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Samuel T. Dana
THE DEVELOPMENT OF FORESTRY
IN
GOVERNMENT AND EDUCATION

An Interview Conducted by
Amelia R. Fry

Berkeley
1967

Produced under the auspices of
Resources for the Future

MAKING WOOD SERVE AMERICA BETTER THROUGH GOOD FOREST MANAGEMENT.



Weyerhaeuser Timber Company advertisement,
1956

DR. SAMUEL TRASK DANA, fellow and former president, Society of American Foresters; Professor Emeritus of Forestry and Dean Emeritus of the School of Natural Resources, University of Michigan. One of the nation's leading forestry educators, he helped train hundreds of young men who have contributed much to wise use and good management of forest resources. Member, U. S. Forest Service, 1907-1918; 1923-1927.

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PREFACE

This interview was made possible by a grant from Resources for the Future, Inc., under which the Regional Oral History Office of the Bancroft Library at the University of California at Berkeley embarked on a series of interviews to trace the history of policy in the U. S. Forest Service. Dr. Henry Vaux, Professor of Forestry, University of California, Berkeley, is the Principal Investigator of this project. Copies of the manuscripts are on deposit in the Bancroft Library of the University of California at Berkeley; also in the Department of Special Collections, UCLA Library; in the Forest History Society, Yale University; and in the library of Resources for the Future, Washington, D. C.

The Regional Oral History Office was established to tape record autobiographical interviews with persons prominent in the recent history of the West. The Office is under the administrative supervision of the Director of the Bancroft Library.

Willa Klug Baum, Head
Regional Oral History Office

Regional Oral History Office
Room 486 The Bancroft Library
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Berkeley, California

THE RESOURCES FOR THE FUTURE SERIES
tape recorded interviews on
THE HISTORY OF FOREST POLICY, 1900-1950

1. Clepper, Henry, Executive Secretary, Society of American Foresters.
2. Dana, Samuel T., Dean, School of Natural Resources, University of Michigan
3. Gill, Tom, Forester, author, head of Pack foundation.
4. Granger, Christopher, Assistant Chief of the Forest Service, national forest administration.
5. Hall, R. Clifford, Director, Forest Taxation Inquiry.
6. Hartzog, George B., Director, National Park Service.
7. Hornaday, Fred, Executive Secretary of American Forestry Association; and Pomeroy, Kenneth, Editor for A. F. A.
8. Kotok, I. E., Assistant Chief of the Forest Service, state and private forestry; research.
9. Kniepp, Leon F., Assistant Chief of the Forest Service, land and acquisition.
10. Marsh, Raymond, Assistant Chief of the U. S. Forest Service under Earle Clapp.
11. Peirce, Earl, Chief, Division of State Cooperation, USFS.
12. Ringland, Arthur, Regional Forester, Region 3; Executive Secretary of National Conference on Outdoor Recreation.
13. Roberts, Paul, Director, Prairie States Forestry Projects;
14. Shepard, Harold B., in charge of Insurance Study, conducted by the Northeastern Experiment Station with Yale University.
15. Sieker, John H., Chief of Division of Recreation and Lands.
16. Swift, Lloyd, Chief of Division of Wildlife Management.

INTRODUCTION

Dean Dana at ⁸⁴~~81~~ is so active in his profession that the logistics of scheduling interviews with him, in spite of his own willingness, were always challenging and sometimes impossible. His accomplishments and writings indicate that this rate of activity has been characteristic throughout his life; he repeatedly has leaped into a new task, discovering in his own quick way the stuff of which it was made. He then either accomplished it with dispatch--as he did as Forest Commissioner of Maine from 1921 to 1923, or he stayed to build and mold the existing task to fit as nearly as possible his own vision of a finished creation--as his twenty-^{four}~~three~~-year leadership of the School of Natural Resources at the University of Michigan suggests.

Samuel Trask Dana was born in Portland, Maine, in 1883, and attended school there until he entered Bowdoin College, where "My course of study was what you'd call a liberal arts program," he says.* Under a flexible elective system, he delved deeply into the physical sciences and also won a prize in economics.

His choice of the field of forestry evolved slowly. He objected to his father's plans to make young Sam into an attorney, stating that he would be a doctor instead. Apparently

*"The Dana Years, Part I," an interview by Elwood R. Maunder and Amelia Fry, *American Forests*, November 1966, p. 32.

both compromised on electrical engineering, so in 1904 the new Bowdoin graduate went to Massachusetts Institute of Technology, where he lasted about three days as an engineer. He turned to forestry, he says, "because I couldn't find anything else I did like."* He wrote to Roy Marston, on the Yale forestry faculty, who told him that forestry was a "wonderful profession if you like it; if you don't you won't last very long."*

Trying the idea on for size, he went into the backwoods of Maine for the winter to think it over. About those days as an "observer" with the Great Northern Paper Company, he remembers that "in spite of nearly freezing to death, getting up two or three hours before sunrise, and sitting around doing nothing, I decided I liked forestry."*

After his Master of Forestry degree from Yale in 1907, Dana went to the U. S. Forest Service Office of Silvics where he shared a desk with Ra^{ph}ael Zon, the father of forestry research, for ten years. During that time he was called upon to make a unique study of timberland "ghost towns," and this he attacked with his usual thoroughness and vigor, eventually even selling a popular version of his report to *Munsey's Magazine*. In World War I he found himself "getting estimates from the various units of the army for what they thought they needed, and then trying to find out where they could get the materials."

**ibid.*

When hostilities were over, he was assigned to yet another task quite different from any before: to compile a history of the army's General Staff, which, with a staff of only one stenographer, he wrapped up in five months.

After the war Dana began to feel that he was hitting his ceiling in the Office of Silvics (now, under Earle Clapp, named the "Branch of Research"), so when Governor Percival Baxter asked him to come to Maine as the land agent, he went "to help improve the situation." In two years, under Dana's energetic leadership, "the situation" changed drastically--from a department of mere custodianship in the state's spoils system to one that had a staff committed to conservation management and education. A "Maine Forestry Association" was organized by Dana primarily for timber owners who could thereby be exposed to principles of sound timber management, better fire protection organization, and disease and insect control. Before he left, the name of the department had been changed to embody the new concept of management, from the "Department of Lands and Forestry" to the "Maine Forestry Service."

After that bit of pioneering in Maine, he accepted the directorship of the U. S. Forest Service Northeastern Forest Experiment Station--also fresh ground to be plowed because the station was a new one. Dana organized a staff, selected projects, and set up field studies, all of which served as a base for four years of steady growth of the research program. At the same time he attempted to integrate the program with the

needs and concerns of the timberland owners and the colleges through his "Northeastern Forest Research Council." "I'm a little proud of the fact that we got real involvement from our Council members," says Dana.

His deanship at Ann Arbor became his most sustained effort to create a broader educational structure in the field of forestry. He took the post in 1927 when the regents accepted his plans to enlarge the department to a "School of Forestry and Conservation" embodying studies of forestry techniques, the influence of the forest on wildlife, climate, streamflow, erosion, recreation, and the community. In 1950 the school was formally changed to "The School of Natural Resources," including all resource studies and in addition instruction for teachers, post-doctoral programs, and study programs for those already in conservation professions. He has requested that a copy of this interview be deposited in the library there.

These two taping sessions, which were held in August and December of 1964--fifty-seven years after Sam Dana first entered the U. S. Forest Service--were not so much for the purpose of chronicling events, for that information is easily available elsewhere, but to capture some of the attitudes and personal outlook held by one of conservation's most knowledgeable and productive figures.

The first interview took place in Mr. and Mrs. Dana's Ann Arbor home, a structure which, sitting low under the trees on a rise near the campus of the university, gives off the

warmth of the woods with which it was built and of the occupants within. It is an informal house, not "old fashioned," and with spacious horizontal lines. It is filled with books, awards, travel memorabilia, and signs of grandchildren's visits. His wife, Ruth Merrill Dana, who is a social worker**insisted on giving up her afternoon in order to be with the interviewer's three boys on the large grassy lawn outside. Inside, in the study, which is off in a wing to itself, Dr. Dana answered questions pointedly and succinctly, not distracted by the outside noises which occasionally made their way to the microphone. With his unswerving attention came an honesty of reply that allowed for easy pursuit of the issues under discussion. Sitting cross-legged near his desk, his slim frame fitting comfortably in the chair, he spoke matter-of-factly with no bombast, no large gestures, no entertaining attempts to color his speech and thereby distort. His enthusiasm for the subject was apparent in the vivacity shown in his eyes and once in a while in a quick grin. One of his fellow deans has said, "Sam is usually friendly but can, if irritated, speak up--but that doesn't happen very often. He can express opposition but still not antagonize anyone."*

The next session was held on the Berkeley campus four months later, during a trip which Dr. Dana was making for a redwood park survey on the West Coast for the American Forestry Association. In a small office in the University of California's School of

*Korstian, Clarence, in unrecorded interview, 1964, Durham, North Carolina.

**Dr. Dana adds: "Mrs. Dana is not a professional 'social worker.' I suggest substituting 'county supervisor' as being more accurate."

Forestry the wirey forester again engaged in forthright discussion, this time on education and on present and future forestry concerns. In spite of a heavy travel schedule and a complex assignment for a controversial issue (a national red-wood ^kpart site), he devoted nearly the entire afternoon to the tape-recorded interview.

Earlier that year, the interviewer had conferred with Elwood Maunder of the Forest History Society at Yale University, who also had been taping interviews with Dr. Dana on a catch-as-catch-can basis. Each office made efforts, with help from Dr. Dana, to supplement the scope of each other's interviews and to prevent too much duplication. The Forest History Society interviews are in separate manuscript form and are deposited with this transcript.

Later, excerpts from the two interviews were put together for publication, first in *Forest History*, July 1966, and then reprinted serially in *American Forests*, an organ of the American Forestry Association, in November and December of that year. The latter publication was timed to coincide with the endowment of a "Samuel T. Dana Endowed Chair of Outdoor Recreation," at the University of Michigan, announced with proper recognition at a banquet at the American Forestry Association's annual meeting in November at Williamsburg, Virginia.

The transcript of the two sessions was put in a rough chronological order by the interviewer and then checked over by Dr. Dana to catch ambiguities and any need for additions--this done

during the hurried weeks preceding his departure for the Sixth World Forestry Congress in Spain. Distressed at the unliterary quality of the spoken word, the professor and writer changed words and phrases here and there to tighten the meaning he had in mind at the time of the recording session. (See correspondence in appendix.) Although a few words and phrases are changed, the precision and liveliness of the Dana mind in unrehearsed conversation still comes through.

Amelia R. Fry
Interviewer

15 September 1967

Regional Oral History Office
Room 486 The Bancroft Library
University of California
Berkeley, California



Samuel T. Dana

High school graduation picture, spring of 1900



Samuel T. Dana - December, 1910

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Samuel T. Dana
December, 1910

ASSISTANT CHIEF IN OFFICE OF FOREST INVESTIGATION

Growth of Research

Fry: After your first three years in the Forest Service as a forest assistant, you became Assistant Chief of the Office of Investigation, didn't you?

Dana: Yes, a position I held from 1910 to 1919. It was not at the policy level.

Fry: Was Raphael Zon your immediate superior?

Dana: Yes. He was not only my immediate superior, we shared the same desk from 1907 to 1921. It was a big desk, and he sat at one side and I sat at the other. So he had me completely under his thumb. [Laughter]

Fry: In your interview with Mr. Elwood Maunder, for the Forest History Society, I notice that you said that your duties there were largely administrative.

Dana: Yes, administration of research.

Fry: Maybe you can give us some idea about the role that research played in the Forest Service in those days. For instance, in talking with Mr. S. B. Show, I got the impression that research in the Forest Service wasn't getting the emphasis which Show himself felt that it should have, at least on the California scene.

Dana: Well, that's what all of us in research thought, that it wasn't getting adequate recognition. Research got started in a modest way in the early 1900's, when Mr. Zon was influential in getting Mr. Pinchot to recognize

Dana: it as being an integral part of Forest Service activities. Pinchot set up this research office that went under various names and that Mr. Zon was in charge of right along. It wasn't until Earle Clapp came in 1915 as the head of the Branch of Research that there was any really vigorous campaign to get the same kind of recognition that administration got. There had been a constant struggle in those years between administration and research, as to who should determine investigative policies and programs. The administrators insisted particularly that they should have control of all research in their region, on the ground that its purpose was to contribute to better management on their part.

Mr. Clapp, on the other hand, felt, as did the rest of us in his organization, that control had to rest in the Branch of Research in the Washington office--of course under the direction of the Chief of the Forest Service, but independent of the regional administrators on the ground that they would be almost certain to divert research into solving problems of immediate rather than basic interest. He felt that the only way to keep research at high levels is to have it independent, and he succeeded in getting that point of view adopted by the Chief of the Forest Service.

Mr. Graves*was the Chief when Clapp came in, and then when Greeley** followed later as Chief, he accepted the situation. The problem hasn't come up seriously since then.

*Henry S. Graves

**William B. Greeley

Fry: Did schools of forestry or outstanding men from schools of forestry help in any way in this effort to get research established as a function independent of administration?

Dana: I don't think so. The problem was wholly an internal one for solution within the Forest Service. As far as my knowledge goes there was no connection between the schools and the decision that was reached.

Fry: And then as research gradually built up in the Forest Service, would you say that the schools didn't have much to do with this, or did they?

Dana: Oh yes, they helped in the way of moral support. Of course they approved of research. And occasionally, I think, somebody would write to a legislator on the subject or speak to a friend who might write to a legislator. But there was nothing in the way of an organized campaign on the part of the schools, whose support was friendly but more or less passive.

Fry: Before research won recognition as a prominent part of the Forest Service, why was it secondary to administration?

Dana: The administrative offices were simply overwhelmed with problems of fire protection, grazing control, estimating the amounts and location of timber available for sale, determining stumpage prices, and so on. It was a relatively small group that was overburdened with problems of protection and administration, and they didn't have any time to bother with research. They just had to act

Dana: on the basis of knowledge already available.

Fry: So that actually it was a lack of appropriations needed to hire a larger staff in order to take in more research, is that right?

Dana: The subject of appropriations was an important one that was related somewhat indirectly to that of over-all control of research. More funds were urgently needed for the greatly overburdened administrative staff as well as for additions to the very small research staff. More money was needed everywhere. The basic difficulty was that the administrators were so absorbed in the task of getting things done that they couldn't spend the time nor had they the interest to pay as much as the Branch of Research felt it deserved. Their recognition of it was theoretical rather than practical. In effect, they said: "Sure, research is a fine thing, but we don't want to overdo it, and we want it to be directed at the solution of current problems."

Fry: Was Zon unhappy about this?

Dana: Yes, I'd say he was unhappy, but not nearly so much as Clapp.

Once Clapp established research as an important and independent function, the big question was how much attention would be paid to the findings in the early days. I doubt whether these had very much influence on actual practice. Good publications were put out, but I fear that few people paid much attention to them. In general,

Dana: it seemed for a while as if the results of research attracted more attention outside of the Forest Service than in it.

Ghost Town Study

Fry: Didn't Greeley publish a study of forest ownership and management when you were working in the Office of Investigation?

Dana: Yes. That was Greeley's, *Some Public and Economic Aspects of the Lumber Industry*.

Fry: Yes. Did you have anything to do with this study of Greeley's?

Dana: No. I had nothing to do with that study, but I was making an independent one at about the same time or maybe a little bit later. The basic objective of my study was to find out what the private owners' practices in the handling of their timberlands were doing to the communities which were dependent on the lumber industry for their existence. So that my job, in large part, was to look up ghost towns and find out why they'd become ghost towns. A bulletin was finally published under the title of *Forestry and Community Development*, in which I pointed out example after example of towns that have virtually disappeared because the timber had run out. And of course, the moral was that the way to avoid these ghost towns was to practice sustained-yield forestry; until that is done ghost towns are going to continue to develop. It was a piece of constructive propaganda based

Dana: on what I am sure was accurate information. One of the most interesting ghost towns that I found was Cross Fork in Potter County in northern Pennsylvania. I got a complete history of that town from the time that the timber was first surveyed and the first houses were built, right through its hectic development with the disappearance of the timber until it just went down flat and became a ghost town. At the time I was there, the town had been taken over by the state government, which had acquired the land and made it part of a State Forest. Yet during its heyday Cross Fork had been an extremely lively and prosperous town whose residents boasted that at one time they had hotels and restaurants which rivaled Delmonico's in New York. This study was made in large part by studying a complete file of the town's newspaper, from which I constructed a history of the life, thought and activities of the town and many of the colorful incidents that marked its rise and fall.

Fry: I wanted to ask you how this study began. This is interesting because now the study of towns has become quite commonplace on the part of sociologists and economists. Yours must have been one of the first. Was this your own idea?

Dana: I'm not really sure, but my guess is that it was Zon's. He thought that as a part of the broad study of the relationship between industry, methods of cutting, and community development, some specific information would be helpful; and I just happened to get picked to collect it.

Fry: As I understand it, the technique you used then was to personally visit these various towns.

Dana: Yes, that's right. I personally visited them, got what I could in the way of historical information, which was particularly good in Cross Fork and, of course, talked with old-timers, going as far back as I could to find people who had lived there and who had first-hand experience with what was going on. I took a lot of pictures.

Fry: It sounds like an interesting job for a forester.

Dana: I became a specialist on ghost towns. [Laughter] I wrote the story of Cross Fork in the form of a popular article and submitted it to *Munsey's Magazine*,* and it was accepted by them. I called it "Cross Fork: The Tale of a Town." The editors didn't like that title, and they changed it to "A Forest Tragedy." [Laughter] This, again, was obviously a piece of propoganda. The article ended up, as the Forest Service Bulletin did, with the comment that the decline of the town was due to not following proper forest management practices. The answer, again, was to practice sustained yield forestry.

If you want a more personal slant on this, one of the interesting things to me was that the issue of *Munsey's Magazine* in which the article was published was reviewed by Brander Matthews, a literary critic of the times. He took each article in that issue and analyzed the way in

**Munsey's Magazine*, 60: 353-363. April, 1917.

Dana: which it had been constructed, why it was or wasn't effective. His main comment on my contribution was that it was effective because it was so very concrete, producing incident after incident. Then he went on to say he could imagine how I wrote it--striding back and forth in my study and emitting volumes of cigar smoke. In view of the fact that I don't stride and I don't smoke, this picture was amusing. [laughter] But his analysis was interesting, particularly in comparing my story with other articles, indicating where each was either strong or weak. That was my only attempt at popular writing.

Fry: Well, you were successful enough that you could have had even another career, alongside all your others. Literary creation.

Dana: I've often thought that I would like to do more of that kind of work. I enjoy....

Fry: Well, if you ever retire maybe you can.

Dana: Yes, if I ever do. [laughter]

Fry: What did you start to say? That you enjoy....

Dana: That I enjoy attempting to popularize scientific material. That's one of my troubles. I enjoy too many things. It makes me tend to scatter. Everything is interesting.

Experiment Stations

Fry: Did your job entail much work with the fledgling research stations that were extant at that time?

Dana: My first connection with the Experiment Stations was back

Dana: in 1908 when I selected the site of what is now the Fort Valley Experiment Station near Flagstaff, Arizona-- the first to be established in the country. I spent some time scouring the Southwest, and then Zon and G. A. Pearson came out to check over the sites that I was suggesting. We all agreed that this location at Fort Valley was the best. That's how the first experiment station got established.

Fry: Do you remember what other locations were under consideration?

Dana: Yes, in a general way. Various places in the White Mountains, southeast of Flagstaff, and in the mountains near Santa Fe seemed to me to offer good possibilities.

Fry: In these early days, were the experiment stations concerned primarily with silvicultural problems? Was this their main interest?

Dana: Yes, almost entirely. Of course, in the Southwest silviculture got mixed up with grazing problems because sheep in particular and cattle to some extent had a very detrimental influence on reproduction, especially in the ponderosa pine type.

Fry: I would guess that this would be a pretty difficult area for research findings to get incorporated into policy.

Dana: [laughter] It was almost more difficult politically than it was silviculturally. Grazing people, of course, were violently opposed to any reduction in the number of the livestock they could graze.

Fry: Did you have any experience at all in trying to

Fry: incorporate this into policy in spite of criticism?

Dana: Not much. I strongly supported Pearson's major findings as to the damage done by grazing, but we didn't any of us have anything to do with the translation of these findings into actual control over grazing. That was handled entirely by an administrative group.

Fry: In the experimentation station in Arizona and later in the one you ran at Amherst, were the problems undertaken in research primarily those of Forest Service administration, or were they aimed at private timbermen who might use the findings?

Dana: I would say that prior to 1920 the research concerned almost entirely National Forest Service problems. Then in the 20's, when the stations began to get started in the East, problems of private owners played a very important part in the picture. This was largely of course because of the lack of federal lands in those eastern regions; federal acquisition had not yet gone very far. The great bulk of the areas were privately owned.

The first of the eastern stations was set up at Asheville in North Carolina. There again I made the preliminary survey that resulted in the choice of that location, after covering quite a lot of the South. I thought it looked like a very good set-up. Then the next was the northeastern station, at Amherst, Massachusetts. After that came the one at St. Paul, which Mr. Zon took charge of.

- Fry: Did you say a while ago that application of research findings was greater in private industry than it was in Forest Service? Or am I remembering that correctly?
- Dana: No, I didn't mean to say that. I think that the interest of the private owners was perhaps greater than the administrative officers, but the timbermen didn't always apply the results even though they were interested in having the work carried on.
- Fry: I wonder why?
- Dana: Well, for one thing, they weren't convinced the results were too good. [laughter] Then, too, when one is used to doing things a certain way, inertia is hard to overcome. Changes don't come about easily.
- Fry: Is perhaps less use made of research in the South than in the forests elsewhere? Is this your impression or not?
- Dana: No, I think the South is paying a great deal of attention to what's going on. The South is very strong for both basic research and applied research and is using the results. Many of the larger Southern private owners are progressive and are doing an excellent job.
- I think there's probably less application in the Lake States than anywhere else.
- Fry: I guess the midwestern companies too have undergone as much change as companies elsewhere.
- Dana: I don't think they have. The South is really quite outstanding now.

Fry: I was reading a book called *Fire and Water*, by Ashley Schiff, who portrays the difficulties of getting the policy of light burning changed. This might be one example of the difficulty of getting research findings incorporated into policy, down on the state level.

Was this a question when you were in research?

Dana: Oh yes, particularly in the West. California was the outstanding hotbed for that.

Fry: Oh, even that early.

Dana: Yes indeed. There were many light burners in California at that time. The Forest Service was violently against it.

Fry: Was it conducting any research on it?

Dana: Not much at that time. It is now.

Fry: Well, some of the men I talked to say that this policy is changing toward allowing more of it.

Dana: Well, it certainly has been changing in the South. I don't think that federal policy has really changed in the West as yet. But the whole subject is now under much more intensive study than it ever has been.

Fry: But it seems that in a situation like that where research findings indicate a reversal of policy, the information and education division of the Forest Service has done such a good job that it's almost impossible to re-educate the public.

Dana: It makes re-education difficult, that's right.

World War ICommodity Statistics on Lumber

Fry: I was wondering if, during World War I, you were in the Tenth Engineers, the Forestry Division?

Dana: No. I was not in favor of our entering the war to start with, so that I didn't join up at all promptly. But after war had gone on for some time, I felt that we're in it we've just got to see it through and that everybody should contribute whatever he could. When I tried to enlist, my physical examination showed that I was too frail for overseas service; so that I did not get into the Tenth Engineers or any similar outfit. I was, however, allowed to enlist for office work, and I became a captain in the Army's General Staff, where I served as secretary of the Commodity Committee on Lumber, which was largely a statistical job. I got estimates from the various units of the Army for what they thought they needed, and then I tried to find out where they could get the material.

Prior to getting into the armed services in a desk job, I had been making some field surveys for the Forest Service in the Office of Forest Investigations, trying to locate supplies of spruce and other woods available for war plane construction. I was also doing a little work in connection with location of walnut for gun stocks; this activity was handled by someone else,

Dana: but I kept in touch with it. So you see that my war service was divided into two parts: first, in the Forest Service, seeking supplies of woods needed for military purposes; and second, in the General Staff, doing statistical work on the Army's requirements for lumber.

Fry: I wanted to ask you if during World War I the lumber industry applied more pressure to cut more wood from National Forests?

Dana: Yes, it did.

Fry: Did this come under your office at all?

Dana: To some extent while I was in the Forest Service, but not at all while I was in the Army, where my work dealt entirely with estimating requirements for lumber and locating available supplies.

Fry: Were you able to go back to the Forest Service immediately after the armistice?

Dana: No. It was harder to get out of the Army than it was to get into it. In order to keep me busy, they put me to the job of writing a history of the General Staff from the Civil War on. I got out a volume that's this thick [laughter]. I don't know whether any copies are still left or not, but it was quite a history.

Fry: What kind of sources did you use?

Dana: Original material from the War College, on the Potomac, where I reviewed reams of departmental orders and reports, and so forth. I really think that I succeeded in compiling in orderly form more about the General Staff

Dana: than had ever been brought together before. This was one of my first ventures into history. [laughter]

Fry: Well, your reputation as a writer must have preceded you.

Dana: No, I don't think that had a thing to do with it. They just had to get me out of the way and keep me busy doing something. [laughter]

Fry: What kind of a staff did you have for this job?

Dana: None, except for a stenographer.

Fry: How long did it take you?

Dana: I think that I was on the job from early November until sometime in late March--it took several months.

Fry: It sounds like you did a pretty fancy job.

Dana: I thought so myself, but I am not sure that anyone else did.

Incidentally, in this connection, neither Chief Forester Graves nor Mr. Clapp favored my going into the Army, because they thought that I was more needed in the Forest Service. They were quite upset at the time about my "desertion," and when the war was over the question came up as to whether I should be taken back. Mr. Graves, in particular, put me on the spot but finally decided that there was a place for me. Clapp, who was then Assistant Forester in charge of research, came through with a proposal that I become his assistant. So I managed to get back again, but I was about to look for another job at one time.

Fry: Did Graves feel this way about all the foresters who went into military service?

Dana: No, not at all.

Fry: Because most of them went into the Tenth Engineers?

Dana: I think that he was much less upset about the men who enlisted early and particularly about those who got into the Tenth Engineers, which the Forest Service had organized, and later the Twentieth Engineers. His feeling about me was that I was leaving essential work in the Forest Service for more or less routine work that many others could do equally well; that I was just following a selfish impulse in wanting to be active in some kind of military capacity in connection with the war.

EARLE CLAPP'S ASSISTANT

Fry: When you returned to the Forest Service, I believe your title was Assistant Chief of the Research Branch. Right?

Dana: Yes, and I was also a "forest-economist."

Fry: What were your chief responsibilities as Dr. Clapp's assistant?

Dana: My duties were very largely carrying out the policies that he decided upon, including the handling of correspondence, supervising field work, reviewing reports, and preparing material for publication. I spent much time visiting experiment stations and reviewing their activities and programs. The Forest Products Laboratory was also on my beat, and I got very well acquainted with

Dana: the work that was going on there.

The Capper Report

Dana: Among other things, I played a minor part in preparation of the Capper Report of 1921, particularly in the final stages of its completion.

Fry: Receiving all of the reports from the field and compiling them, you mean?

Dana: Yes. That's right. Clapp was very insistent that the report must be submitted by the date which Congress had set; and to do this we had to spend several nights just before it was due putting it into final shape. Finally we finished it late on the last day; and he met the deadline by delivering the report on the Hill just before midnight.

Fry: How did the Congressional resolution, which called for this report, get passed in the first place? Was this initiated largely by Clapp's effort?

Dana: No. It passed Congress through the influence of Gifford Pinchot and his friendship with Senator Capper of Kansas. At the time, the first row over federal control of private forests was at its peak, and Pinchot thought that a good way to center attention on the situation was through a study of "timber depletion, lumber prices, lumber exports, and concentration of timber ownership" which he hoped would support his view that the situation was so serious as to require federal intervention.

- Dana: Being a strong friend of Senator Capper, he got Capper to introduce the resolution, which passed without much difficulty since it called only for an investigation and not for any specific action.
- Fry: Since this was the very first forest inventory that we had, I'd like to have an evaluation from you on the research methods used and how effective and accurate you think it was.
- Dana: You're not quite right in saying that this was the first forest inventory. A previous one had been made by the Department of Commerce and Labor, Bureau of Corporations, which sent investigators into the Pacific Northwest, the southern pine region and the Lake States. The results of this first really comprehensive field study of the situation were published in three volumes in 1913-1914. The Capper Report was based in large part on this earlier study, which was brought up to date by the Forest Service on the basis of later and additional information. It constituted the best inventory that had been made up to that time, but was still far from adequate. The report was based entirely on information already available in Washington and in the field, since the time limit set by the Congressional resolution precluded any new field studies. It was, however, a very good job of compilation, analysis and presentation. It was very liberally and, I think, effectively illustrated by charts, which we used more freely and more extensively than had been the case in

Dana: previous reports.

Fry: Did Pinchot, who must have known about the Commerce Department study, gather from it that a timber supply crisis did exist and that further study would show this?

Dana: Yes. That a timber crisis existed was a point of view that I think he held without reference to the report, although he undoubtedly felt that the latter buttressed his own opinions. [laughter] The gist of the Bureau of Corporations report was that a monopoly in timber ownership existed and that it was resulting in increased prices--a point which Pinchot kept harping on. Now about the time of the publication of this report, Greeley undertook a study for the Forest Service of the same situation, based in large part on the Bureau's data, but with a different point of view in analyzing it. His results are published in a bulletin called Some Public and Economic Aspects of the Lumber Industry in which he came to the conclusion that there was no timber monopoly and that the lumber industry was a sick, not a willfully destructive industry, which was greatly overcapitalized and overdeveloped. His later opposition to federal control was based in large part on this earlier study.

The Copeland Report

Fry: I understand Clapp was the power behind the Copeland resolution and report of 1932 and 1933.

Dana: Yes, and he was also influential in getting the Copeland resolution interpreted much more broadly than it sounded. [laughter] Although the language is a bit ambiguous and could be interpreted as involving a study of the whole forestry situation, there's some question as to whether Copeland really intended to go that far.

Fry: And the McSweeney-McNary Act in 1928, to bolster and reorganize research?

Dana: Clapp was the real author of the McSweeney-McNary Act and the main factor in obtaining its enactment. He did a wonderful job on that too, and was quite an operator as a matter of fact. [laughter] Of course, I'm a great admirer of Clapp's. I think that he did an outstanding job in developing the Forest Service research organization, which is really his creation. He deserves tremendous credit for it. But he's a Messiah. When he gets an idea, he just has to put it across. Of course, I'm not that intensely emotional. [laughter]

Fry: It's difficult to understand how he accomplished so much.

Dana: He is both able and extremely persistent. He never gives up.

Fry: Maybe it pays off to have a Messiah in a high position on a staff. [laughter]

Dana: I think it does. I think a Messiah can be extremely useful if he takes the right course.

Dana: Clapp worked effectively with all the different bureaus in the Department of Agriculture, nearly all of which were involved in one way or another in the McSweeney-McNary Act, in getting them either to accept his point of view or to accept some mutually satisfactory compromise. And that was a job in itself. He also worked with the National Forestry Program Committee which four years earlier had been primarily responsible for passage of the Clarke-McNary Act and got the great help of their support. He told me later that he would never go through the same process again but would limit any future legislation dealing with research to the Forest Service; that it was just too big a job to include the other bureaus in Agriculture.

Fry: Why?

Dana: The other agencies all had different ideas and tended to go off on tangents, or at least what he thought were tangents. He wanted to tie the Forest Service into almost everything that was going on. [laughter] Clapp was responsible for keeping research out of the final draft of the Clarke-McNary Act because he feared that it would get inadequate attention in an act that covered so much ground and that had so many controversial provisions. So he insisted that there be a separate act on research, which finally materialized in the McSweeney-McNary Act, as a means of emphasizing research as an independent major activity.

The McSweeney-McNary Act

Fry: Did you have something to do with the McSweeney-McNary Act?

Dana: Yes, as a member of the Forest Service (I was Director of the Northeastern Forest Experiment Station until 1927), I had quite a lot to do with its preparation. Then in the winter of 1928, shortly after I had been appointed Dean of the School of Forestry and Conservation at the University of Michigan, I testified in behalf of the bill before a House committee on the subject.

Fry: What were your main duties connected with the development of this piece of legislation?

Dana: Primarily helping to decide what to include in the act and then what phraseology to use.

Fry: Could you give an example?

Dana: [laughter] That was a long time ago. I don't remember any of the details.

Fry: In situations like that is there a sort of "council of deans" of forestry schools across the country who are sometimes relied upon as consultants to furnish information and guidance for legislation?

Dana: I think they were consulted only as individuals and not as a group. The Forest Service naturally talked with people in whom it had confidence, including forest school deans, as well as many others. The only outside organized efforts in behalf of the bill were

Dana: those of the National Forestry Program Committee headed by R. S. Kellogg, which had been largely responsible for the Clarke-McNary Act. That committee was also interested in boosting research.

Fry: Was this committee formed primarily by the Society of American Foresters?

Dana: No. It was an entirely independent committee organized early in the row over whether there should be control of private forests by a public agency. The committee was organized largely by the timber-land owners and wood-using industries, with some representation of the general public, to try to work out a solution to the problem.

Fry: This is the one Greeley mentioned in "Forests and Men"* isn't it?

Dana: Yes, but Greeley was not a member of the committee, although he participated actively in its discussions and helped to influence its conclusions. R. S. Kellogg was the chairman of the committee. R. S. Hosmer wrote a very detailed account of its activities, which was published in the *Journal of Forestry* in 1947. One of the interests of this committee was to strengthen research. It supported the bill that Clapp had prepared and arranged for its presentation to the House Committee on Agriculture. I don't know how it happened, but at the last minute no one was available for the job,

*Greeley, William B., *Forests and Men*, Doubleday and Co. New York, pp. 103, 107.

Dana: and I had to handle it. Just before my appearance Greeley said: "Now Sam, these Congressmen are a tough bunch, and you've got to talk right up to them. Don't act like an academician."

Fry: And did you talk up to them?

Dana: Yes, but I talked too long. Kellogg had to cut me off. But I think I talked with adequate vehemence. At any rate the committee recommended passage of the bill.

Fry: Do you think that the hearing accomplished its purposes?

Dana: Yes, I thought the hearing was a good one, and the results were all that we desired. I think only one or two other people spoke. I came down loaded with charts and guess that I had too many.

Fry: You mean you feel you were kind of over-prepared?

Dana: Yes. I usually am. Fear that I won't be adequately prepared almost always results in my being over-prepared. If I'm supposed to talk for twenty minutes, I'm sure I can't talk for five, and end up by getting together enough material to keep me going for thirty minutes or more [laughter].

FOREST COMMISSIONER OF MAINE

Fry: Did you develop any new special abilities during your short career as Clapp's assistant?

Dana: No, I was a jack-of-all-trades. There's nothing that I can point to with pride. This fact was partly, I think, the reason why I left in 1921 to become forest commissioner of Maine. I felt that I was kind of getting into a rut in the Forest Service, that I wasn't developing as I should.

Fry: You mentioned that you "carried out" Clapp's policies, and I wondered if this meant that at that point you were divorced from any policy making?

Dana: Not entirely, since he usually consulted me in the formulation of policies. My opinions may have sometimes had weight, but he made the decisions, which is the normal procedure in a bureaucracy. At each level of authority decisions are made by the person in charge of the unit concerned.

Fry: This kept you from your own professional growth?

Dana: I didn't feel that I was really contributing very much that was constructive. I was afraid that I was getting into sort of a treadmill and decided I'd better take a plunge into something else. It happened that about this time the Governor of Maine died, and he was succeeded by the President of the Senate, Percival P. Baxter, whom I happened to know very well as a fellow-resident of Portland Maine. I had talked with him a year or two

Dana: before with regard to the importance of forestry in Maine, and he had said something to the effect that he wished that I could be in the state to help improve the situation. So after he became Governor, I wrote to him and reminded him of this conversation. I told him that I would be interested in becoming forest commissioner to replace the incumbent, who had just resigned, provided I could work on a strictly professional basis without reference to politics. He wrote back that he was much interested, and after some correspondence, he offered me the position and sent my name to the Governor's Executive Council for their approval, which at first they declined to give. They had apparently heard a rumor that I was a socialist, and they weren't going to have any socialist as a forest commissioner of Maine. It took quite a little further correspondence to convince them that I was a competent forester and was not a socialist. Among other things, I got letters of endorsement from Gifford Pinchot and Harry Graves for the Governor, who accumulated quite a lot of additional material and got Executive Council approval at the next meeting. This was in the spring of 1921.

The Executive Council in Maine has authority to approve the Governor's major appointments and to participate in other ways in determining policy. In other words, it's a more effective policy-making organization than the Governor's Council in California,

Dana: which I understand is purely advisory. In Maine it has real power; it can check the Governor in many ways, and in this case it attempted to do so.

After the Council and I got acquainted, we were on the best of terms.

Fry: Did your reputation as a socialist come from your stand on federal regulation of timber cutting?

Dana: Possibly, but probably more important were the facts that I was a member of what many regarded as a radical organization [Forest Service], and that I was closely associated with Zon, who was generally recognized as having strong socialist tendencies. I should think that my close association with him was probably the major reason that I got that reputation.

Fry: What were your duties as Forest Commissioner?

Dana: The biggest job was forest fire protection. The State of Maine taxes timberland owners in the wildland region of the state to provide a fund for fire protection. And the forest commissioner handles that fund, which is used to provide protection for several million acres of forest land. About the time that I went there, the white pine blister rust was becoming a serious danger, and we took over the job of attempting to control that--another protective activity. And then through a grant from an anonymous donor we were able to hire a forest entomologist who spent his whole time on the investigation and control of forest insects.

Dana: I think we were the first state department to have a specialist in that field, and my getting work started in that field was probably my biggest accomplishment.

Then, of course, there was considerable general publicity and educational work. I guess I may have revived my socialist reputation by trying to interest the Legislature in providing control of cutting on important watersheds, where poor cutting might result in erosion and floods. That suggestion never got anywhere, rather predictably. Then I organized for the first time a Maine Forestry Association as a means of building up public interest in forestry.

Fry: With membership made up of whom?

Dana: Anybody from whom we could get dues. Timberland owners joined very freely as a means of getting on the inside, and there was a large and very diverse representation of the general public.

Fry: You had some research activities going on, didn't you?

Dana: Very little outside of the field of entomology that I would dignify as "research," and even that dealt largely with surveys of the location and extent of insect damage, particularly the spruce bud worm. Then on the basis of existing information, control measures were recommended. This activity resulted later in the organization of definite and continuous surveys of insect occurrence and damage, in which the entire field force of the Maine Forest Service participated. It was an

Dana: integral part of their duties to look for insect damage and to send specimens to the main office with notes as to any injury that is being caused. These reports are then followed up by field visits from the state entomologist whenever the situation seems to require his personal attention. That work is still going forward in a very effective way, and it meets with great approval on the part of the timberland owners, who have given it their complete support.

One other part of my job was the handling of the relatively small area of lands owned by the state of Maine. This activity is the responsibility of the state officer known first as land agent, later as land agent and forest commissioner, and since 1923 simply as forest commissioner. Management involves protection from trespass and the making of occasional timber sales.

Fry: I see. Much as the federal Forest Service operates.

Dana: Yes, except that management is much less ⁱⁿ~~ex~~ensive.

In Maine, the timber sales weren't supervised carefully silviculturally, and the purchaser was often allowed to cut about as he pleased. As a matter of fact, it wasn't possible to do very much in the way of intensive management because the tracts were so small and so scattered. There was no solid body of land that you could manage like you can a National Forest.

Fry: What about land acquisition? Did you have any of that?

Dana: Not a thing. State forests were taboo when I was there.

Dana: Timberland owners wouldn't listen to any acquisition program. I talked a little about it, but not very much, since the prospect was obviously hopeless.

Fry: In your efforts toward encouraging the private owners to adopt practices for sustained yield production, did you have any reactions there that were encouraging?

Dana: Yes, very much so. The forests of Maine lend themselves to selective cutting very well, so that private owners were already doing a fairly good job from the silvicultural point of view. And in the northern part of the state, where my activities were mainly centered, there were places where they'd been cutting for 200 years, and there was still a lot of forest left. There is relatively little of what you'd call forest devastation in Maine, only small patches in the southern part of the state and in the pine country, with virtually nothing of the sort in the north. With any reasonable cutting, the timber will come back of its own accord, without much trouble.

Fry: You mentioned that you administered a fire fund. Did you have any serious fire protection or control problems?

Dana: I'll say we did. [laughter] I went to Maine about the first of June in 1921, following several weeks of the worst fire outbreaks in years. The whole northern part of the state was ablaze when I arrived, and there wasn't much I could do about it except pray for

Dana: rain. In the meantime, we had not only spent all of the money accumulated by this tax on timberland, but timberland owners had contributed out of their own funds about a hundred thousand dollars that the state was supposed to repay. We were just bankrupt and depended wholly on timberland owners to provide the money that we were using to control the fires. So that I had a very fiery baptism. The next step was to try to get enough money to reimburse the land owners for the hundred thousand dollars that they'd put up. The Governor and the Executive Council had authority to provide that money without any special appropriation, and, of course, I requested that they do so. But the Governor declined to agree. He said, "These timberland owners are merely protecting their own property. Why should we help them out?" So then I went to the Legislature, which appropriated the needed one hundred thousand dollars, but the bill was pocket vetoed by the Governor. So the timberland owners never did get reimbursed while I was there. Fortunately after I left there were several good fire seasons during which the basic fund accumulated, and in a few years it was possible to pay off the timberland owners.

Fry: Were there other issues that involved your going to the Legislature for help?

Dana: Yes, I was going to say one more thing about the change of title from Land Agent to Forest Commissioner. About the time that we were having arguments with the

Dana: Governor about reimbursing the timberland owners, he got the idea that the department should be curtailed in some of its activities. He wanted to transfer blister rust control to the Department of Agriculture and some other changes that I thought would weaken my department. He had legislation introduced as a result of a special study that would accomplish these things. So I went to the chairman of the committee handling the bill in the House, who was a very good friend of my department, and suggested some changes which had been approved by the Attorney General as far as the legal aspects were concerned. The major change was to abolish the title of land agent and make the head of the department merely the "forest commissioner," which I felt would emphasize the forestry aspects of the office rather than its routine land management. The amendments also strengthened the department in one or two minor ways. The bill went through the Legislature in its revised form and was signed by the Governor. I was never sure that he understood what was in it, but in any event the final result was to materially strengthen the department.

One of the other things that we did early in my administration was to change the name of the Department of Lands and Forestry to Maine Forest Service--a designation comparable to United States Forest Service, with emphasis on the word service.

Dana: That was a change which the Governor heartily approved. He thought it was fine.

Fry: In the bill you amended, did they transfer the control of blister rust to Agriculture?

Dana: Oh no, they left it right where it was. I think that this was due largely to the efforts of my deputy, Neil Violette, who was well versed in politics.

Fry: Oh, he was your lobbyist. [Laughter]

Dana: He was an influential figure in the Republican Party, which was in complete control at the time. He came from a French-Canadian background in Aroostook County. He had previously served twice as Deputy Land Agent and Forest Commissioner. His first term ended abruptly when the Democrats got in, surprisingly enough, and the Governor appointed a new land agent, whose first official act was to fire Violette. The Democratic land agent was presently succeeded by a Republican, who restored Violette to the deputy commissioner's job, and when I went to the state, he was the acting land agent and forest commissioner.

Fry: I see. That was why you felt it was necessary then to stipulate you wanted to be hired as a professional. Right?

Dana: Yes. Violette had never met me before, and he had no idea of who I was or what I was like. I remember well with what nervousness he first greeted me. I asked him if he'd stay on as deputy, for the time

Dana: being at least, until we could get well acquainted. Then he told me about the way he'd been fired before and said he thought maybe the same thing would happen again. [Laughter]

He was invaluable because of his knowledge of the field force and his intimacy with the politicians in the Legislature and elsewhere. Both personally and officially our relationship was a happy one. Several months after I resigned, he was made forest commissioner, which I think was an excellent choice. He was a very good man for the job.

Fry: Did you have changes of administration between Republicans and Democrats while you were in?

Dana: No. The Republicans were in the saddle all the time I was there. Nobody ever asked my politics, curiously enough. They just assumed I was a Republican, I'm sure.

Fry: A Theodore Roosevelt Republican. What were you really?

Dana: I was a Roosevelt Republican, a Bull Mooser.

Fry: Where there any Bull Moosers on the Governor's Council?

Dana: I'm not sure, but I suspect that there were both Taft Republicans and Roosevelt Republicans. The Governor was, I'm sure, a Bull Moose Republican--a strong supporter of Roosevelt, and almost a worshipper of Pinchot, of whom he thought very highly.

Fry: That was fortunate for you.

Dana: He shared Pinchot's views that the water power interests and the timber interests were monopolists and predators. The Governor disliked the water power people most and the timber owners next; he regarded both as dangers that must be controlled.

Fry: Did you have anything to do with water power interests in your job?

Dana: No. Nothing to do with water power or with fish and game, which pleased me. I had no desire to get into any of those fields. [Laughter]

Fry: Well, do you have any more stories on this?

Dana: I'm sure that my previous interview with Mr. Maunder would cover anything of interest.

NORTHEASTERN FOREST EXPERIMENT
STATION DIRECTOR

Establishment

Fry: My notes say that you became Director of the Northeastern Forest Experiment Station in 1923. This was before the McSweeney-McNary Act was passed in 1928, which enabled many experiment stations to be set up...

Dana: Yes, this was established in 1923. Incidentally, there were a number of stations before that, you know, and one of my efforts while I was Forest Commissioner of Maine was to try to get the necessary legislation to establish one in the Northeast. I didn't know I was getting myself a new job when I did it. [Laughter]

Fry: I understand that a great many of the senators and some representatives from New England formed the major bloc of support for Forest Service research in those years. Is this your impression?

Dana: I'd say that the Lake States were just about as effective as the Northeast. In general, the Northeast and the Lake States, parts of the South, and later the West were vigorous supporters of federal forest research.

Fry: Whom did you work with most successfully in your campaign in Congress?

Dana: I don't remember now.

Fry: Did this consist primarily of writing letters?

Dana: Yes. Let me add that there were other pressures on Congress and that I was a minor part of the picture.

Fry: When the station was established, you helped in determining the location, didn't you?

Dana: Yes, I participated with the Washington office in a search for a suitable location. We investigated a number of possibilities and finally boiled the choice down to Amherst, where the Massachusetts State College was located, or to Worcester where Clark University was located, both of which offered to provide quarters for the station. I was a little inclined to favor Worcester, partly, I'm afraid, for personal reasons. Clark University had a very strong department of geography and a great interest in the whole conservation field, while Massachusetts Agricultural College was strong in the broad field of agriculture, including an agricultural experiment station. It had an effective advocate in Professor Frank Waugh, head of the department of horticulture, who had worked with the Forest Service in connection with recreational developments. He was an exceptionally capable man with a strong personality and he was influential in making Amherst the final choice. I think during the entire period I was there the Experiment Station operated in two rooms, which will give you some idea of its size compared with the modern experiment station.

Dana: Several years after I'd left as Director, the station was moved to New Haven, where it was felt that the contacts with the Yale School of Forestry were more important than those with the Massachusetts Agricultural College. Still later, it was moved to Philadelphia because the scope of the Station was expanded to cover a larger region, in which Philadelphia was somewhat centrally located. Also, the location of the Regional Office of the Forest Service there facilitated cooperation between it and the Experiment Station. That's where it still is.

Operations

Fry: Can you describe a typical day in your experiment station?

Dana: I don't know whether there is any such thing as a typical day. [Laughter] At first the great bulk of our time was spent in organizing a staff, selecting projects, and getting people at work on them in the field. Most of the time that I was there we were engaged in the job of getting and analyzing field data rather than in issuing any publications. It always takes several times as long to analyze and work up material for publication as it does to get the data. During the few years I was there, a large part of the time had to be devoted to organizational work.

Fry: Did you find that your duties carried any similarities

Fry: to your previous forest commissioner post?

Dana: There was at least one similar activity: I tried to work with the public. A very important activity was the making of contacts with numerous agencies and groups whose interest and support we sought, such as timberland owners in different categories, various state departments, the agricultural experiment stations, and the colleges throughout the region. One thing that was very helpful was the action of the directors of the agricultural experiment stations throughout the Northeast in inviting me to be one of the group, so that I was able to attend their annual meetings and to learn at first hand what was going on in the field of agricultural research. At the same time I could give them an idea of what our forest experiment station was doing. In some cases they took on projects to supplement what we were doing. So our main initial jobs were organization and contact--or public relations if you want to call it that--getting ourselves really established in the region.

Fry: It is my understanding that you organized a council...

Dana: Yes. The Northeastern Forest Research Council, composed of representatives of the timberland owners, the colleges, the experiment stations, and a few public-spirited people who were interested in the whole field. It had some 12 to 15 members, as I remember it, with many more private citizens in it than either

Dana: federal or state representatives. The Council met twice a year. One meeting in the summer or fall was always in the field, in an area where there were problems and activities with which we thought the Council should be acquainted. At the other meeting, in the winter, we discussed what we were finding out and obtained suggestions as to future activities. The Northeastern is the oldest of the forest research councils, and it's still going very effectively.

Fry: Has this plan been followed by the other stations?

Dana: By most of them, but in general it hasn't worked out as effectively. Field meetings have not been common, and the winter meetings have often been devoted largely to lectures by members of the staff, rather than to discussions by council members.

Fry: So that there's not as much feed-in, then of the actual needs of the field for research.

Dana: That's right. I'm a little proud of the fact that we got real involvement from our council members, who really participated in the discussions instead of just sitting and listening to lectures.

Fry: Did this tend to de-emphasize your so-called "basic research" as opposed to "applied research"?

Dana: I have difficulty in distinguishing between the two. [laughter].

Fry: To be arbitrary, I mean "basic" research which is important but cannot be directly and immediately

Fry: applied to the problems of the timberland owners.

Dana: Oh, sometimes it can. If there is a difference, I think that basic research attempts to get facts without any particular reference to a specific problem, whereas applied research starts with a concrete problem and tries to find a solution. In doing so, it may get involved in some very deep so-called basic research. There are a lot of people who question whether the so-called applied research is really research.

Fry: Do you mean it is empirical experimentation?

Dana: Yes. I once had quite a discussion on this subject with the Director of the Massachusetts Agricultural Experiment Station, in which I was inclined to take the position that basic research was more important and should be emphasized. His reply was that any activity that results in knowledge is research. [Laughter] An interesting definition.

Fry: So he wasn't going to draw any lines either. But you were satisfied that you were doing enough basic research?

Dana: No, I wasn't satisfied. [Laughter]

There was not enough money or staff to do a good job on either applied or basic research. I think that we emphasized the so-called applied research much more than we did the basic research while I was there. We started out with concrete problems and tried to find the answers. I was never too happy either with that approach or with the resources that we had.

Fry: Could you give us an idea of what the major concerns were then on the part of the Council?

Dana: Yes. It had, as I said, a large private representation, and it always went over our plans and made suggestions; it really was quite influential in determining what the program should be. Private owners would point out what their problems were, and we'd try to find out how to do something about them.

I'd say they were primarily interested in methods of cutting to obtain natural reproduction in the various forest types in the region. How do you cut a mature stand of spruce in the White Mountains, for instance, in order to avoid much windfall after cutting and at the same time get adequate reproduction? And how do you handle northern hardwoods, in which we were very interested.

Our Experiment Station spent much more time on problems dealing with these northern types than we did with the white pine types in central New England because other institutions were already working with those-- Harvard and Yale in particular. Our main interest was in the problem of cutting so as to get good reproduction with relatively little loss in the residual stand.

Fry: Was there very much interest in fire protection in the East?

Dana: Yes. But it didn't compare in volume with that in silviculture. Fire protection was going ahead pretty well already in the East.

Fry: Did this liaison which you developed result in more use of your research results by the people who were represented on the Research Council?

Dana: I don't know. I hope so, but I wouldn't want to guarantee it. It's hard to tell just when and how the results of research are applied or even whether you can trace changes in practice to any particular piece of research. There's sort of a general evolution. Changes in practice are usually the result of contributions from a good many different sources, including particularly changes in the economic situation in which increased prices and better utilization justify spending more money on silviculture and other forest practices. In other words, the technical solution of a problem may get no reaction from timberland owners unless its application will clearly result in greater profits. So, to me, it's very difficult to put your finger on any one thing and say that it led to any given change in practice. However, the mere fact that we are getting new information makes the folks who ought to be interested more aware of what the problems are and of the possibilities of changes even if they don't adopt them immediately. It has a very stimulating effect on the thinking of timberland owners. That I'm sure of.

FOREST SERVICE ISSUES

Government Regulation of Timber Cutting

Fry: I wonder if you could enlighten us about the efforts made by the Forest Service to get legislation passed for federal regulation and why these efforts failed.

Dana: I'm not very familiar with the details of the attempts to get federal legislation. I know, of course, what the purpose was, but I wasn't particularly involved in the actual efforts to get legislation. These resulted in the early days into a vigorous difference of opinion between Pinchot and Greeley.

Fry: You mean over whether regulation should be federally administered?

Dana: Yes, whether federal or state. During the 1920's there was apparently almost unanimous agreement that some kind of regulation was desirable; the real argument was whether it should be federal or state. Even industry reached the point where it was willing to agree that some kind of regulation was probably in order.

Fry: How did Agriculture Secretary Henry A Wallace feel about regulation?

Dana: He never took any position on the subject.

Fry: You don't know how he felt personally about it?

Dana: No. I think that he did indicate support of the view that public regulation is desirable, but he didn't come

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Dana: out specifically for federal regulation.

Fry: Do you think that the state regulation which has resulted now in a great many of our states has worked out?

Dana: I think reasonably well, yes. The situation is somewhat like the current civil rights struggle in the South. I don't think we are going to completely reform timberland owners any more than we are segregationists, or any faster; but I think that on the whole state regulation has worked pretty well--better of course in some places than in others. In New York, I doubt whether it's had much influence. In Oregon and Washington I think it's doing very well. California, where industry in effect regulates itself under general state direction, is probably a middle ground.

Fry: So that it's not as demanding then of the private owners as, say, Oregon?

Dana: It's demanding of private owners in that they have to conform to certain standards, but they are the ones who set the standards, not the state. All the state can do if it doesn't like proposed standards is to apply pressure to get them improved.

Fry: I'd like to get your opinion on what you think a model set-up would be if you were given the power to legislate on this.

Dana: I think that I would adopt the Swedish system. There control is exercised by a group that represents the state, the local agencies, and the private timberland

Dana: owners, who agree on the standards that should be adopted, which are then enforced by the state. It's a cooperative enterprise between public and private agencies, in which the private owners have a great deal to say in connection with the standards and their enforcement. In other words, I'm in favor of some public participation in the control of cutting operations, but not complete control. I'd like to see it a cooperative affair. This is quite a change from back in the 1920's when I was all for federal regulation [Laughter]. I shifted on that.

Fry: What shifted you? Anything specific?

Dana: I didn't see any hope of getting federal legislation, for one thing. And I think that I've lost faith, on both theoretical and practical grounds, in the wisdom of centralizing too much authority in the federal government. Local governments are much more closely in touch with the situation and potentially able to do a better job.

I favored federal legislation in those days because I didn't see any hope in getting the states to do anything. Now they are doing something, and private owners are voluntarily doing ever so much better than they did back in those days.

Fry: Do you think that individual states are less subject to pressures than the federal government is in something like this?

Dana: No. Perhaps they're more so.

Fry: But this might be a good thing, in that they'd be more responsive?

Dana: I think that states are undoubtedly more subject to local pressure than the federal government is; on the other hand, in the field of forestry, I think that owners generally now have reached the point where their interests largely coincide with those of the state, so that what pressure they apply usually would be in support of sound practices.

Fry: Along this line, do you think that the state forestry departments seem to be pretty strong in the South, compared to the federal?

Dana: Areawise, the federal government is much stronger in the West, because of the large acreage in national forests, but I doubt whether it has any more influence on private owners than state forestry departments do in the South. Actually I don't see much difference in different parts of the country in the federal government's relations to private owners.

Fry: When I talked with S. B. Show and read some of his old manuscripts, he occasionally mentioned that there had been problems along the line of fire protection, where federal cooperation with a state was made difficult because of a rather reticent state department of forestry. Is this common in your experience?

Dana: No. In general, the federal government and the states

Dana: seems to me to have gotten along splendidly in fire protection. In the early days some of the states, particularly in the South, were a little hesitant to install measures that the government thought necessary to justify federal financial support, but that situation changed long ago. In recent years I think that relations in that field have been excellent all over the country. I don't see any friction at all.

Fry: Yes. I was referring to the earlier days.

Dana: Well, in the earlier days there was some friction, since the states were inclined to resent any interference with what they were doing. They wanted to set their own standards, which were sometimes lower than those the federal government was willing to accept. So the government kept putting on pressure until the states agreed, which eventually they always did. I think that situation straightened itself out. The relations now are excellent all over the country.

This Clarke-McNary cooperative fire protection program is generally recognized not only by foresters, but by political scientists as being an outstandingly good example of federal-state cooperation and federal grants-in-aid. There's a lot of criticism of many grants-in-aid and this one is cited repeatedly as an example of the way grants-in-aid can be effectively administered.

Fry: You couldn't comment on what finally resolved the difficulties between the state and federal governments?

Dana: No one thing. They had the same objective, and they just worked [laughter] until they got together. These things evolve naturally. I don't think there is any one factor you could put your finger on.

Fry: Well, it seems there are still some strong feelings about the principle of federal regulation on the part of retired foresters in both Washington and California.

Dana: I'm surprised that they're still emotional, although there might still be a little emotional reaction against Clapp for his missionary campaign to put federal regulation across. He tried to be a leader in the wilderness when it was too late. The opportunity, I think, had gone by the time he became Acting Chief of the Forest Service. He was fighting for a lost cause from the beginning.

Fry: Why do you say it was a "lost cause from the beginning?"

Dana: People in the country in general, including foresters, were no longer in favor of federal regulation. Many in the profession who had been for it earlier had changed, as I had. They felt that we can reach the same goals by other means. Clapp was much disappointed because I wasn't supporting his campaign. We had been quite close, and he felt that I had let him down.

Transfer Attempts

Fry: Something that the Forest Service was up against in the twenties and later in the thirties was the threat of being transferred to the Department of Interior. Was Clapp involved in this fight?

Dana: Yes, up to his ears. In the early forties he was involved to the point where, I guess, it was touch and go whether Roosevelt would fire him for his activities. These were naturally not conducted in public, but behind the scenes he provided much of the intellectual and emotional leadership for the campaign to keep the Forest Service in the Department of Agriculture. He was influential in the organization of a committee headed by Charles Dunwoody with headquarters in Los Angeles to mobilize the efforts of those opposed to the transfer.

Fry: This was that "grass roots" movement?

Dana: Yes, with Clapp really pulling the strings.

Fry: I think Mr. Kotok mentioned that.*

Dana: I was entirely sympathetic with Clapp's activities in this matter. I hoped he'd get away with it, [laughter] which he did. But I think that his part in the campaign undoubtedly antagonized Roosevelt and is probably the main reason that he did not become permanent Chief of the Forest Service.

*Kotok, Ed I., Interview Regional Oral History Office, University of California at Berkeley.

Fry: Do you foresee an increase in cooperation between the Department of Interior and the Department of Agriculture in the future?

Dana: And the Forest Service? Oh yes. I think things will continue to improve, depending very largely on the Secretaries. Freeman and Udall have gotten along very well, but if another Ickes or Fall should appear, I wouldn't be so sure.

Fry: It's a matter of personality rather than any kind of governmental structure?

Dana: Not entirely. I wouldn't be surprised to see the Forest Service some day in a Department of Conservation or a Department of Natural Resources, which would replace the Department of the Interior. That is what the Task Force on Natural Resources of the first Hoover Commission, of which I was a member, recommended.

Fry: And didn't the Task Force on Agriculture recommend that forestry stay in the Department of Agriculture? Is that right?

Dana: Not only suggested it, but argued very vigorously for it.

Fry: What was your position on this?

Dana: I recommended a combination of activities dealing with agriculture and natural resources in a new Department of Agriculture and Natural Resources. The Task Force on Agriculture indicated a willingness to go along, but my committee wouldn't do so. They objected to the combination for various reasons and thought that all natural

Dana: resource activities, including forestry, should be in an independent department. So it ended up by my joining in that recommendation.

The Outdoor Recreation Resources
Review Commission

Fry: There was another commission later on that you had something to do with, the Outdoor Recreation Resources Review Commission.

Dana: Yes, I was a member of that Commission--one of the most obstreperous, I'm afraid. [Laughter] I managed to stir up many arguments.

Fry: Over what issues?

Dana: The outstanding one was whether federal activities in this field should be centered in the Department of the Interior or in a separate Commission that reported to the President and the Congress. I strongly favored the latter approach, which was voted down on the grounds that while it was theoretically a fine idea it wouldn't work. Congress wouldn't approve and there was no point in suggesting it. After considerable argument, we finally ended up by saying that a separate Commission was an ideal but impracticable arrangement. In its stead, we recommended a bureau, which was shortly created as the Bureau of Outdoor Recreation in the Department of the Interior.

Another question was whether recreation activities should be financed by earmarked funds or by appropriations

Dana: from the General Treasury. I favored the latter procedure, which was finally approved by the Commission, but not by the Congress. The act that establishes the Land and Water Conservation Fund provides entirely for use of earmarked money.

Fry: I've heard intimations that the O.R.R.R.C. was influenced too heavily by the Forest Service. These came from Department of Interior men. [Laughter] On the other hand, I've also heard one or two specific complaints from Forest Service people who thought that it might have been influenced too much by pro-Interior views. I'd be interested in your evaluation of this.

Dana: I don't think it was over-influenced by either group.

Fry: Do you think that these other issues, then, were the major ones which did not have much relevancy concerning pro-Interior or pro-Agriculture matters?

Dana: The broader issues were more important, I think. Interior vs. Agriculture came up occasionally, and Senator Anderson*, in particular, would sometimes ask how what we were talking about would affect the Forest Service. "I'm going to make sure that the Service doesn't get injured by anything we propose." However, it was very seldom that that question came up.

The Forest Service, I think, was a little upset because several members of the Commission's staff came from Interior, including the Deputy Director for Research (Larry Stevens), but nobody from the Forest Service.

*Clinton P. Anderson

Dana: Superficially, the Forest Service may have a better case for criticism than the Interior Department does.

Fry: I don't know what the case was for Interior's complaint.

Dana: Possibly they thought that Mr. Orell*and I might be tools of the Forest Service. [Laughter] We were under suspicion from some other members of the Commission in the beginning, because we were foresters who had the reputation of being interested only in saw log production. They joshed us for some time about our alleged narrowness, but we finally convinced them that we were just as broad as they were. On occasion when they were discussing somebody as a possible addition to the staff, they asked Orell's opinion. He said, "I'm not saying anything about him because he's a forester." I laughed and said, "That's why I'm for him. Obviously he must be a very broad individual if he's a forester." [Laughter] Which might be putting it a bit strongly, but I wanted to defend the profession.

Policy Evolution in the Forest Service

Fry: What would you say were the main years of greatest change in policy for the Forest Service?

Dana: I don't believe there have been any very sharp changes. Developments have been evolutionary rather than revolutionary.

Fry: What about the emphasis of policy during the fight to stay in the Department of Agriculture in the early 1930's?

*Bernard Orell

Dana: That involved no change in policy. From the time that the Forest Service got into the Department of Agriculture, every chief has fought vigorously to keep it there.

Fry: This became a real crisis I guess in 1930 when the Department of Interior almost succeeded.

Dana: Crises have been more or less chronic. One of the most serious was in the 1920's when Fall was trying to get the Forest Service. Did you ever read Greeley's book, *Forests and Men*?

Fry: Yes.

Dana: He gives some interesting illustrations of his troubles with Fall. He felt so strongly that he almost resigned in order to be able to fight Fall as a private citizen outside of the Forest Service.

Fry: Even the multiple use policy was not a change?

Dana: Certainly not. Take recreation for example. In 1915 the leasing of sites for summer homes on National Forests was authorized, and in the middle 1920's, the *Outlook* actually criticized the Forest Service for getting so deep in outdoor recreation as to be neglecting its main job of timber management. So there's nothing new about the interest of the Forest Service in outdoor recreation, but it may have been a bit slow in recognizing the relatively increased importance that recreation was rapidly assuming.

In 1957 when I was studying recreation research for the Forest Service, I told a group of assistant

Dana: chiefs that I feared that the lip service which they gave to recreation was not being adequately translated into action. They all insisted I was wrong. [Laughter]

I'd say this simply illustrates the fact that whether recreation has been a major activity or not, there's nothing new about it.

Fry: In land use policy would you say there's been any change in the question of mining in National Forests?

Dana: The policy has always been to permit the development of mineral claims wherever there was a valid discovery, but to try to prevent the holding of mineral claims for other purposes, and particularly for recreational use, which has been a common practice.

Fry: The practice on the ground has changed.

Dana: This was made possible by passage in 1955 of an act that gave the government greater authority in the management of timber resources on unpatented mineral claims and in the cancellation of invalid claims. Prior to that time, it was extremely difficult to prevent even flagrant abuses. With respect to other policies, there were, of course, differences of opinion between Pinchot on one hand and Graves and Greeley on the other regarding federal vs. state control of cutting on private lands. The controversy resulted in passage of the Clarke-McNary Act, which simply expanded the policy of federal cooperation with the states which had been established in 1911 under the Weeks Law. Some former chiefs of the Forest

Dana: Service have wanted to get the Service in the business of regulation, but they have not succeeded in doing so.

Fry: What about land management? Would you say there's been no change in policy in things like cooperation with the states in fire protection or the advent of more wildlife management? Are those policy changes, or would you class them as differences in degree?

Dana: I think that's all. I don't see any basic change in policy. In the field of game management, a question arose at one time as to whether the Forest Service could control the taking of game in national forests in North Carolina. The state claimed that it had that right and the Forest Service claimed that it did. The courts finally decided in favor of the state, which owned the wildlife and was, therefore, entitled to control over the taking of it.

Fry: And did the Forest Service proceed, then, to use this as a basis for its policy of taking game in the national forests in other states?

Dana: Yes. The court decision was accepted as applying everywhere. You might argue that the establishment of wilderness areas constituted a change in policy, but I don't think so. The Forest Service didn't get around to taking action until the early 1920's, but the subject had not been a controversial one and there was no adverse policy. Additional wilderness areas were established as rapidly as suitable areas were identified. Boundaries are often

Dana: modified--some people think unwisely when the removal of commercial timber is involved--but there has been no change in basic policy. Multiple use continues to be the ruling philosophy, although of course with wide differences of opinion with individuals and groups outside of the Service as to the wisdom of its application in specific situations.

Fry: Do "Conservationists," like our friends in the Sierra Club, who want the forests but are not very concerned about the wood products....[Laughter]

Dana: You see you're using the word "conservation" in a wholly different sense from what I would.

Fry: I know. I'm doing this purposely because I want to ask you about the type of conservationist as epitomized by the Sierra Club membership. Do these people ever have any influence on Forest Service policy or on lumber operators and owners?

Dana: Yes, I think they do. They certainly serve as an irritant and I think that they have some influence both on legislation and on the practices followed by the Forest Service and by private timberland owners.

Fry: Because of public opinion?

Dana: Yes, and because some of the policies and practices which they advocate are sound. They sometimes get us foresters mad not so much because of the programs which they support as because of the means used to advance them. We feel that too often they misrepresent the facts and that

Dana: they fail to credit us either with intelligence or with a genuine concern for the public interest.

Fry: Do many of these people also hold memberships in the Society of American Foresters?

Dana: Yes, and some foresters are members of the Sierra Club and other "conservation" organizations.

Fry: Can you think of a specific situation in which the activities of the Sierra Club were prominent in influencing forestry practices?

Dana: No, I can't spot a specific case. The influence tends to be gradual, diffused, and not spectacular.

Fry: To sum it up, none of this would be termed actual change in policy?

Dana: No.

Fry: Someone has mentioned to me that perhaps the Forest Service should start moving its main effort from timber conservation toward efforts to reduce the cost of timber production, to make it more available by giving it a broader price base.

Dana: Do you think that would be a change?

Fry: It seems to me that there might be a change of emphasis. Perhaps you see other major changes that the Forest Service might start considering now.

Dana: No, I don't foresee any major changes. Of course, the Forest Service and timber operators are always arguing about the conditions under which national forest timber is sold. But there's nothing new about that.

Fry: Those are things that have to be decided on a local level, right? We've been talking about possible change in the major national policies.

Dana: Perhaps there is a major question as to whether decisions by the Secretary of Agriculture should be subject to review by the courts. Operators favor making this possible, while the Secretary has always argued that his decision is and should be final, and so far he has made that position stick. Here, as elsewhere, it seems to me that policy has followed a consistent course.

Fry: So that as Pinchot bent the twig, the tree has grown. Would you say that most of these policies were present in some of Pinchot's earliest applications?

Dana: Yes, by implication at least, ever since 1905 when the Forest Service first got hold of the national forests.



Left to right--Ernest F. Swift (1962), Stewart H. Holbrook (1963), and Saumeul T. Dana (1961).

Recipients of award for distinguished service to forest industries from American Forest Products Industries in year shown. Washington, D.C., October 31, 1963.

FOREST SERVICE CHIEFS

Gifford Pinchot

Fry: When you were working under Zon, you must have had some contact with Gifford Pinchot, too, since he was still Chief for a time when you were there.

Dana: Pinchot and Zon, as you probably know, were close friends. I think Pinchot was considerably influenced by Zon, for whose ability and judgment he had a high regard.

Fry: Were you an avid Pinchot follower?

Dana: He was my idol; I thought him perfect. He's the most magnetic individual that I ever knew. One could disagree with him a hundred per cent and still think him charming. In the days when I worked under him, I didn't see any possible defects. [Laughter]

Now I think that like everyone else he may have had feet of clay, but I didn't realize it at the time. In retrospect I can see that he tended to be inflexible and to hold grudges against those who opposed him. But in the early days nearly all of us in the Forest Service had complete confidence in him and great affection for him.

Fry: His being ousted by Taft in the [Richard A.] Ballinger controversy more or less strengthened most foresters' viewpoint, is that right?

Dana: Yes, we worshipped him more than ever. We thought

Dana: Pinchot was a hundred per cent right; Ballinger was a disgrace to the public service, and Taft was a weakling. I remember walking up 16th Street in Washington, D. C. one day with a fellow forester, when we happened to pass Taft, who was President at the time. As we tipped our hats to him, my companion turned to me and said, "Out of respect for the office, not the man." [Laughter] That was the attitude most of us had at the time, which was probably unfair and which in my case has changed with the years.

Fry: Do you think Taft had some difficulty in knowing what was going on?

Dana: Yes. I am sure he didn't know all the intricacies of the Ballinger case. When that led to his [Pinchot's] dismissal, the very next morning he assembled all of the members of the Washington office of the Forest Service on the top floor of the old Atlantic Building to say goodbye. That was a highly emotional occasion, which left us ready to fight to the death for him and for his policies.

Fry: All of the foresters with whom I've spoken who entered the Forest Service under Pinchot felt personally inspired by him, usually as a public speaker.

Dana: I think that was often the case, since he couldn't know everybody personally, of course. Although my office was in the same building, my own contacts with him, while friendly, were never frequent or intimate.

Fry: After you became Dean at Michigan, did you have more contact with him?

Dana: Our paths seldom crossed, and I fell out of favor when I stopped being a federal regulationist. [laughter] He thought that I had slipped.

Fry: Pinchot, I understand, was a great do-it-yourselfer in administration. When you were working under Zon, did Pinchot have such a thing as a Public Information Office?

Dana: There was no formal information and education branch, "I & E," in those days. The Madison Avenue approach is a relatively new development.

Fry: Pinchot did this intuitively, I guess.

Dana: However he did it, he was a master in the field of public relations.

Fry: I was talking to Mr. Keller, Pinchot's state forester in Pennsylvania, who said that as Governor, Pinchot did bring in some public relations and journalism men just to teach foresters how to write a news story. I guess Pinchot's methods became more formalized then.

Dana: I think that's right. Of course, you have to understand that the Associate Forester, Overton Price, really handled most of the day-to-day administration of the Forest Service. Pinchot dealt with the President and Congress, determined policies and in general occupied the limelight, while Price took care of the details of administration. Pinchot was the inspiring leader, but

Dana: as he himself generously said, Price "had more to do with the good organization and high efficiency of the government forest work than ever I had."

Henry Graves

Fry: Can you give us your evaluation of Henry S. Graves as the Chief from 1910 to 1920?

Dana: I think that Graves was very effective in handling the activities that particularly needed his attention during his administration. Pinchot had devoted his attention largely to the task of getting public, Executive, and Congressional support of the Forest Service and the national forests. Graves concentrated on internal affairs rather than on publicity and did a very good job of strengthening the administrative organization which Price had established. He was a man of strong personality, possibly a bit arbitrary at times, but not harmfully so. He commanded both affection and respect. During the First World War the Service was badly disrupted by the departure of so many of its members for war work of one sort or another. When Graves undertook the task of rebuilding it, he found himself badly handicapped by a lack of funds to do what he felt was necessary. When he resigned in 1920, he stated that he was doing so in large part because of the impossibility of building up an effective personnel with the salaries that could be paid and funds that were available for other purposes. He

Dana: also was getting pretty tired, but he used his departure as a means of stressing the importance of more adequate appropriations as the only way of maintaining morale and assuring effective administration.

Fry: What particular issues did he have to deal with besides this business of wartime depletion and post-war adjustment?

Dana: He got involved, of course, in the controversy over federal versus state regulation, which he was partially responsible for starting by insisting on the need for better management of privately owned lands, and which he felt would probably require some degree of public regulation. Later he came out in favor of state rather than federal regulation.

Fry: Did he try to enlist Pinchot's help at first?

Dana: I don't know but I suspect that the two men approached the subject independently.

Graves was the outstanding pioneer and leader in the field of forestry education. In my judgment he made a greater contribution to the profession in that field than as Chief of the Forest Service. There have been other good chiefs, but with the possible exception of B. E. Fernow and Filibert Roth, he stands by himself as a leader in forestry education.

Fry: Tell me more about Graves as a dean.

Dana: In 1900 he became the first Director of the Yale School of Forestry, to which he returned as Dean in 1922, after

Dana: his ten years as Chief of the Forest Service. After his retirement in 1939, he continued to take an active interest in the School and was influential in the development of policies and programs. He was a good teacher, but his major contributions were in the field of educational philosophy and policy, and as an inspiring leader of students.

Fry: Do you think he was chiefly interested in the Forest Service or in education?

Dana: I think his basic interests were in education rather than in administration. He was more or less drafted to be Chief of the Forest Service, but education was his real love.

Fry: Can you sum up his kind of policy and philosophy as opposed to some others?

Dana: He was more insistent on fundamentals--on a firm foundation in the liberal arts and sciences, and on the principles that underlie forest management rather than on the details of forest practice. He saw forestry as much more than timber management; and he recognized the need for training technicians as well as professional men. In a way, Johnson's ^{and my} book on *Forestry Education in America** merely reemphasized a lot of things that he'd been saying for a long time.

When the question of dedicating our book arose, we immediately recommended Graves as the only man deserving that recognition.

* Dana, Samuel T. and Johnson, Evert W., *Forestry Education in America, Today and Tomorrow*, Society of American Foresters, Washington, D. C., 1963.

Fry: Did Graves have any ideas on actual forest practices which were ahead of his time?

Dana: Yes. I think he was ahead of his time in the matter of public regulation of cutting on privately owned lands. As I said, he preceded Pinchot and others in emphasizing publicly the importance of some kind of public control. He also emphasized the need for public cooperation along with public control more strongly than Pinchot did. He felt that both approaches were essential.

Fry: Yes. Who in the field of forestry was Graves closest to? Was he very close to Pinchot?

Dana: Yes, very close.

Fry: And who else would you say? You, as Dean at Michigan?

Dana: No. Probably Greeley, for whom he had the highest regard; and at the School he was very close to Toumey,* who succeeded him as its head. But I believe Pinchot was his closest friend. Another intimate and influential friend, who was not a forester, was Herbert A. Smith, an editor in the Forest Service. Graves was always on very good terms with his associate forester, A. F. Potter, but I doubt whether he was as close a friend as the others I have mentioned.

Fry: When you say Graves was a "leader," do you mean that he, too, could inspire and persuade?

Dana: I think Graves would probably rank next to Pinchot as an inspirational type of leader with extremely high ideals. I should be inclined to rate him higher on that score than as an administrator.

*James W. Toumey

Fry: Did he have an able assistant to help him with organizational work?

Dana: No one individual. He used the whole group of assistant foresters and district foresters rather than any one man. Well, perhaps that isn't quite fair. I think that A. F. Potter, the associate chief, did carry much of the administrative burden. He had previously been in range management and grazing. Greeley was also a mainstay of the Graves administration. He was brought to Washington quite soon after Graves became Chief Forester, and he handled a great deal of the administrative work.

William B. Greeley and Others

Fry: How would you evaluate Greeley's performance after he became Chief in 1920?

Dana: I'd rate him very high. He was a very outstanding individual.

Fry: What were his main strong points?

Dana: Above all he was an excellent administrator. He organized and directed things exceptionally well. And I think that in general his policies were sound; when he had a policy, you knew what it was. He was always clear-cut. There was never any misunderstanding as to where he stood.

When the 1910 fires out in Montana and Idaho were at their worst, Silcox was the acting regional forester during Greeley's absence and things seemed to be pretty badly confused. On Greeley's return to the office, as a forester who was there told me later, "In three hours

Dana: everything was as clear-cut as could be." Everybody knew exactly what he was to do, and the organization was running at 100 per cent efficiency. That's the kind of thing that he was particularly good at.

Fry: How good was he at developing policy?

Dana: Very good, I think. He was criticized a good deal, but I don't think fairly. One of the major criticisms was that he was overstandardizing the Forest Service, that he was crushing individuality and initiative. I had some contact with him on that, and I think I told Elwood Maunder about it. Maybe you'd be interested, too.

Fry: Yes.

Dana: Well, some time in the middle 1920's the New England Section of the Society of American Foresters adopted a resolution asking the Society to investigate the Forest Service on the grounds of overstandardization and resulting deterioration of morale. At the time I was President of the Society and also Director of the Northeastern Forest Experiment Station, so that Greeley was my Chief--an embarrassing combination.[Laughter] Nevertheless I went to Greeley and asked him if he had heard of the resolution. He said he hadn't. When I told him of its contents and of the reasons for its adoption, he was obviously very much hurt. I added that if the Section insisted on the proposed investigation I didn't see how the Society could avoid going ahead with it. In reply to a question as to how he would feel toward me in that case,

Dana: he replied that it would make no difference in our relations and that I should do whatever I thought was right. Then he wanted to know what was really back of the action by the Section. So I told him that one of the underlying causes appeared to be a rather general belief that he tended to be a machine rather than a human being, that people found him cold and unapproachable, and that many were afraid of him. Finally he looked out of the window, probably for at least half a minute, without saying a word. When he turned back to me, he said, "Sam, is that what people really think of me?" When I told him I was afraid it was, he was obviously tremendously hurt. Then he said, "Well, if there's anything to these criticisms, I'd like to find out what the basis for them is. What would you think if I wrote to some of the critics to get their views?" Acting on this idea, he sent an excellent letter to a list of people whom some of us suggested asking for frank criticisms. I think that only one person of the group sent him a really frank reply. I also tried to summarize in writing some of the things that I thought were bothering people. His five or six page letter seemed to me convincing justification for his actions in trying to tighten up the organization, which he felt wasn't operating as efficiently as it should.

Incidentally, do you know his son, Arthur, in Washington?

Fry: No I don't.

Dana: He's a coming man who combines his father's ability with his mother's charm. She is as warm as her husband was reputedly cold. As a matter of fact, I never thought at heart he really was cold. I knew him and his family very well and found him a wholly different individual at home from what he was in his office.

Fry: This was just his method of operating on the job?

Dana: I don't think any strong man, and particularly one who concentrates on his job as intensely as Greeley did, can be popular with everyone.

Fry: I take it then that Greeley is one of your choices for nomination as one of the best administrators in the Forest Service.

Dana: Yes.

Fry: And are there any others?

Dana: All had their virtues, but taking everything into consideration I'd put Greeley at or near the top. Pinchot excelled him in missionary zeal and in his ability to mobilize public sentiment behind the whole forestry movement, but that task was pretty well completed by the time Greeley came along.

Fry: Did Silcox appear to have any great administrative ability?

Dana: Not to me. His strength lay in the field of public relations. He resembled Clapp in being a zealot, but to my mind he was not as good an organizer and administrator.

Dana: He had a very fine personality with plenty of warmth and more magnetism than Greeley, for example.

Fry: Was Lyle Watts a warm person?

Dana: Moderately so, and certainly likeable.

Fry: How do you feel about him as an administrator?

Dana: Not too strong.

Fry: And no unusual changes of policy or anything like that?

Dana: No. he was a strong advocate of federal regulation, but that was nothing new.

Fry: But not much happened under him?

Dana: I'd classify him as a competent chief but not an outstanding one.



Samuel T. Dana

EDUCATION AND FORESTRY

Curriculum-Forest Service Relationships

- Fry: Does the Forest Service influence curricula in the schools of forestry?
- Dana: It has a very definite influence on the general character of the curricula, since the schools have to adopt programs that will enable students to meet the requirements set by the Civil Service Commission, and those are determined primarily by the Forest Service. That influence used to be even more pronounced when the candidates for employment by the Forest Service had to pass an examination, which is no longer the case. The influence is more marked on coverage than on quality, although the latter is recognized to some extent by giving additional credits to a man with a degree from an accredited school.
- Fry: Your recommendation, as I read it in *Forest Education in America**, is that five years should be required because the Forest Service's multiple use policy requires broader training for the forest administrators. Since you were a dean from 1927 on, you might be able to explain what changes were required in forestry schools because of this policy.
- Dana: The Forest Service in practice has always had a multiple use policy. Only two major changes have taken place: one is the increasing emphasis on outdoor recreation and

*Dana, Samuel Trask, and Evert W. Johnson, *Forestry Education in America: Today and Tomorrow*, Society of American Foresters, Washington, D. C., 1963.

Dana: on watershed protection. The other is that prior to 1961 there was no legal recognition of any activity on the national forests except watershed protection and timber production. The Forest Service felt that its position would be much stronger if the other activities that it was already handling were recognized in law. It also felt that such recognition would help to prevent the transfer of areas primarily valuable for recreation to the National Park Service. From my point of view the Multiple Use Act does not make any real change in the activities that the Forest Service can undertake. The Secretary of Agriculture has always been authorized to make rules and regulations for the administration of all the resources in national forests, and has not hesitated to do so. Nevertheless, the Forest Service felt that additional legal recognition would greatly strengthen its position.

Fry: Over the years, then, has forestry education become a little broader?

Dana: Very much so. We now teach things that I never heard of when I was in school. Forest economics, and outdoor recreation, for instance, and there are many new developments within the regular branches such as mensuration, silviculture, protection, and management.

Fry: Wildlife management?

Dana: Yes, that too.

Fry: Have you been able to see any changes wrought in the

Fry: Forest Service from men who have graduated under the broader curricula?

Dana: I think so. The present administrative force in the Forest Service has a much broader outlook than it did twenty years ago, maybe even ten years ago. The change is particularly noticeable in connection with outdoor recreation, which until fairly recently was regarded as pretty much of a nuisance. Now the great majority of Forest Service officers recognize it not only as an inescapable but as a desirable activity. Another is in the increased emphasis on watershed management. It used to be assumed that good silviculture was also good watershed protection, but it has been proved that that isn't always true. Different cutting methods may be needed to adequately protect the water supply and to get desired kinds of reproduction. The combining of the two objectives has proved much more difficult than was once thought.

Fry: Does this make research any stronger?

Dana: I think very much so. The results of research are now being pretty generally applied throughout the Forest Service. There's been a great change in attitude on the part of administrative officers within the last twenty years. Research is now recognized as one of the outstanding activities of the Forest Service. It ranks very high and commands great respect, partly because it gets so much money. [Laughter] That always helps.

Fry: That's different too, isn't it, from when you first entered research?

Dana: The experiment stations now spend several million a year, and have several hundred men on their staffs. When I went to Amherst I think we got something like thirty to thirty-five thousand dollars a year, and two or three technical men and a couple of clerks constituted the entire staff. And that was only forty years ago. Times certainly have changed.

Fry: Yes. You were there with a master's from Yale, and what training did your technical men have?

Dana: The same. I think we all happened to be from Yale.

Fry: I think in your book you mentioned that some schools are more oriented than others toward needs of private industry.

Dana: That seems to me to be the case in the South, and perhaps also in Oregon and Washington.

Fry: Were some schools more pro-federal regulation than others?

Dana: I really don't know, but I doubt whether any of the schools took any formal position on federal versus state control.

Fry: What about the University of Michigan?

Dana: The Forest Service has sometimes accused us of being

Dana: oriented toward private industry. We don't think we are. We think we're very impartial. [Laughter]

Fry: Does this involve the question of acceptance of research grants from private industry?

Dana: No, I don't think so.

Fry: It might influence the kind of research you do.

Dana: Acceptance of a grant from private industry of course implies work on a problem of interest to the grantor, but the schools have always insisted on independence in selecting the methods of research and interpreting the results.

Fry: Do you think that some schools of forestry have the attitude, expressed in curriculum offerings and placement services, that graduates who join the Forest Service have an added status as a sort of crusader, and that those who take positions in industry are perhaps ignoring the "call"?

Dana: No, I don't. Some of them may favor the Forest Service, but I don't think they have any feeling against individuals who choose employment in industry. I don't think there's any attempt to blacklist industry or anything of that sort. I don't think so. The Rocky Mountain schools tend to favor the Forest Service because there are very few private timberlands in that region, and these are largely inaccessible. So graduates of Colorado, Utah, Idaho, and Montana tend to enter the Forest Service. I don't know of any school that is antagonistic to industry.

Schools and the Field of Forestry

Fry: Have there been any times in the past when it has been especially difficult to relate curricula to the needs of the field, when the field changed faster than curricula or vice versa?

Dana: I don't know that I can put my finger on any particular time when that has happened. There's been gradually increasing recognition on the part of both employers and the schools of the importance of forest products and services other than timber, but I don't believe that either has ever been far ahead of the other. If anything the schools may have been a little slower in recognizing the rise of outdoor recreation as a major use of the forest. Many of them are not introducing specific curricula in that field. Michigan, for instance, is considering the possibility not only of having a separate curriculum but of giving a separate degree in that field.

Fry: Have forestry schools managed to match pretty well the demand for personnel in the field?

Dana: In quantity do you mean?

Fry: Yes. Have they ever over-supplied?

Dana: I think so. Current graduates can usually find jobs, but these often require only technical rather than truly professional competence. We're turning out, I suspect, more men than are needed for the latter type of work but not for the former. Not everybody, however, will agree with me on that.

Dana: On the other hand, I think that professional foresters should be more competent than many of our graduates now are in the broad field of over-all planning and intelligent coordination of the different kinds of activities.

Fry: What about their ability to adapt to changes in the field?

Dana: Individuals vary greatly, but many are very adaptable.

Fry: In this country, there is open enrollment policy in most schools of forestry, which has led to some concern about the quality of entering students and the high rate of attrition. Do you feel that there's any way out of this dilemma?

Dana: I think it lies largely in the admission policies of the institutions with which the schools of forestry are connected. For instance, the University of Michigan is very selective in its admissions. Michigan State University is not nearly so restrictive, and Ohio State University even less so. The latter will admit virtually any high school graduate, with a resulting rate of attrition much higher than that at Michigan.

Fry: In the Pinchot days there were foresters who had varied concerns. In other words they seemed to be concerned about community relations as well as how to grow a tree and the amount of run-off per year. Do you think this has changed since those early days?

Dana: No. If it's changed at all, it's in the direction of more awareness of community relations. I don't see any

Dana: substantial difference in that respect.

Fry: Can you relate this community sensitivity to training they get in the schools, or would you say that this is the type of individual who chooses forestry?

Dana: I think that most individuals who go into forestry are interested in the social as well as the purely technical aspects of the profession. Also, most jobs throw a man into touch with the community in a way that he can't avoid. Timber management and utilization, for example, inevitably involve contacts with community leaders, with whom administrative officers simply have to work. If they can't do so successfully, they had better get into some other line of work. The schools pay a reasonable amount of attention to community relations, but the field is one in which experience is a great teacher.

Specialists and Generalists

Fry: I'd like to go into the question of the need for someone who is well trained as a generalist in the profession of forestry, but at the same time who has a specialist background.

Dana: In the early days most foresters had to be "generalists," not only because of the all-inclusive nature of the activities they had to handle, but because there were virtually no foresters with graduate training leading to a doctor's degree that would entitle them to be classified as "specialists." Today the generalist should still

Dana: predominate in the actual management of forest lands, but he needs the assistance of specialists, who are fortunately becoming available in steadily increasing numbers. Their function is twofold: to serve in staff positions as advisors to the administrators and managers, and to conduct research. As management becomes more intensive, the generalists are more and more going to lean on the specialists for help in the solution of difficult problems in recreation management, and so forth. One specialist in a staff position may readily provide expert advice for half a dozen or more administrators.

A point that I've been trying to make for years is that the administrators should be really generalists and not simply timber managers, saw log producers, or pulp producers. They should know the ecologic and economic relations between the many forest resources of timber, water, wildlife, recreation, range lands, and so on, and the ways in which these relations influence their management. Anybody with this breadth of scope can't possibly be a specialist in all of these fields. In other words, a generalist is one who is well qualified to provide intelligent management of the various resources and services that the forest can yield, with the assistance of appropriate specialists.

Fry: Would this generalist be given more basic general education in his college work than your specialist?

Dana: Not necessarily. I'm in favor of sound basic education

Dana: for professional men in general, lawyers, doctors, engineers, etc., including both forestry generalists and specialists.

The early Yale foresters have done very well in the world, and I suspect that their success has been due largely to the fact that practically all of them had a four-year liberal arts course before they went to Yale. They entered on their forestry education with dual advantages of a broad foundation and relative maturity. With all due respect to my alma mater, I think those two factors contributed as much to the records made by its alumni as the quality of the teaching.

Fry: At Michigan didn't you have a three-year forestry course ending in a master's degree?

Dana: Not when I went there. The program led only to a master's degree until 1916 when Professor Roth changed it to provide for a bachelor's degree at the end of four years and a master's degree at the end of five years. That was the situation when I went there in 1927.

Fry: When the first foresters took over in the Pinchot days, their forestry training had been confined largely to graduate education, hadn't it?

Dana: You're generalizing too much. In the early days Yale and Michigan (and for awhile Harvard) were the only schools that really insisted on a broad basic education and that offered only the master's degree. The many other schools admitted men as freshmen and granted the

Dana: bachelor's degree at the end of four years.

Fry: Was there a movement toward more specialization then in the colleges?

Dana: It depends on what you mean by specialization. There was a tendency toward emphasizing forestry rather than a basic liberal arts education, but not toward specialization in particular fields, such as entomology or pathology or fire protection.

Fry: So that they were broadening the field of forestry but at the same time restricting other outside studies.

Dana: Yes. In effect, the four-year programs included as much technical forestry as the five- and six-year programs.

Fry: Yes, but less in the social sciences and humanities.

Dana: I think so.

Fry: Has there been a swing back toward more of the non-forestry subjects?

Dana: There has been a trend in that direction but not a very pronounced one. The tendency has been to place more emphasis on the basic sciences, such as botany, mathematics, chemistry, geology, and sometimes zoology, rather than on social sciences and humanities, although the latter have been receiving increasing attention. That trend is one which Johnson and I endorsed strongly in our book on forest education.* Most of the schools recognize the fact that the broader education which we advocate will take more than four years, but they don't

**Ibid.*

Dana: think the time is ripe to require more than that time for the first professional degree. They argue that a reasonably good professional education can be provided in four years, that a five-year requirement might result in the loss of so many students as to imperil their existence, and that already the better students are voluntarily taking the five years necessary for a master's degree. My answer to that is that a four-year program under-prepares a student for truly professional service and over-prepares him for work as a technician.

Fry: Do your students take different types of jobs when they get out from the five-year course?

Dana: They are apt to get the same kinds of jobs as the four-year graduates, but usually at a little better salary. Theoretically they should go on to better positions in later life, and I believe that in practice they actually do so; but there's never been an adequate study to provide any accurate statistics on the subject.

Fry: What about the Forest Service?

Dana: The Forest Service prefers men with a five-year training for truly professional positions, but the Civil Service Commission will not permit them to limit appointments to men in that category. Men with master's degrees do, however, receive higher ratings on their entrance examinations, as do men from accredited schools. Incidentally, the Forest Service also says they would welcome the opportunity to employ more technicians, for whom there is

- Dana: a very real need.
- Fry: It seems like it would help their budget, too.
- Dana: Yes, I think it would.

Reactions to the Study on Forestry Education

- Fry: I'd like to ask you what some responses have been to your book on education.*
- Dana: I think one dean probably expressed it pretty well. He said that we were fifty years ahead of our times. I think it's nearer ten years. There is as yet no general acceptance of the proposal that the first professional degree should not be granted in less than five years. The majority of the deans still feel that it should be given in four years, and I see little prospect of any early or general change.
- Fry: What about responses to your idea in the book about more two-year technical education for men who would fill the less responsible positions?
- Dana: I think that's even more vigorously opposed, largely because if the technicians were available they might replace four-year men in positions which the latter now hold but which could be filled competently by technicians. Why train more men for jobs that are now being handled satisfactorily by four-year graduates, of whom there is an adequate supply? My answer is that it's a waste of time and money to provide a four-year training for work for which a two-year training is sufficient.

**Ibid.*

Fry: I'm thinking of some organizations who could support this report of yours, such as the Accrediting Committee of the Society of American Foresters. Have you had any luck with that?

Dana: Neither that committee nor the Division of Education in the Society is more than mildly interested. Then there's the Council of Forestry School Executives, which includes the heads of all the schools, and which appointed several committees to consider what training a person needs in the major branches of forestry. Their reports will bear on the problem of how long it will take to provide such training. Finally, there's a separate Committee on Programs in Forestry Education headed by Henry Vaux of the University of California School of Forestry, which was created by the Council of the Society for the purpose of studying our recommendations and what might be done about them. Professor Vaux is handling the matter very diplomatically. Instead of focusing discussion on a five-year program, he is asking questions as to the adequacy of present programs and what they need in the way of strengthening. He is very wisely emphasizing fundamentals rather than mechanics. There's some real thinking being done along these lines. We both feel that progress will be slow but steady if attention is focused on fundamental questions. I think he's quite right in feeling that we shouldn't be too precipitous in trying to get immediate action on our specific recommendations.



Samuel T. Dana in Union Square, San Francisco, 1956.

The figure in the Weyerhaeuser advertisement was based on this picture.

PRESENT AND FUTURE CONCERNS

Fry: In the timber review of 1958* did the results show a more optimistic picture than some of you had expected?

Dana: No, but the later one, *Timber Trends*,**does. It gives an optimistic picture which the Forest Service attributes partly to improved methods of management, but even more to the fact that demands on the forests haven't been as great as was anticipated.

The current report gives a pretty high rating to practices by industrial owners but a very low one to practices by the smaller owners, particularly farmers. Some of the large corporations, such as Weyerh^eäuser, are actually doing a better job of management than the Forest Service.

Fry: How?

Dana: They're doing more intensive work in the way of thinning and planting. Their cutting methods are about the same as those used by the Forest Service, but there is more thinning of young stands, more planting of suitable areas; all of that helps to get more growth.

Fry: Well, I understand that some of the companies in California, for instance, are employing good cutting and forest management practices and that forestry graduates are beginning to have policy-making positions within these companies. Is that your experience?

**Timber Resources for America's Future*, Forest Resource Report #14, January, 1958.

**USFS, Forest Resource Report #17, *Timber Trends in the U.S.*, February, 1965.



Dana: I think that's true.

Fry: Can you trace any of this? Can you think of any who have positions of influence in the field of industrial forestry and who are graduates of any particular school?

Dana: Benton Cancell is President of the Potlatch Forests Inc. In Idaho. Bernie Orell and Ed Heacox are vice-presidents of Weyerhaeuser. Paul Dunn is a vice-president of St. Regis Paper Company, and B. E. Allen of Union Bag-Camp Corporation. These are a few examples.

Fry: Along this same line of forest management, is there a move toward more concern with the forest ecology involved?

Dana: Yes. Ecology has become a magic word. [Laughter]

Fry: Is it a "good word" now?

Dana: It's good if one knows what it means. I'm sometimes doubtful whether I do. [Laughter] I think it's something like "multiple use." I'm not quite sure what that means, and I certainly don't know what "conservation" means. These expressions often cause confusion because they mean different things to different people.

Fry: I meant ecology that includes wildlife, human use, community development and.....

Dana: It couldn't be ecology unless it is all-inclusive. Ecology deals with the whole environment, of which man is usually a part.

Fry: I gather there hasn't been much emphasis on wildlife management, even in the Forest Service.

Dana: Oh yes, there's been a good deal. The interest has been partly from the point of view of controlling wildlife in order to prevent damage to the timber, rather than of increasing it; but wildlife management has much attention from the positive and negative points of view. The Forest Service has had a division dealing with wildlife management for many years.

Fry: As I understand it, it was one of the later divisions to be added. And do you think private industry is coming more to wildlife management, also?

Dana: I think so. It is receiving much attention, for example, at Weyerhaeuser's forest experiment station at Centralia, Washington.

Fry: What do you think some of the major changes will be in the field? Do you think automation is going to affect forestry very much?

Dana: Not directly from the point of view of timber production. It will probably affect timber utilization much more than it has so far, and this will indirectly have an influence on timber production. The latter is essentially a biological activity, in which genetics and improved silvicultural methods, including fertilization, will become increasingly important. It's a wholly new approach from what we're doing now. These are clearly biological and chemical approaches, rather than mechanical ones, characteristic of automation, which will, however, be a factor of major importance in the harvesting and manufacture of timber.

Fry: There's always been a question about whether forest research and forest extension services should apply themselves more to lowering the cost of timber production. Has that question ever been tackled much in the past by those who are engaged in forestry research, and do you think it is likely to be emphasized more in the future?

Dana: Yes, particularly by private owners, whose interest in costs is obvious. The relatively little research they have so far done in this field will almost certainly be greatly increased.

Fry: Do you think that technological advances are likely to develop new materials that will make lumber unnecessary?

Dana: No. I think they may reduce the demand for lumber, but it is too useful and attractive a material to become obsolete. We could conceivably survive without lumber--perhaps even fairly comfortably--but it has so many virtues that I cannot imagine our ever trying to do so.

I don't know whether I ever told you the comment a lawyer friend of mine used to make when he tried to de-emphasize the timber production aspects of forestry. Jokingly, he said, "You know, we could get along perfectly well in this world without wood, but we couldn't get along without forests." [Laughter]

Fry: He sounds like a good Sierra Club member.

Dana: Theoretically he was probably right, but there will continue to be a demand for wood in many forms. At the same time there will be a relatively greater increase

Dana: in the demand for management of forests for watershed protection and recreation, including hunting and fishing.

Fry: We can also "get along" without those. [Laughter]

I've run out of questions. Do you have anything else to add?

Dana: I've said more than I know already. [Laughter]

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APPENDIX

March 14, 1966

Dr. Samuel T. Dana
2027 Hill Street
Ann Arbor, Michigan 48104

Dear Dr. Dana:

Before either of us takes off on some springtime-inspired trip, I thought I should inquire as to the general health and well-being of the manuscript which awaits your approval and possible changes.

You mentioned in your October note that you were somewhat surprised at the length of it. My feeling is that it is too short, that we probably did not dwell thoroughly enough on some of the topics covered because in each session I thought that you and I might not be in the same part of the country any time in the near future, and so the interviewer rushed you along. Please add whatever you feel is pertinent.

Director
etc.

Of course it will be combined with the sessions you had with Mr. Maunder, so the final product will probably be quite respectable. Mr. Maunder is waiting to edit it all together, a process at which he is particularly talented I understand.

Let me repeat my plea to send along any old photographs (and a few recent ones, too) and illustrations which you might conveniently put your hands on. It adds quite a lot to the final manuscript if it can have a few pictures to help the reader, years from now, to envision what the person really looked like.

Thank you again for being so very cooperative both here and at Ann Arbor. Please thank you wife, too, for her part in this--as adopted grandmother for an afternoon for three small Indians.

Sincerely yours,

Amelia R. Fry

SAMUEL T. DANA
2027 HILL STREET
ANN ARBOR, MICHIGAN 48104

April 4, 1966

Mrs. Amelia R. Fry
Regional Oral History Office
ROOM 486, The General Library
University of California
Berkeley 4, California

Dear Mrs. Fry:

Here at long last is the edited transcript of our oral history interviews. Your letter of March 14 finally provided the necessary stimulus to get me down to business. I guess I kept putting off the job in the fear that I would find it a disillusioning one, and how right I was!

I have not changed very much the content of what I said, or what I was trying to say, which was not always clear. But I have done my best to improve the language, which was a disgrace. After other experiences with tape recordings, I suppose I should not be surprised to find how poorly, and particularly how verbosely, I express myself, but it nevertheless comes as a shock.

I have dug up a few pictures of myself, which I enclose. Recent ones seem to be pretty scarce. American Forests has occasionally used other likenesses, but I don't seem to have any copies.

In spite of my disappointment with my performance, I can credit the oral history interviews with two beneficial results. They have discouraged me from following the suggestion of a few misguided friends that I write my memoirs; and they provided the opportunity for a pleasant acquaintance with you.

With best wishes,

Sincerely,



cc: E. R. Maunder

Samuel T. Dana

Amelia R. Fry

Graduated from the University of Oklahoma in 1947 with a B.A. in psychology, wrote for campus magazine; Master of Arts in educational psychology from the University of Illinois in 1952, with heavy minors in English for both degrees.

Taught freshman English at the University of Illinois 1947-48, and Hiram College (Ohio) 1954-55. Also taught English as a foreign language in Chicago 1950-53.

Writes feature articles for various newspapers, was reporter for a suburban daily 1966-67.

Writes professional articles for journals and historical magazines.

Joined the staff of Regional Oral History Office in February, 1959, specializing in the field of conservation and forest history.







