn't play much of a role. He did get some literature. McGill was a very good force in the middle South.
- ERM: How good have the relations of the Forest Service been to the press and to the rest of the mass media?
- CAC: I don't really have any particular comment, pro or con. I think they have been adequate--not superior but certainly not inadequate. From our point of view, the press has generally been satisfactory. In the environmental crusade there were certain press positions that

were definitely preservation-oriented. There wasn't any question about it. As a result, I felt on occasion they didn't get the full story.

ERM: Interestingly, the New York Times, the Washington Post, the St. Louis Post Dispatch and the Los Angeles Times have been the most severe critics of the Forest Service in recent years. At the same time, these four national newspapers have the highest repute in journalism. They are not thought to be sloppy in their reportorial or editorial functions. Yet I've heard more criticism of those four newspapers respecting the way they have treated subjects that bear upon Forest Service policy, national policy of forestry, the environmental crusade, etcetera, than I have any others. I think that in some instances they have been rather blind in their support of the so-called preservationist groups and what they have been trying to do. How do you explain that?

CAC: I don't know if I can. First of all, I thought that the contacts that I had with the Los Angeles Times were okay. Certain writers that were assigned to it did a good job getting a fair story. I didn't have much criticism for them. It may have changed. I haven't had much contact in recent years. But your general question as to why has the dominant editorial policy been slanted away from use and toward preservation is a good question that I can't answer. But this is true nationwide.

ERM: I wonder if it has anything to do with the general quality of public relations information and education work in the Service. How good a job has the Division of Information and Education done?

CAC: That's an impossible question really for me to answer.

ERM: It should be answered in your view. I mean, it's your value judgment.

CAC: The information and education work of an agency could always be strengthened. I don't care if the whole organization works at it. On the other hand, I think the Forest Service has had remarkable support particularly from all of the press. We don't bridge the gap well between the type of press that you describe, what I'll term national press, and local press. The difference is between the groups that a ranger would work with and the big professional approach that a paper like the Los Angeles Times and the New York Times might have. A paper in a small town in eastern Oregon which has, in my judgment, been pretty well informed on public land

matters has given us pretty fair treatment through the years has quite a different approach than a big national daily.

From this standpoint, the I & E approach of the Forest Service is not an organized effort on the part of a few paid people. The I & E effort is the job of every man in the organization and our rangers, our supervisors and others have done some good work. Generally speaking, we've done a far better job, I think, at that level than we have on what amounts to the organized or the project-type approach which is not a very expansive effort in an organization like the Forest Service. There's not much money available for that sort of thing. Any newspaper or other outlet that wants information for feature story writing is always treated with courtesy. But relatively little originates and is developed and passed along to publications like the Times or Readers Digest. It has been done a little but very minimal. Not enough. That costs money and takes effort and skill. There isn't much of that kind available in any organization in the government.

ERM: Is that partly due to the fact that most of the people employed by the Forest Service are not oriented by their training to be experts in that field?

CAC: No. We recruit people basically as land managers, not as public relations experts.

ERM: How do people get assigned to I & E then?

CAC: Some people are employed for their skill, say from the newspaper world, and of course, these are the people that have skills to really move with ease. The rest in the I & E game are people that are perhaps foresters or other biologists with certain skills in public education and this sort of thing. And they've done a beautiful job on this.

ERM: What would you have to say about the role the national forests have played in our national economy? How has that role shifted from what was primarily custodial to what is now becoming more and more intensive management?

CAC: When the national forests were established, you could almost say without qualification, they included lands that were of low consequence otherwise. In short, these lands played a small role in the economy of the day. This would be an exaggeration to take too literally because, in terms of grazing livestock, they were pretty

important. But otherwise, no. The population hadn't expanded to the point where these more or less inaccessible lands were considered as necessary to satisfy needs.

This meant, then, that early management satisfied needs by merely simple protection--with the exception of grazing. Our early history of public land management begins with protection, and we didn't have much of this at the beginning. But after the 1910 fires in the Northwest, the Inland Empire country, Congress began to make some allowances. The Weeks Act of 1911 was passed, as well as other legislation.* We began to get some administration of the national forests.

Since that time, these public lands have come to play a major role, not only in the local and state economies but in the national economy. We now have a hundred and eighty-seven million acres of national forest land. Ninety-two million acres of that is commercial timberland. Let's take the timberland. When national forests were first established, the timber harvest was inconsequential in terms of the national picture. The needs of the nation were being satisfied from the South and elsewhere from privately owned lands. Now over fifty percent of the nation's softwoods is on the national forests. And the harvest from the national forests is considered inadequate in terms of the requirements of the nation. According to the best projections, we are going to need more and more production from these public lands in the future than we ever did before. In short we need to intensify management so that the land can produce more than it could when it was managed custodially. What does all this mean? It means that in states where the national forests are significant--that is eleven of the western states and some of the others in the East--the policies and procedures followed on these lands is very important to the entire public policy of that state or region.

Take a state like Oregon, for example. The timber production capacity in the national forests in Oregon is vitally important to the long-range economy of the state. The recreation opportunities are vital to the potential in Oregon. Here are two very dominant resources. Grazing is not too significant anymore. At one time, it was pretty major but its rather dimmed out now.

In summary I think this big public estate included within the national forest system plays a major role as one of

*See citation page 63.

the most significant items in the entire United States system in determining general public welfare, particularly as applied to the West. I don't think the Congress is sufficiently conscious of this, and they presume to determine national policy.

Incidentally, we have no national policy for resources or renewable resources in the United States. We are headed for the same sort of problems and hazards that the energy situation developed because of lack of policy. We could and should establish some kind of national policy for natural renewable resources. This will give some guides as to how many acres will be needed and for what. Until some recognition is made of the great role of this public asset in the day-to-day welfare of the western community, we are going to be on a piecemeal, hand-to-mouth annual basis like we've been and like we are today.

ERM: What do you think would turn that around?

CAC: Recognition of the very point that I'm making. Recognition of the significance of this land resource. Take a state like California. Twenty-percent of it is within the national forests. I don't care much what that resource is, twenty percent of a state that has over twenty million people in it, that factor ought to play a pretty dominant role in that state. In the state of Idaho, thirty-three percent is in the national forests. Twenty-five percent of the state of Oregon. Twenty percent of the state of Washington. Name one other influence in these respective states that's as well packaged as the national forest. Just name another one. I don't care which one it may happen to be. You've got industry, agriculture, and so on. But they're not as neatly packaged, in my opinion.

So I think what has to bring it about is public recognition of the role and value of these lands and then enunciation of a public policy for their management and proper financing, proper laws, proper regulations, proper action to implement this. I don't think it's hard to do at all. I think it's perfectly within the capabilities of men available right now to carry this out.

ERM: Where do you anticipate the leadership might come from to write such a plan?

CAC: I think it ought to come from the administration. This is a function of our leadership. This is the sort of

thing that both Roosevelts did. This is what put them in the forefront of resource planning.

ERM: I don't think the present administration has the intellectual capacity even to see that.

CAC: Well, it's going to change. The president, I think, is where it needs to come from; otherwise where could it come from? It could come from Congress, but Congress's interests are so diverse and so territorially committed that this would be slow. But it is a possibility. Congress could implement it if the administration will start it. I'd rather see Congress in a role of following the administration. I can see this happening perfectly simply and easily.

In the absence of it, I think many of the exercises we are going through today which call for programs, such as the Humphrey-Rarick legislation and so on, are more or less exercises in futility because we have no policy to guide these programs.* Somebody has to have a policy in mind to make an action program. In the absence of established policy, programs can miss the mark of wide acceptance. As I mentioned at the outset, there is a great role for the public lands. We are going in the right direction, but we are going too slow.

ERM: Don't we almost have to reach a condition of severe crisis before something like this takes shape and the leadership really grabs the ball and runs with it?

CAC: I'm afraid you may be right. We faced that in the energy situation and in spite of that we haven't developed an energy policy yet in the United States, so I think maybe you are right. Only a resource crisis will bring us into this. I hope that we don't wait that long because that's going to be a pretty cruel way to take it. But that's probably a realistic prediction.

ERM: I would like to talk to you now about the relative balance between various uses of the national forests as they relate to the mission of the U.S. Forest Service.

CAC: This has periodically raised major policy questions internally in the Forest Service. We discussed earlier meetings of regional foresters and directors, the purposes, and so on. A number of such meetings have been devoted to this very topic. It really boils down to the question of what is the mission of the Forest Service? I'm not going to fall back on the law or

*See citation ***, page 64.

secretary of agriculture instructions to Gifford Pinchot when the Forest Service was established, or other similar directives.

ERM: The greatest good for the greatest number and all that.

CAC: This is the written word. But what's in the mind of the man in the street? When you say Forest Service, what does he say? What does the man think in the city of Chicago when he hears the words Forest Service? Well, he probably doesn't think much of anything, but if he does, in my opinion, he thinks this is the agency of government that concerns itself with our forests--our trees. And the Forest Service has a functional responsibility for trees as such.

You might say to this man, "There are other resources in the forest. What other responsibilities does the Forest Service have?" He says, "Well, they probably do have other responsibilities, but really they are the Forest Service--the words say it. Concern with trees is the mission." Now if this fellow was a little better informed, he'd say, "They also have another mission. In addition to this functional responsibility, they have a territorial responsibility for the land within the boundaries of the national forest, regardless of what the resources may happen to be thereon." Under the legislation that exists and in accordance with popular opinion, the Forest Service is responsible for all the resources on the national forests, no matter what they are--timber, grazing, water, recreation, and wildlife habitat. So in total the Forest Service has a complete mission, a functional one for timber and trees and a territorial one for national forest land. I think this is pretty clear, understandable, and reasonable.

Where we get on shaky ground, however, is when we start to bring the territorial responsibilities into the functional area. Outside the national forests, the Forest Service does not have responsibility for all resources of the forest.

ERM: No, as a matter of fact, the initiating legislation in 1898 covered only water and forests.*

CAC: Water and forests, but the case of water is interesting. If the president of the United States wants an authoritative opinion on water, he doesn't go to the Forest Service. He goes to the Reclamation, the Corps of Engineers, the U.S. Water Resource Agency, or one of the various water agencies. If he wants to know about

*Organic Administration Act of 4 June 1897, 30 Stat. 34, as amended.

wildlife, he goes to the Wildlife Service. If he wants to know about rangeland, he goes to the Department of Agriculture, Soil Conservation Service. If he wants to know about recreation he goes to the Bureau of Recreation. So the Forest Service responsibilities then, in my mind, are sharp. There is a functional responsibility for timber and timber alone--trees. In addition there is a territorial responsibility within the national forest for all resources, regardless.

The Forest Service gets pretty shaky on ground when it develops analyses, recommendations, reports and proposals for American forests, which include resources besides timber for lands other than national forests. Such action puts the Forest Service in an uncertain, untenable area. As long as the Forest Service sticks to this, there should be no difficulty, but when it begins to get too expansive and applies multiple use and multiple responsibility to all resources in the forests of America, then the mission of the Forest Service is exceeded.

ERM: A frequently raised issue or demand is to consolidate all of this under one department, to eliminate the waste, eliminate the duplication of functions and complexity. One of the problems has been to know what expert you go to when you want real expert advice. How do you react to the oft-repeated demand to consolidate?

CAC: I have faced this many times, of course, and I have strong convictions on this. I think it would be a very desirable thing to form a Department of Natural Resources or a natural resources group, if you were starting a new government. A Department of Natural Resources would be a sensible organization. But I am unalterably opposed to renaming the Department of Interior and moving the Forest Service into it.

ERM: Is that an emotional objection or an intellectual one?

CAC: It's both. Partly, a long deep-seated set of emotions are involved, but from the standpoint of facts, Interior contains a number of efforts that haven't anything to do with natural resource management. Take them out. To take the Park Service, the Bureau of Land Management, the Forest Service, and the Bureau of Recreation and put them into one agency and call it the Department of Natural Resources, I think would be very acceptable. And let mining and fuel energy and these kinds of things stay in the Department of Interior with the Bureau of Indian Affairs and some other activities.

- ERM: What about agriculture?
- CAC: In my opinion, agriculture can have a vital, significant, and dominant department when it concerns itself with farm crops. You can rationalize that these various agencies that I have mentioned should all go into the Department of Agriculture. You can rationalize this very well. I don't think this is going to happen. A new bureau, a pure Department of Natural Resources, with the natural resource agencies in it, is the best answer. Have Agriculture deal with the farm and the farm groups and let Interior continue to deal with the group of special problems that they've dealt with through the years. I think if this was done and a Department of Natural Resources was created, it would be the strongest department in government, next to the Department of Defense.
- ERM: But that new department would almost inevitably be divided into subbureaus, would it not?
- CAC: I think the subbureaus would be needed in accordance with the wishes of the secretary.
- ERM: They would be obliged to work more in concert with one another.
- CAC: That they would and they'd be under one secretary. There wouldn't be broad conflicting policies, that's certain. And in dealing with the public, there'd be one single group. I think it would be an invincible group.
- ERM: Do you think this might overcome the great problem of inadequate funding that has plagued all of these groups?
- CAC: That's not the whole answer; that's only a portion of it.
- ERM: But would it ameliorate that problem?
- CAC: I think it would help, but it's not the whole answer. It would give them a little stronger position.
- ERM: Have you any additional thoughts in regard to the mission of the Forest Service?
- CAC: What I am about to say might be so axiomatic that I needn't say it. These are public lands that belong to the entire nation and obviously should be managed and so organized. The reason I bring this up is, very frequently it's difficult to comprehend that a management

policy might fit the local condition, but be detrimental to national welfare. We do have circumstances in which local interests and desires are in conflict with national attitudes. What I'm saying is that in the management of public lands in the national forests, policies must be determined and the administration of these policies must be determined in consideration of the overall national welfare. At times, this poses some pretty difficult questions to the administrator.

I'll give you an illustration. In the John Muir Wilderness, we had two very rustic lodges, one was stone and one was logs--native materials--at the end of trails. In the interest of making no improvements in wilderness areas, we put these buildings on tenure. At the end of a certain fixed period of time, they had to be removed. The entire local community opposed this action because these were used in a constructive way in connection with the wilderness area. Yet it was contrary to the wilderness policy. We went ahead and these were removed, they are now gone. This was the application of a national policy in contradiction of local interests. This is kind of a simple one, but it is clear cut. This is really what I am talking about in terms of administration.

ERM: Isn't there something that flies in the face of what we know to be true in this kind of now-and-forever concept of what wilderness is and what the policy must be to preserve what has been declared wilderness. There is no such thing as an absolute--a thing that never changes, is there?

CAC: No.

ERM: It is constantly changing, and its use by even a relatively few people forces change upon it.

CAC: Sure, I agree with that.

ERM: Haven't they got to recognize that there is really nothing that is completely sacrosanct, that is ever beyond a need for change?

CAC: Yes, I would think that any reasonable land manager would certainly agree that no policy will stand forever. You must adopt policies going on your best known ability and projections into the future. You must provide for review at future times.

ERM: Because new knowledge will come to the fore.

- CAC: Things you couldn't anticipate, right. You must always provide for review and revision.
- ERM: I'd like to ask you about your affiliation with and participation in the affairs of professional and lay groups outside the Forest Service. You have long been a member of the American Forestry Association and were past president of that organization. You are active now in the planning of the Sixth American Forestry Congress which is to be held this coming fall in Washington, D.C. on the occasion of the 100th anniversary of AFA. How important a role has the American Forestry Association played in American forest history in the years you have been a witness and participant?
- CAC: I can't evaluate that quantitatively, but qualitatively let me say that, overall and generally speaking, it has played a significant and a positive role. I understand that one hundred years ago, when the American Forestry Association was established, it was exceedingly dominant because it was about the only conservation group in the country. It had the field by default. There was nothing else. And this meant its voice obviously sounded loud and clear because there were not others to be heard. This is quite different today, of course. Many, many other voices are on the national scene. But going back again to the beginning of the period where it dominated the scene, the American Forestry Association can trace its recommendations on several constructive moves, including such things as the establishment of the national forests that we have been talking about. All through the years, AFA can trace relationships to such things as the establishment of the CCC. I have been told that the director of the American Forestry Association was instrumental in working out with Franklin Roosevelt the specifications for CCC.

And the American Forestry Association has customarily played a role in national policy issues. Most of these, of course, are matters of legislation. In the main, the association merely expresses itself on policy but in some issues, such as the wilderness legislation, the association worked aggressively at great length in supporting and presenting its position on the legislation and the attitudes of those involved.

I would say that consistently through the years the voice of the American Forestry Association has been expressed. How well that voice has been heard has varied from time to time. Sometimes it has been heard loud and clear, and these were very positive instances in the field of

conservation. I believe that, generally speaking, the association can be quite proud of its record. If it continues into the future, it should also carry this forward. I am hopeful that the American Forestry Association will play an even stronger role in the immediate future than it has in the immediate past in such things as the formulation of new legislation, seeing that legislation is introduced, and this sort of thing, rather than expressing itself mainly after introduction of legislation. Only time will tell how these things will work out. This varies with the issues that are at stake and with the personalities that are involved.

- ERM: There was a rupture not too long ago over the wilderness matter. A controversy surrounded Mike Frome's series of articles in the American Forests magazine. Frome was fired or his contract was cancelled--whatever arrangement he had with AFA. I think the echoes of that have faded with time, and the members that AFA lost in the wake of it have also been regained to a considerable extent.
- CAC: Yes.
- ERM: But the question still exists as to what it was all about, how the problem was resolved, and who played what role in the solution of the problem or dealing with the problem. As president of the AFA at the time, you were right in the midst of that, Charlie. What light can you shed on that matter?
- CAC: At the time, I was familiar with most everything that transpired in this particular case. Some of it may have escaped me, but in general I can outline most of it. Frome wrote a monthly column in American Forests on a month-to-month basis. There was no contract, no arrangements whatsoever except that he made a monthly contribution. It was very interesting and well received as a whole.
- ERM: This was primarily just a personal arrangement between Frome and the editor, Jim Craig?
- CAC: I suppose that's the way it was arranged. The editor needed a column and he hired Frome to write it. Frome was an advocate of certain positions such as the establishment of wilderness.
- ERM: He was recognized as that before he ever became a columnist for AFA.

- CAC: I'm not going to say whether he was or he wasn't. I'm saying this is what he wrote in his articles; he took an advocate position. You can take an advocate position as much as you want, I presume, but there were certain positions that were maintained by the American Forestry Association as long established policies. Some conflict between Frome and AFA policy was one element of the controversy. I understand this was called to his attention. However, I had no contact with Frome. I presume this was called to his attention by the editor. Moreover, his columns did contain personalities, and this is one thing the Association frowned on. They did not want the magazine of the American Forestry Association to become a platform for attacking personalities.
- ERM: Was Ed Cliff the main target?
- CAC: Well, he was one. I've forgotten. This didn't just happen once but a time or two. I've forgotten how many or what the circumstances were. But finally at the time of the meeting of the board of American Forests in Washington in March 1971, a column appeared, if I remember correctly, at the same time. The board reviewed this and decided there really wasn't any point in further debating with Frome. The simplest, easiest and most direct way was to discontinue publication of his column. At this meeting I was elected president of AFA after the action on Frome was taken. Frome was advised by the editor that he would no longer be carried in the column. That's all there was to it. Afterward, there were several explanations. I have no way of knowing who originated them.
- ERM: Wasn't there some thought that information was passed on to Frome by someone in the office who should not have released it?
- CAC: I don't know. In any event much material later published was in support of Frome.
- ERM: The Wilderness Society's magazine picked up the whole story and blew it up.
- CAC: . Yes. It was the one that published some of the what you might call "Frome rebuttal." Some excerpts of his various columns were published elsewhere too. But William Towell explained it on some occasions at some meetings. That was about all there was to it. Frome was separated with no cancellation of any contract, no anything. The next month he just wasn't published and that was the end of it. I hope that by now that if it did cause some troubles--and I'm sure it did cause some

difficulties because there were some letters to the editor opposing this change--that it has blown over because I hate to see the Association's solidarity jeopardized by something of this kind.

Many of us like to read Frome. He wrote some very interesting material. He had a way of presenting controversial materials so that you related well to it. We hated to see him go, but at the same time, American Forests had standards to maintain that they felt rather strongly were in jeopardy in these columns.

ERM: I take it, from what you have said, that you and Ed Cliff had nothing whatever to do with the ultimate decision that the AFA made in the matter.

CAC: I did.

ERM: You did, but he didn't?

CAC: He didn't.

ERM: In other words, you were not pressured in any way by your former Forest Service associates to put the skids under Frome?

CAC: Not in the least. Cliff wasn't even aware that the AFA was considering dropping the Frome column.

ERM: Hadn't there been some strong negative feeling in the Forest Service over the Forest Service history that Frome wrote?

CAC: I don't think so. He wrote two books. He wrote one with Freeman.* The Forest Service people did all they could to distribute that one, you know.

ERM: I'm thinking of one he published through Praeger.**

CAC: Yes. I don't think there's anything too adverse in that. I don't remember that there was, and I don't remember any criticism of it.

ERM: I don't think it was received with total approval in the Washington Office.

CAC: I don't ever remember discussing it with anybody. I don't remember the book well enough to pass judgment on it myself. I did look at it.

*Orville L. Freeman and Michael Frome, The National Forests of America (New York: G.P. Putnam's Sons and Country Beautiful Foundation, 1968).

**Michael Frome, The Forest Service (New York: Praeger Publishers, 1971).

ERM: What would you say about where the Society of American Foresters stands today after seventy-five years as the principal professional association of foresters?

CAC: I expressed earlier in this interview the thought that forestry profession is evolving. Over our seventy-five year history, we have grown up as a profession, and I think the Society of American Foresters is one symbol of that. I like the way the Society of American Foresters operates. Over the forty years that I have been a member, it seems to me we've raised our sights to a high level of professional concerns. We are more stimulating, I believe, to our members professionally, and I think the Society is gradually progressing in the right direction. I have real confidence that its going to achieve what it wants to. Occasionally the Society takes a turn in the road that I would just as soon it didn't take. This never worries me particularly because I always feel that, given enough time, you can always turn back. And if it is the right turn, the sooner they make it the better. It works out that way.

ERM: What recent turns have you regretted?

CAC: Some things having to do with membership qualifications, primarily, are those I can think of.

ERM: Do you think they are loosening up too much?

CAC: I didn't think we ought to loosen it. Some election procedures I would rather they hadn't changed, if I remember correctly. Several little bylaw changes along the way I'd just as soon we hadn't changed. But after all, when you're as old as I am, you get accustomed to living with things and they become habit and rote, and to make changes is harder than to go ahead as you are. I must remember that. I think the Society is doing pretty well.

ERM: How do you rate Hardy Glascock's performance?

CAC: As far as I know, it's fine. I don't have any close personal contact with Hardy. I see him occasionally at a meeting. He has great enthusiasm. I see this all over the Society--a terrific drive and desire to get the job done. I think the Society is in pretty good hands with Hardy.

ERM: Your presidency was toward the end of Clepper's regime, was it not?

CAC: Yes.

ERM: How would you appraise Henry's contribution to American forestry?

CAC: Clepper's contribution is terrific. He has such a high set of professional and ethical principles that he carried over into the Society that the basis of them will be there forever. That isn't very tangible but it's certainly there. The Clepper image, the Clepper cloak, will forever be over the Society of American Foresters in a wholesome, constructive way. Henry was very conservative--perhaps too much so. The growth of the Society may have reflected this. Maybe some of the Society's policies reflected this. But on the other side of the coin, each and every action that was taken by the Society of American Foresters was taken in a proper, constructive, wholesome manner because of the code imposed by Clepper as executive secretary.

Furthermore, he brought to it great dignity. The Society of American Foresters needed that, particularly at the time that Clepper entered the job as executive secretary. We were having a little trouble with the "lumberjack" syndrome at that particular time. Henry, by example I think, showed us that the profession of forestry would not attain its best standards by copying some of the least desirable habits of the famous north woods lumberjack camps. Instead, he reflected dignity and prestige in terms of appearance, character, and attitudes. This was a great credit to him. He was a real example--a personal example.

ERM: Henry was obliged to operate under the long regime of H.H. Chapman, as I recall.

CAC: Chapman was at least three times president.

ERM: That's never been true before or since, has it?

CAC: I rather doubt it. He was president probably longer than any other person. He was a very dominant person. He imposed himself strongly on the organization. Henry probably deserves a good deal of credit for being able to adapt to it--recognizing that it was a temporary thing--and for taking good from it. There was obviously a lot of good in it too, in spite of the fact that Chapman imposed himself so strongly.

ERM: Yes, very few people would have taken the time and put forth the energy that Chapman did as president of the

organization. I think this is one of the continuous problems of professional groups--they depend on volunteers to serve in various capacities such as officers and board members. Few people really care enough to use their valuable time to get the job done.

CAC: That's very true. Well, he did. Chapman gave of himself unstintingly and accomplished a great deal. Of course, his interest and efforts took time and drew attention and developed interest in the profession as a whole. But generally speaking, they were not directed toward lines that would raise professional stature in the Society. He sought out controversy; he enjoyed it.

ERM: Yes, he was a curmudgeon in the same way that his counterpart in the federal establishment, Harold L. Ickes, was a curmudgeon.

CAC: Sure.

ERM: You put one curmudgeon in the same boat with another curmudgeon and you are bound to have a scrap, such as developed in the New Deal years, as you well remember, between Ickes and Chapman.

CAC: And I don't think those fights had any professional stature. They might satisfy some individuals.

ERM: Yes. I think both were involved in what today are termed as "ego trips."

CAC: Yes, I believe that.

ERM: I remember interviewing Chapman years ago when he came out to Minnesota for some meeting at which the state was recognizing his work in early forestry around Red Lake Reservation. I interviewed him one day in my office in St. Paul. It was a very brief interview, but I remember his recounting his boyhood experiences as a lad growing up there in St. Paul. He was a little fellow, much smaller than his peers. Many who are small in stature develop a Napoleonic complex as youngsters that stays with them all of their lives. I think that, in a very real sense, had a lot to do with explaining H.H. Chapman's behavior.

CAC: Possibly. He was a forceful man, a very good professor.

ERM: You took courses under him?

CAC: Yes. If he had to write it down for you, it was pretty much lost. But if he'd talk to you and explain, it

was good. He was a very forceful fellow. Chapman could explain what he wanted to say to you, but he couldn't write it down clearly.

ERM: What are you going to do in your leisure time now that you are leaving this position with the Western Wood Products?

CAC: I don't know. I haven't any particular plans. I'll just let things come as they will. I'm hopeful that I can relate, in some way, to forestry activities, not necessarily on a regular basis but enough to keep my hand in because I'm interested and I know the people.

ERM: Are you going to practice as a consultant in any way?

CAC: I don't plan to make any particular effort to. If something should come my way, I might get involved, but I'm not aware of anything at the present.

ERM: Charlie, I've enjoyed these two days of talking very much. You are a man who has spent nearly half a century in the field, and we can hardly have covered all you know about events of that time in a few hours of a couple days, but I think we have talked about the highlights of the story. Is there anything you would like to add before we finish?

CAC: I'd have to stop and think a minute. I haven't any particular subject in mind. I would like to say this, that my career has been a happy one. I've enjoyed it from the very beginning. If I was to start over, I don't know that I could write a different prescription. It's been delightful and that's a pretty fine recommendation. It's just been a fine way to live, and I was real pleased when my son came back from the Navy and after having graduated from Stanford said, "I believe I'd like to get into forestry." I was glad that he decided that. He's now completing his Ph.D. at the University of California.

ERM: He's specializing in what field?

CAC: Forest economics. I know his personality and he, too, I'm sure is going to have a rich experience in the field of forestry. I only wish I was his age. This is my biggest regret, because I can see so many things in the field of forestry that are going on and haven't happened yet. The pace, I know, is going to be much faster than it has been in the last ten or fifteen years, and demands for technical skills and the results

on the land are obviously going to increase geometrically. There can't be any other way.

From my point of view, an item of terrific enthusiasm is if you can just relate to the land. This is one of the things that has stimulated me. You asked earlier about any frustration I may have felt at not having been assigned to the Washington, D.C. office. That is not close to the land, and when you are out in the field area, you are far enough away from it, but you are on the land every day or so. Whereas, when you deal with problems in a detached way, whether you are dealing mainly with people or politics, has a whole different set of values. So I have been happy with the developments in my career, and I'm sure a number of other people in the Forest Service feel the same way, but none of them are any more enthusiastic than I am. I entered the Forest Service, am proud of the organization, and I leave it just as proud. That's a pretty fine feeling.

ERM: That's a great thing to be able to say.

CAC: You know one thing I used to do with a great deal of enthusiasm--I started this in Atlanta, and carried it through while I was in California--I had a week's meeting with beginning professional employees each year. This was arranged in various ways. Always at the first session, the regional forester would have a chance to discuss with them the history, aims, goals, and the aspirations of the Forest Service and their potential place in it. I talked to them for a couple of hours. I really enjoyed this as much as anything that I did. Everybody did. Some of them may not have even particularly heard me, but I'm sure that some of them did, because in later life they would mention it.

I used to deliver, pretty much, the same framework of a talk but different in detail from year to year. I would say that insofar as the Forest Service is concerned, they ought to look it over soon and, if they didn't find just what they were looking for, they should quit. The Forest Service didn't want them, if they didn't want to be in the Forest Service. I recommended to them that if they couldn't be part of the organization and subordinate themselves to the organization, they ought to quit. The Forest Service was not a place for individual stars. It was a big organization and you had to be an organization man to enjoy it and be part of it. This meant suppressing some of your great personal ideas and talents in the interest of the organization. If you didn't like this and this didn't appeal to you, get

out. You could quit right there at that meeting, as far as I was concerned, with no hard feelings. But if it did appeal to you, if you could adapt to this sort of thing, the organization in turn became part of your strength. You leaned on the organization; it helped you in times of stress; it helped you attain your goals and objectives; it helped you find your niche. It was big enough that there was a place in it for anyone who wanted to find a certain specialty or a certain locality. So it had strengths as well as its weaknesses. I used to develop this at quite some length.

ERM: Do you think that still holds true today?

CAC: Yes, I do. I think it still applies. One thing that always used to annoy me in the Forest Service was to hear people say, "Well, I think this, but the official position is the opposite." You don't have a personal position when you work for an organization. There is an official position--that's your position--and if you don't have it, you had better quit. As far as your public expression is concerned, there is only one position and that is the position of your organization. Otherwise you had better get out.

I don't think anybody should be forced to accept a position, but they should accept it if they are going to stay in. It's naive to think that everybody believes the same as the organization does. There are lots of things in the Forest Service that I didn't believe in, and I expressed myself to the organization. But when the decision was made on the direction to go, this became my position, wholeheartedly. And it works that way; it has to work.

If an employee persists in some negative and contrary position, he makes himself unhappy and achievement diminishes. One of the great problems in an organization is with those who can't adjust to changes, those who can't recognize their own ceilings. Of course, this is not uncommon, and it makes for frustrations. It's rather a rare thing--a man that can recognize his ceiling. A man can get pretty unhappy when he's trying to reconcile his job and his ability. We could spend the rest of the afternoon philosophizing about the job, but I guess you've got all that's any good.

ERM: I think we've got the best of it.

CAC: I hope it's what you've wanted.

ERM: I think so. I'm quite well satisfied with what we've covered.

CAC: I am too.



Mr. and Mrs. Charles A. Connaughton, 1971.

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