

Oral History Office
Forest History Society
Santa Cruz, California

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

Emanuel Fritz

Teacher, Editor, and Forestry Consultant

An Interview Conducted by

Elwood R. Maunder

and

Amelia R. Fry

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FOREWORD

This interview is part of a series produced by the Regional Oral History Office of Bancroft Library, University of California at Berkeley, under a grant from the Forest History Society, whose funding was made possible by the Hill Family Foundation.

Transcripts in the series consist of interviews with: DeWitt Nelson, retired head of the Department of Natural Resources, California; William R. Schofield, lobbyist for timber owners, California Legislature; Rex Black, also lobbyist for timber owners, California Legislature; Walter F. McCulloch, retired Dean of the School of Forestry, Oregon State University, Corvallis, Oregon; Thornton Munger, retired head of U.S. Forest Service Experiment Station, Pacific Northwest Region; Leo Isaac, retired, silviculture research in the Forest Service Experiment Station, Pacific Northwest Region; and Walter Lund, retired chief, Division of Timber Management, Pacific Northwest Region of the Forest Service; Richard Colgan, retired forester for Diamond Match Lumber Company; Myron Krueger, professor of forestry, emeritus, U.C. Berkeley; and Woodbridge Metcalf, retired extension forester, U.C. Berkeley. Copies of the manuscripts are on deposit in the Bancroft Library, University of California at Los Angeles; and the Forest History Society, University of California at Santa Cruz.

Interviews done for the Forest History Society under other auspices include: Emanuel Fritz, professor of forestry, University of California, Berkeley, with funding from the California Redwood Association; and a forest genetics series on the Eddy Tree Breeding Station with tapes by W.C. Cumming, A.R. Liddicoet, N.T. Mirov, Mrs. Lloyd Austin, Jack Carpenter, and F.I. Righter, currently funded by the Forest History Society Oral History Program.

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

Willia Klug Baum, Head
Regional Oral History Office

Regional Oral History Office
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PREFACE

If one were to characterize in one word the personality and impact of Emanuel Fritz--whether as professional forester or as teacher--no doubt the word should be independence. Fritz's career included work in a wide variety of professional contexts: in forestry education at the University of California; in government programs in the Forest Service and Department of the Interior; in organized industry with the California Redwood Association; in the organized profession as editor of the Journal of Forestry; and in a considerable array of private relationships as a highly respected consultant. But within each and every one of these varied contexts, Fritz was always Fritz.

I knew him first as one of his students. It was in the mid-1930s when forestry seemed, in the eyes of most, to have become largely a government enterprise and when industrial forestry seemed impotent, if not actually dead. But Fritz confidently offered his students a different view, a vision of commercial forestry on a sound financial base imbued with the vitality inherent in an important sector of modern industry. This was truly only a vision in the 1930s, but it was due in no small measure to men like Fritz, and the students intrigued by his ideas, that the vision of the Thirties became the reality of the Sixties.

Fritz has never been reluctant to speak his views plainly, even bluntly. He has no hesitation in challenging the "conventional wisdom" and does so in any gathering where he can arouse interest in forestry. As a result, to many within the profession he has often appeared as a dissenter. But these same qualities have given him the interested attention of people outside of forestry. Not only did this earn him the cognomen of "Mr. Redwood" among many Californians, but, more importantly, it introduced basic ideas of forest management among many land owners and public officials who simply were not hearing the forestry message being preached in other quarters. Foresters have often been self-critical of their tendency to talk only to themselves. Fritz has been a model exception to this generalization. Hence, his influence on forestry development in California has been profound. His work with redwood forest landowners led to many constructive improvements in the management of large redwood landholdings. As a member of the California Forestry Study Committee, he influenced strongly and constructively the landmark forestry legislation adopted by the state at the end of World War II. And in later years he was among the first voices to point to needed revision and strengthening of several features of the state's forestry policies.

Fritz's strong and independent voice lent balance to discussion of many forestry issues. Many students learned from him the importance of considering all sides of controversial policies. His practical approach to forestry, reinforced by a lifetime of astute observation in the woods, has helped innumerable people to think of forestry as a practice rather than as a theory. His unbounded interest and enthusiasm for redwood have been transmitted to a host of his listeners both within and outside the forestry profession.

Fritz's profound influence on forestry in California and elsewhere has recently been recognized with the award to him of the Gifford Pinchot Medal. This may have surprised Fritz, whose evenhanded criticism has at times fallen even on the "Father of the Profession," Gifford Pinchot. But to those who have seen Fritz's own contributions at close range, the award was fitting recognition to an outstanding figure in the profession.

Henry S. Vaux
Professor of Forestry

4 July 1972
217 Mulford Hall
University of California, Berkeley

INTRODUCTION

In the developing history of forestry in America certain men and women emerge as major figures in the arena of conservation and forest policy. Emanuel Fritz of Berkeley, California, is one of these. Professor Fritz has long been a familiar figure in forestry affairs. Widely known as Mr. Redwood, he wears this appellation with considerable discomfort. "It is a questionable moniker to hang on anyone," he scoffs. "Whenever I hear it, it makes me feel as if I am being identified as some kind of character and without realization that my life has been spent in work on many species besides Sequoia sempervirens."

But to a considerable company of foresters who have studied under the strong-minded professor of lumbering and forest products at the world-renowned School of Forestry and Conservation on the University of California's Berkeley campus, Fritz is Mr. Redwood, and their number is considerably bolstered by a large contingent of laymen whose concern for the forests of America has brought them into frequent touch with the feisty professor in public meetings or through his extensive writings.

Emanuel Fritz was born October 29, 1886, in Baltimore, Maryland, to German Immigrant parents, John George Fritz and Rosa Barbara Trautwein Fritz. The family enjoyed the fruits of a prosperous new business and gave major consideration to the education of its offspring. Young Emanuel grew up speaking German, learning English from his friends in the streets of Baltimore. He was sent to school at the Polytechnic Institute of Baltimore along with his younger brother, Theodore. Another younger brother, Gustave, attended the City College. Both brothers are deceased.

The Fritz family was devoutly religious in the evangelical tradition of the Lutheran faith. Daily Bible reading was part of family life. Young Emanuel's early interest in nature derived, perhaps, from his father's active attention to birds, animals, and plants. When city neighbors objected to a swarm of bees brought home in a gunnysack from the country, the elder Fritz packed up his family and moved to a suburb.

After graduation from the Polytechnic Institute, Emanuel went to Cornell University following a major interest in engineering. Fritz took a generous variety of nonengineering courses through his years at Cornell, economics, corporate finance, contracts, and music. He sang regularly in the Cornell Chapel Choir, and, as he likes to recall, "received credit for it." In retrospect he now regrets not having pursued a degree in the arts as well as the mechanical engineering degree that he earned. Athletic skill was demonstrated by rowing stroke on the Engineering College crew. In Intermural competition he came to know Fritz Fernow, stroke of the Arts College crew. Fernow was the youngest son of the first professional forester in America, Bernhard Eduard Fernow.

Fritz turned to forestry some years after teaching a stint at his old alma mater, Baltimore Polytechnic Institute. He went to Yale University's highly-touted School of Forestry and in 1914 was awarded the master's

degree in Forestry. Franklin Hough's Trees of North America sparked an interest in wood technology that led him into a life-long study of uses of the redwoods and other western species.

In 1914 he resumed a summer job he had previously landed as a student at Yale, working for the New Hampshire State Department of Forestry. The following year he joined the growing ranks of the United States Forest Service. This involved him from 1915 to 1917, first, in fire suppression and prevention work and, secondly, in silvicultural research. His experience with the Service ended with America's entry into World War I.

Immediately after the war, Fritz moved into the ranks of academic forestry. From 1919 to 1954 he rose from Assistant Professor to full Professor in forestry at the University of California. During these years he taught wood technology and timber utilization. He emphasized with his students that forestry must be brought out into the woods.

In line with this philosophy, from 1934 on, he served as consultant forester to the lumber industry, particularly in pine and redwood. Among his numerous positions and honors can be listed that of wood technologist for the California Pine Association and the West Coast Lumbermen's Association; forestry advisor and Vice-President of the Foundation of American Resource Management; Editor-in-Chief of the Journal of Forestry; and Founder and Secretary of the Redwood Region Logging Conference.

Fritz was not one to ignore the role of federal and state government. Though advocating minimum public regulation of private forestry, he served, from 1938 to 1940, as consultant to the United States Department of the Interior and, from 1943 to 1945, as forestry consultant to the California Legislative Interim Committee.

His work thrust him into contact with a bustling lumber industry which was already showing signs of the sickness that was to provoke the critical analyses of William B. Greeley, David T. Mason, and, later, Wilson Compton. Fritz felt a sympathy for loggers and lumbermen and defended them against critics both within his profession and in the muckraker press. It was this attitude, maintained throughout a long career, which has brought upon his head the frequent accusation that he is a stalking-horse of industrial interests. The bitter battle over management of the nation's forest resources in this century, continuing with heightened fury today, creates fertile ground for such accusations. Historians of the future will appraise Fritz's role from the careful examination of his personal papers, preserved in the University of California's Bancroft Library,* as well as his voluminous published record of American forestry.

That Fritz took up the cudgels frequently in the great battles of recent forest history, often opposing one of his leading mentors at Yale, H.H. Chapman, is a part of this work which will draw special attention from scholars. Whatever future analyses of Fritz may produce, it is

*In the course of these interviews with Emanuel Fritz the Forest History Society also obtained funding from the California Redwood Association for the inventorying and indexing of the Fritz papers in The Bancroft Library. This was done by Marion Stuart of the Forestry Library, University of California, Berkeley.

without doubt that he made a clear and unequivocal impact upon the record of American forestry.

The Fritz interviews were made over a period of nine years. I made the first interview in San Francisco on January 2, 1958. This was followed by another interview of mine made in Berkeley on November 5, 1958. Mrs. Fry conducted separate interviews on November 12, 1965, and August 28, 1967, in Berkeley. Working from rough drafts of these initial interviews, Mrs. Fry and I made further interviews with Professor Fritz in Berkeley on February 27, 1967, and on March 1, 2, 3, and 4, 1967. The volume is composed of major portions of all the various interviews.

This volume of oral history interviews with Professor Fritz is one of a series of works focusing upon Western American forest history and made possible by grants from the Louis W. and Maud Hill Family Foundation and the Weyerhaeuser Family Foundation. The Hill and Weyerhaeuser grants were made to the Forest History Society during the 1960s to permit the making of selected in-depth interviews with westerners who had been either major participants in or keen observers of developing patterns of western forest land use.

A considerable list of desirable interviews was compiled with the aid and assistance of colleagues in the major western universities and colleges with which the Forest History Society has enjoyed a symbiotic relationship for nearly two decades. Interviews were planned with a final high-priority list. Preparatory research for the interviews included searching published sources as well as examining available documentary materials relating to the men and women to be interviewed. To conserve funds, interviews were planned to take advantage of the attendance of respondents at regional or national meetings held on the West Coast.* Experts in the oral history method in western universities were employed to assist in the program, particularly from the Regional Oral History Office of the Bancroft Library at the University of California in Berkeley.** Professor William H. Hutchinson of the History Department at Chico State University was also recruited to make interviews which explored the folklore of the western woodlands.***

*George L. Drake, tape-recorded interview in 1967, and David T. Mason, tape-recorded interview in 1965, 1966 and 1967, by Elwood R. Maunder, Forest History Society, Santa Cruz, California. In process.

**Among these interviews were, C. Raymond Clar, tape-recorded interview in 1966 by Amelia R. Fry, in process; Leo A. Isaac, "Douglas Fir Research in the Pacific Northwest, 1920-1956," typed transcript of tape-recorded interview by Amelia R. Fry, 1967; Woodbridge Metcalf, "Extension Forester, 1926-1956," typed transcript of tape-recorded interview by Evelyn Bonnie Fairburn, 1969, University of California Bancroft Library Regional Oral History Office, Berkeley.

***W.B. Laughead, typed transcript of tape-recorded interview by William H. Hutchinson, Forest History Society, Santa Cruz, California. 1957.

As the principal investigator I was privileged to make approximately half of the interviews. Amelia Roberts Fry of the Regional Oral History Office, Berkeley, is co-author of this work and the author of other interviews in this series. Willa K. Baum, Director of the Regional Oral History Office of Berkeley, assisted in directing the processing of interviews. The preparatory research on the large Fritz collection, which is a comprehensive documentary resource for all areas of his professional life, was done by Amelia Fry; my Yale University colleagues Joseph A. Miller, Judith C. Rudnicki, and Margaret G. Davidson did much of the research from related deposits in the Forest History Society and the Yale Historical Manuscripts Collection. Susan R. Schrepfer and Barbara D. Holman did the final editing of the manuscript, created its index, and saw the volume through the last steps of publication.

Acknowledgment of advice of many others who aided in the arrangements for interviews would require several pages to record here. Of particular noteworthy assistance were Carwin Woolley, Executive Vice-President of the Pacific Logging Congress; Bernard L. Orell and Irving Luiten of the Weyerhaeuser Company; Dave James of Simpson Timber Company; Foresters Thornton T. Munger, David T. Mason, Henry J. Vaux, Henry E. Clepper, Frank H. Kaufert, George A. Garratt, and Paul M. Dunn. Hardin C. Glascock of the Western Forestry and Conservation Association, now Executive Vice-President of the Society of American Foresters, was a most helpful consultant and critic.

Special appreciation is expressed for the encouragement and patience of the sponsors, in particular A.A. Heckman and John D. Taylor of the Hill Family Foundation, Frank B. Rarig and Frederick K. Weyerhaeuser of the Weyerhaeuser Family Foundation, and Phillip Farnsworth and Kramer Adams of the California Redwood Association.

Oral history is a new and demanding discipline. The great volume of work involved in designing, planning, and carrying out the processing of all the many interviews was done without intrusion of any kind upon the team of scholars who labored so long and hard upon it. Many of the men and women who were interviewed have since died. That their vivid memories of the history of western forestry and conservation have been preserved in the interviews of this series is a tribute to all who have been associated with the project.

It is our hope that more interviews in this series may be published and that excerpts from other unpublished interviews can be submitted as articles to scholarly and popular journals. Funds are now being sought from the National Endowment for the Humanities and other sources of philanthropy to assist us toward these goals. A significant number of articles from oral interviews have already been published in Forest History and American Forests.

The potential of oral history has only begun to be realized. Much progress has been made since Professor Allan Nevins began to develop the method at Columbia University in 1950. It is a matter of pride to the Forest History Society that its first exploration of the method was made only two years later, the result of conversations I had with Professor

Nevins. Today the ranks of oral historians are growing at a rate that amazes even those optimistic advocates who championed the method in the face of considerable criticism during the early fifties. The Oral History Association now stands on sturdy feet, counts numerous members on its rolls, and gains prestige with the mounting number of fine books and articles published. The Forest History Society is proud to add this volume to the library of American oral history.

Copies of this manuscript, either in manuscript or microfiche form, can be purchased from the Forest History Society.

Elwood R. Maunder, Interviewer
Executive Director
Forest History Society

30 November 1972
Forest History Society
733 River Street
Santa Cruz, California

Elwood R. Maunder was graduated from the University of Minnesota in 1939 with a B.A. in journalism. He was a reporter and editor of the Minnesota Daily and an officer of his class. From 1939 to December, 1941, he was a reporter and feature writer for the Minneapolis Times-Tribune and the Minneapolis Star-Journal. He enlisted in the U.S. Coast Guard December 21, 1941, and served as a combat correspondent in both the European and Mediterranean theaters of war on landing craft for infantry and combat transports. He was editor of the Ninth Naval District's magazine, Soundings, at the conclusion of the war. He was graduated from Washington University at St. Louis in 1947 with an M.A. in history. He attended the London School of Economics and Political Science for one year and worked as a freelance foreign correspondent and British Gallup Pollster. He was a member of the staff of the U.S. Department of State during the Meeting of Foreign Ministers in London in 1947 and 1948. Returning to the United States he was named director of Public Relations for the Board of Missions of the Methodist Church, later director of public relations for the Ohio area of the Methodist Church. In 1952 he was appointed executive director of the Forest History Society. He is the author of many articles, has produced more than one hundred oral history interviews, and edited with Margaret G. Davidson A History of the Forest Products Industries: Proceedings of the First National Colloquium, sponsored by the Forest History Society and the Business History Group of the Harvard Graduate School of Business Administration. He is the publisher and long-time editor of Forest History, quarterly journal of the Forest History Society. He is an Honorary Member of the Society of American Foresters and a Fellow of the Forest History Society.

Amella R. Fry was graduated from the University of Oklahoma in 1947 with a B.A. in psychology. She wrote for the campus magazine. She received her Master of Arts in educational psychology from the University of Illinois in 1952, with heavy minors in English for both degrees. She taught freshman English at the University of Illinois from 1947 to 1948 and at Hiram College in Ohio from 1954 to 1955. Mrs. Fry also taught English as a foreign language in Chicago from 1950 to 1953. She writes feature articles for various newspapers and was reporter for a suburban daily from 1966 to 1967 and writes professional articles for journals and historical magazines. She joined the staff of Regional Oral History Office, University of California, Berkeley, in 1959, first specializing in the field of conservation and forest history, then public administration and politics. She is currently director of the Earl Warren Oral History Project at the university and secretary of the Oral History Association.



This photograph was taken on the occasion of the presentation of the Emanuel Fritz papers to the Bancroft Library. From left to right, Elwood R. Maunder, Donald Coney, former University of California, Berkeley, Librarian, and Professor Fritz.

OBITUARIES

UC Forestry Expert Emmanuel Fritz

Emmanuel Fritz, a forestry expert nicknamed "Mr. Redwood" and the oldest faculty member at the University of California at Berkeley, died last Thursday in his Berkeley home at the age of 102.

Mr. Fritz was involved in nearly every aspect of the redwood industry and was considered a forestry and conservation authority for 70 years.

He advised elected and appointed officials on the need to balance demands for lumber in a rapidly growing state with the need to preserve old-growth groves, replant logged areas and set aside areas for protection.

"He encouraged reforestation and cooperation between the logging industry and conservation groups," said John DeWitt, executive director of the Save the Redwoods League, of which Mr. Fritz was a longtime member.

Mr. Fritz wrote a pamphlet in 1932 entitled "The Story Told by the Fallen Redwood" which is still distributed by the Save The Redwoods League to schools across the country, DeWitt said.

Millions of people who do not recognize Mr. Fritz's name probably remember reading the book at some point during their childhood, DeWitt said. The book describes how tree rings, fire scars and other markings can provide a detailed chronology of an ancient redwood's history.

When Mr. Fritz turned 102, he earned the distinction of becoming the oldest faculty member in UC Berkeley history. Cal's previously oldest professor, chemist Joel Hildebrand, was 101 when he died in 1983.

Mr. Fritz helped create California's State Forest program and advised Governor Earl Warren on forest and logging matters. And he was the founder of the Redwood Region Logging Conference, which honored him on its 50th anniversary earlier this year for his prominence and his influence on forestry practices.

His personal papers are at UC Berkeley's Bancroft Library, noted for its collection documenting the history of the Western United States.

Mr. Fritz was a member of the Commonwealth Club and of the Bohemian Club. At the Bohemian Club he established a museum to depict the life, history and ecology of the trees on the club grounds along the Russian River.

Mr. Fritz was born in Baltimore on Oct. 29, 1886. He received a bachelor's degree from Cornell in 1908 and a master's from Yale in 1914.

He was a forester for the New Hampshire State Forestry Department before moving West to work for the U.S. Forest Service and serving as an Air Service captain in World War I.

Mr. Fritz joined UC Berkeley's Division of Forestry in 1919 and retired in 1954, retaining the title professor emeritus.

He is survived by two daughters, Barbara Fritz of Berkeley and Roberta Fair of Eugene, Ore. At his request, no services were planned.

Donations are preferred to Save the Redwoods League, Alta Bates Hospice, 5232 Claremont Avenue, Oakland, 94618 or to the Society of American Foresters' building fund, 5400 Grosvenor Lane, Bethesda, Md., 20814-2188.

I EARLY LIFE

The Fritz Family in Baltimore

Maunder: Emanuel, can you start out by telling us something about your family origins and where you were born and something perhaps of your early childhood?

Fritz: I was born in Baltimore, Maryland, October 29, 1886. My father was born in Ebersberg, Württemberg, on February 14, 1855. My mother was born in Stuttgart, Württemberg, on February 2, 1856. Father was nearly eighty-three when he passed away and mother was just past eighty-two.

Father was a tailor, learning the trade in Switzerland to which he went before he was twenty. He came to the United States in about 1880. Mother came to the United States about the same time and they were married in Baltimore on April 15, 1884.

When they came to this country, they went to night school at once to learn the language, and in my father's case, he also learned bookkeeping so that he could set up his own business. While he finished his apprenticeship in Switzerland, where he spent most of his youth although born in Germany, he decided that the thing to do in the United States was to have his own business. He set up one shortly after he was married and the business prospered. The only tough times we knew as boys were those of the 1892-1893 period in the very severe depression of those years. My parents often spoke of those days, but they pulled themselves out of the slump without help, as did the rest of the country.

Maunder: Your father's name was what?

Fritz: John George Fritz. And my mother's maiden name was Rosa Barbara Trautwein. Her parents and ancestors were all soldiers. My father's were soldiers and farmers. My father was exempted from military service because of a bad leg.

Maunder: What brought him to this country? Was it the economic opportunity?

Fritz: Well, in those days of course many young men in Europe felt that the streets of the United States were paved with gold, and they thought they'd come over here and pick up some of it. My father often told me that in this country one is compensated in accordance with how hard he works and what he knows, while in Europe, one's station in life, as to birth, pretty much determined how far you could get.

Maunder: When did he come to this country?



Aunt Carrie Trautwein Muth with Emanuel Fritz, ca. 1890

Fritz: It must have been about 1880. I was born in 1886, October 29th. Mother and father, as I said, met in this country and they were both nearly thirty when they married.

Mauder: Was there any particular reason for their settling in Baltimore?

Fritz: No, unless it was the church. My father was a very devout churchman. He joined the church while he was a young man in Switzerland. He was somewhat of an orator--at least he liked to speak before groups--and I have an idea the church gave him an opportunity to express himself.

Mauder: This was one of the evangelical churches?

Fritz: That's right, a Lutheran offshoot.

Mauder: Which one?

Fritz: It was called merely the Evangelical Church. That's my recollection. I should remember it more clearly but frankly we boys (three of us in the family and I was the oldest) had to go to church and Sunday school so much in the course of a week that we, you might say, got a little too much of it. There was a lot of dogma and fear of the hereafter. But my father insisted on it and as long as he was the boss, we went.

Mauder: Has that persisted through your life? Have you not been an active churchman as a result of this?

Fritz: I really did enjoy going to church while in college, both at Cornell and at Yale. Attendance was purely voluntary. They had invited preachers, a different one nearly every Sunday, and they were really great men and good speakers. They spoke with good sense and I enjoyed attending those sermons, but since then I haven't been very active in any church. As youngsters, we would occasionally go to a synagogue or a Catholic church to see what it was like.

Mauder: Was this a German community that you lived in as a boy in Baltimore?

Fritz: In part. It was changing. Baltimore had a large number of Germans and Irish. Italians, largely from Naples and Sicily, were beginning to arrive in large numbers.

The Germans had Turnvereins (gymnasium clubs). I belonged to one. And they had a lot of societies and singing groups (Saenger verein). They would go during the summer to their Schuetzenpark for their Schuetzenfest, as they called it. "Schuetz," of course, would be a guard.

I don't know what the origin of those organizations was and why they were set up but as a result of the First World War and the strong feeling against the Germans, all those organizations came to a quick end. It was rather unfortunate because they were very

Fritz: good social organizations and very loyal to America. The Germans we came in contact with were mostly from south Germany, kind, fun-loving, religious and not militaristic as were the Prussians. They became citizens as soon as they could and prized their new status.

Maunder: Did you grow up speaking both English and German?

Fritz: I spoke German until I was eight, and when I was about eight, I picked up English on the street and to some extent in school.

Maunder: I wonder if you could tell us a little bit about your family life and your growing up as a young man in the eastern United States. What do you recall most about your boyhood?

Fritz: Well, it was a very happy boyhood. Our parents took a great deal of interest in us and gave us every opportunity. Of course, transportation in those days wasn't what it is today. We had to ride streetcars or we walked or rode our bicycles.

Even though we lived right in the city I had to walk to school as far as Abraham Lincoln was reported to have walked and mine was always on hard city streets--but no mud. The Polytechnic Institute was about two miles from home but we enjoyed walking. When I say "we," I mean my younger brother Theodore and I. There were a lot of interesting windows en route, especially Schwartz's Toy Store, which was always fascinating.

Maunder: Where did your middle brother go to school?

Fritz: He went to the Polytechnic as I did, but did not finish. Theodore thought it was very foolish to stay in school so long when you could go out and make money right away, so he quit the Polytechnic early and entered business college. He was one of the first to operate what is today a "stenotype" machine.

As soon as he graduated from this business college--I think it was Strayer's--he got excellent jobs and he worked himself up very rapidly in business. His principal employer at the time, as I recall, was Armour and Company. Later he had a large steel distributing business, everything from chain link fencing to tool steels.

Maunder: But your younger brother went along with you through the Polytechnic?

Fritz: That was Theodore. The other brother, Gustave, was four years younger and went to the City College. Baltimore in those days had no high schools for boys under that name. It had only the Baltimore Polytechnic Institute and they had the Baltimore City College, both for boys only.

My youngest brother Gus had decided to become a doctor so that meant that he would go to the City College where he would be prepared to enter either Hopkins or the University of Maryland. He chose the

Fritz: University of Maryland and developed an excellent medical practice. Both brothers are deceased, Gus at fifty, Ted at sixty-eight. Both were hard workers.

Maunder: Your parents were in a position to give you all the very best of education as you were growing up?

Fritz: Yes, they insisted upon it. They were not always in comfortable circumstances but they generally had enough. They were very frugal and they made a dollar go a long way. They taught us the same principle. They encouraged us to do some work on the outside with the result that when I went to college I financed my first two years myself and made nearly enough money in the summertime and at odd times to help me through the third year, although my father and mother contributed a considerable share.

They were very independent people, especially my mother. They felt that one appreciated more what he had to work for. Mother was very practical. Father, on the other hand, was pretty much of an idealist.

My father was a diligent student of the Bible and he read very widely on biological subjects, medical and zoological. Living in the city, we had little opportunity to have any biological interests except that father raised Newfoundland dogs and fancy pigeons for show purposes and others for racing. Since the birds didn't need the floor of the cage, I was permitted to have some guinea pigs and a squirrel, but that was the extent of that. However, we bicycled often to the country and particularly to the fine Druid Hill Park to see something green.

Even though the back yard was small, as in all those city houses, we built some boxes on the porch in which we had flowers and vines.

My father's interest in birds and animals and plants, which he couldn't really develop in the city, led him finally to quit the city and move to the country. He had been on a Sunday walk in the country with my mother, beyond the end of the car line. He found a swarm of bees and he told mother that swarm was going to belong to him. So he went to a nearby farm house for a gunny sack, slipped the sack over the swarm and took it home. Although it meant being absent from church that Sunday night, he stayed home and made himself a beehive out of, I believe, a cracker box, and the next morning we were amateur apiarists.

Those bees were very active and had to forage pretty far and wide in the city to get what they needed. Some of the neighbors complained, so my father said, "If the neighbors don't like my bees, I'm going to move where nobody can be bothered by them." So he bought himself a little place of about seven acres about a mile from the end of the Belair Road car line at a place called Kenwood Park. There was a newly completed house on the property which was up for sale because the owner had lost his wife. It was a large

Fritz: house, very well built, and the grounds gave father a chance to have not only bees and pigeons but chickens and everything else. As a result of that interest, a few years later I built him an aviary about twenty by twenty, in which he raised pheasants of five or six different kinds.

The chicken house, as I remember it, was pretty much like a modern four-room house. On the second floor he had pigeons and on the first floor there were chickens--fancy chickens, by the way. Mother, being rather practical, couldn't see the sense--being generally badly bent financially--of raising show birds, so she insisted on birds that would lay eggs and cause no tears if they were laid on a block and decapitated. So she had her own flock of Plymouth Rocks and Leghorns for eggs and the big Orpingtons for meat, so we were on a chicken diet at least once a week and we had more eggs than we knew what to do with.

An interesting sidelight on that was this: they moved to the country while I was a junior at Cornell but I didn't spend the following summer with them. That summer I spent in Steelton, Pennsylvania, working for the Pennsylvania Steel Company.

After college graduation, I became a teacher at the Baltimore Polytechnic Institute. (This is jumping ahead a little, on this chicken business.) Our chickens were doing so well laying eggs that we thought it deserved some attention as a business. It happened that in the summer of 1910, I think it was, I worked as a draftsman for the Cambria Steel Company in Johnstown, Pennsylvania. Two other draftsmen also liked the outdoors so we three used to take walks Saturday afternoons and all day Sundays in the woods and talked over our future as young fellows will.

I noticed that one of them could identify grasses. He apparently was a farm-bred boy and could distinguish one grass from another merely by the fruit. I thought that was very interesting. The other one knew some trees while I didn't know any of those things. We decided it would be interesting to have a little hobby, or a little sideline, so two of us enrolled in Pennsylvania State College extension courses, correspondence courses in fact.

I recall my first course was the propagation of plants in which we learned how plants live and grow and how they are propagated. That opened an entirely new world to me and it came to be very fascinating. I couldn't wait for the next exercise to come in the mail. Then I took courses in poultry husbandry and in fertilizers and so on, but the poultry husbandry course was the one I look back upon with real amusement.

The courses told us that chickens will lay well if treated well, what chickens needed in the way of treatment was this and that. So when I got back to Maryland for the winter term of teaching I decided to put some of these principles into operation. First of all, I learned that our chicken house, which was a pretty fancy

Fritz: affair, faced the wrong way, according to the book. It should have faced south whereas it faced west to the residence. I turned the house ninety degrees with the help of some of my husky cousins one Easter Monday. I had everything ready: the new foundation had been poured earlier and the house had been raised up on skids, properly greased. So when the youngsters were asked to heave and they did heave, the house spun right around ninety degrees. Then it was easy to lower it on the new foundation blocks. That was possibly my first use of my engineering training by actually building something.

Well, we put in all the appurtenances required by the book and as a result the chickens laid at a great rate, and we had eggs coming out of our ears--we didn't know what to do with them. It happened that one of our neighbors, who were all farmers, thought it rather amusing for city people to come to the country and even attempt to run a little kitchen garden and to have some chickens, but he asked all kinds of questions as to why our chickens laid eggs and his did not. So we told him that as long as he hadn't eggs to supply his trade, we'd sell him our excess.

My brother Theodore and I got excited over that and we thought that if we could raise eggs by that simple procedure it ought to be a good business to get into. Being a businessman working for Armour and Company, he went to the hotels in Baltimore and at each one was told that if he could guarantee a certain number of dozen eggs every morning he could have all of their business.

He came home all steamed up and soon we had it all planned out as to where the new chicken houses were to be, and even had a delivery truck all picked out. It would have been one of the first motor trucks in that locality. Things were going very well and we were on the verge of going into the chicken business when Armour and Company transferred him to Cuba.

That settled that venture, and I'm very glad it did because a man who raises chickens is really a slave to them. He has to be there morning and night. In fact, it was a good thing because I was weakening on engineering anyway.

The experience of being out in the country and having so much free time--all of Saturday and Sunday and all the vacation days were spent out there--was a real education. Father had some excellent men working for him; one was an avid reader of every document that was ever published by the U. S. Department of Agriculture up to that time. It was from him that I learned the difference between hay and straw and what humus is, and so on. He was a very well-read man although he had no formal education. I learned later that he worked for us in the off-season only, because his major interest was following the races; and he was with us only waiting for the Pimlico race track season to open. I learned a great deal from him and also from the other men and I got interested in growing things.

Fritz: My father, of course, was always playing with his bees and birds and animals. We had to have a horse to drive us to the streetcar line a mile away, and we thought we ought to have a cow to have fresh milk, although it probably would have been a great deal cheaper to buy it from the local farmers. He also experimented with grafting and I used to watch him, and as the thing went along, after a few years I got to feeling that engineering was not nearly as exciting as the biological fields like growing things and watching bees at work and so on. Incidentally, father had an "observation hive" from which one could take off a cover and see what went on inside. I recommend it to others. It's an eye-opener.

As a result of this experience in the country, I decided to quit engineering eventually and study forestry. I'll have to make a little separate story of that because that goes back a little farther. Do you have a question at this point?

Baltimore Polytechnic

Maunder: Can you tell us of the progress of your education up until you entered forestry school?

Fritz: The early years of education I spent in a Lutheran parochial school where the language was practically all German for the first two years; and then shortly after that I went to the F. Knapp's Institute in Baltimore which was also a private school but run by an American-born man of German descent, a school that had been started by his father before the Civil War in the same buildings.

I recall there was quite a wing at the back of the school in which the slaves had been kept before the war. This wing had the same number of floors on the same levels as the floors in the main building and each floor had its own slave. It was a very thorough school. They taught pretty much with the stick. The teachers were first-class people, men and women. They knew how to teach and they made us feel that we wanted to learn.

Incidentally, this was the same school that H. L. Mencken attended. Later on, I attended another school which was also Mencken's school, the Baltimore Polytechnic Institute. That school, by the way, was in his time known as the Baltimore Manual Training School. It was set up as an experimental school to see how vocational training would work out. Baltimore was always, as I remember it, an experimental area for schooling, possibly brought about by the presence of Johns Hopkins University in the same city.

Maunder: You got a stern type of discipline and education in this school?

Fritz: There was discipline from morning until you were released in the afternoon. There was no monkey business about giving one extra hour to study. We were expected to study at home. There was no

Fritz: choice of courses; all were prescribed, and if your grade average wasn't up to a certain point you were canned. This had the predictable results.

From Knapp's Institute I went to the Polytechnic, entering the sixth grade and staying seven years. "Poly" was being elevated from a purely vocational school with three lower grades, sixth, seventh and eighth, and three high school grades. The grammar school grades were to be phased out and the three high school years were to be raised to four. It developed into a very highly rated school, really a secondary engineering school from which its graduates could enter Lehigh or Cornell as sophomores. Some of the engineering textbooks were the same used at the U. S. Naval Academy. There were no biological courses whatever. Dr. J. B. Conant, who made a study of secondary schools in the 1940's, considered it a top school.

I was graduated twice, first at the end of three years and then again at the end of four years in 1905. The school was always headed by a retired naval officer who insisted on good discipline. The curriculum was all prescribed; there was no choice.

The school was really remarkable and I'm happy to say that the man who followed the last naval officer was a close friend of mine and a near classmate. He retires, I believe, this month, in January of 1958. He's a Cornell graduate, as I am, and he maintained the same policy that was carried on by Lieutenant William R. King, who was principal for about twenty years.

Incidentally, going to a school like that makes one think back as to who had the greatest influence on him in later life, and it's pretty hard to say which one of the teachers had the greatest influence on me. There were all men--no women teachers--and no girls in the school. It was quite different than it would have been in an ordinary high school. All those men were primarily teachers. They loved teaching; they loved being among the boys; they loved talking with the boys in off hours; and they insisted on fairness, scholarship and good behavior. The only thing that they were weak on, as I think back, was penmanship. They never made us learn to write a really legible hand as the kids were taught in those days in the parochial schools. I wasn't in the parochial school long enough to really learn to write a good hand.

Mauder: By parochial school, what do you mean? Is this one that was carried on by your father's church?

Fritz: It wasn't my father's church; it was a Lutheran church in our neighborhood. Our own church did not have a school. I call it a parochial school, although it was Lutheran. Generally the parochial schools are looked upon as Catholic schools but that is not necessarily true.

Fritz: The principal of the Polytechnic was a most understanding man. He was not only firm but he was also fair and he knew his stuff. He had an idea that the time for a boy to learn was when he was very young, so, this being a polytechnic Institute, he was naturally charged with the duty of turning out men who would go into the engineering or manufacturing fields.

The school was strong on mechanical and electrical subjects, of course, but at the expense of such subjects or fields as history, literature and English. What history and English and literature we had was excellent, but I wish there had been a great deal more. The men we had for teachers were wonderful and I can still remember to this day much of the poetry that we had to learn by heart. In fact, these men imbued us in the short time that we were with them with an interest in English and literature and history, and in my own case it has never left me.

The school was possibly a little more advanced than it should have been for boys of our age. We had to take mathematics every day the entire time we were in the school--for me, it was seven years. We started out with arithmetic and we wound up with ten units of calculus, both integral and differential, after ten units of analytical geometry. In both cases, it was twice as much as was required to enter Cornell University's engineering department.

I recall the instructor in calculus, a man more than six feet high, well built, a former oarsman, but not a college graduate. His name was Uhrbrock. (I think only one teacher in that school at that time was a college graduate.) He got us so excited about calculus that most of us ended the course with an average of more than ninety percent, and I recall in my case, prior to the examination, I worked out each problem in the book just for the fun of it, not necessarily for the examination. That helped a great deal when we went to college. Some of the boys went to Lehigh and once in a while one went to M.I.T. Having a good grounding in mathematics, our courses at Cornell were much easier.

I might say also that the steam engineering we got at the Polytechnic Institute and the course in mechanics were in many respects superior to that which we got at Cornell. Cornell permitted us to enter as sophomores but refused to give us credit for the mechanics course because they thought that was so important they wanted to be sure we got mechanics the way they wanted it taught. But as a result of having to take mechanics all over again, five units a week for an entire year, every boy who came from our Polytechnic to enter Cornell finished the mechanics course with a grade of ninety percent or more. I think I got ninety-six or ninety-seven, and one of my classmates got ninety-eight or ninety-nine. We were always the top in the class, not because we were any better but because we were merely repeating the course.

That was one of the most interesting courses I ever took. The book

Fritz: was written by Irving P. Church. I remember him very well. He was a typical teacher type and all tied up with his mechanics. If he were alive today, he would probably be working out some of the mechanics involved in space vehicles. He was a very short man; he could write with both hands. In one hand he would have a piece of white chalk and in the other a piece of colored chalk. He'd draw his diagrams and present the problem and then show how it would be worked out. By the time he got through, his black swallow-tailed coat was pretty well covered with chalk dust. He was a great teacher.

The steam engineering we didn't have to take until we were juniors at Cornell, and that course was so simple, and merely a lecture course, that I would take along my other courses for study because, although the man giving the lectures--the dean of the College of Engineering, "Uncle Pete," as we called him, Professor A. W. Smith--knew his stuff, but we Polytechnic graduates were way ahead of him.

The Polytechnic principals had all come from Annapolis and were in the Navy's engineering department before their retirement. I must admit though that at the Polytechnic, my brother and I were teammates in some of the difficulties we got into.

Maunder: You make it sound as if you were a real juvenile delinquent.

Fritz: Oh no. Nothing like that. [Laughter] Not with the kind of parents I had. As I said earlier, the teachers we had were excellent, but we did have one or two that were rather weak and couldn't handle the classes, and of course the students took charge. Word would get to the principal once in a while that the classes were running away with the teachers and that the Fritz brothers were leaders.

They were innocent pranks, but when you get into difficulty once, then you're accused of every other prank that is committed. For example, I was accused once of having stolen a skeleton from one of the laboratories, putting a rope around it and hanging it in the flies of the theater stage, and of being about to lower it on the stage during commencement of the class before mine, to excite the audience; but the janitor found the skeleton in time and cut it down. Well, I suppose they still think, if they're still living, that I swiped that skeleton. I knew nothing about it until after the ceremony.

Maunder: That skeleton really doesn't belong in your closet, is that right?

[Laughter]

Fritz: Nope, not that one.

Cornell University

Maunder: You attended Cornell how many years, Emanuel?

Fritz: Three years. I could have gotten my mechanical engineering degree in two years by attending one summer session, but I preferred to stay a year longer because in those days there was a nation-wide feeling that engineers were not being educated, just like today we talk about the lacks of engineering education. Feeling that I could benefit by more liberal education, I took the extra time that I had available at Cornell to take courses in economics, corporation finance, contracts, and so forth. I even took music. I sang in the Sage Chapel choir and received credit for it. I also enjoyed some of the sermons at the chapel.

Maunder: Do you remember some of those men, who they were?

Fritz: The man I think who had the most impact on me was old Dr. Lyman Abbott. He was the editor and publisher of the old Outlook magazine. He had a very, very long beard and I understand that he had never shaved. He not only preached in the beautiful and inspiring Sage Chapel but he also held informal gatherings Sunday night which I enjoyed attending. He also preached in Woolsey Chapel at Yale, and I never missed going to hear him.

Dr. Henry Van Dyke also appealed strongly to me. I believe E. E. Hale also preached there. He was a venerable man at the time. A rabbi preached once and made an excellent impression. These men all showed great learning and good philosophy. I don't recall that a Catholic priest ever appeared, and that was a loss. I sang in the choir at Cornell. It added much to the pleasure of attending chapel.

I must add that my father retired from business rather early, got even more active in the church, and became a pinch-hitter for preachers (in the Methodist church this time) who were either ill or on vacation. Father enjoyed substituting for them and he could preach in English as well as in German--one of the old-fashioned hell-fire and brimstone sermons.

I had almost enough credits for an A.B. degree at the same time I got the M.E., but engineers looked down on the A.B. degree because it wasn't practical. As I look back on it now, I feel that I should have taken less engineering and more of the letters and science courses. An odd thing about that whole educational program was that I had not one single unit of any biological subject, and later on when I decided to enter forestry school, I was afraid I wouldn't be able to handle it because all my previous training had been in the physical sciences. Going later into forestry, a biological field with strange scientific terms and names--but that's another story.

Maunder: It's interesting that you should say you feel that you lacked education in the fields of social science and the humanities. Would you say that this is a very important part of an engineer's training and why?

Fritz: I think an engineer should have a better general education because he deals not only with machines and bridges but also with people. For example, when a bridge is first proposed, you might go to an engineer and ask him if it's feasible. The engineer might say, after some computation, "Yes, it is feasible from an engineering standpoint, but is it feasible from an economic standpoint? Will the bridge be used enough to pay it off? Should beauty of design be considered?"

So many engineers don't have an understanding of economics even to this day, or of dealing with people, so that they are looked upon as being merely slide rule operators and designers or operators of engineering plants. I found in my own case that the art of speaking English and writing it and conversing with others is possibly even more valuable or more important than knowing a lot of formulae.

Maunder: This seems now to be borne out in what top management in industry is doing in some of its recruitment of new leadership. They require not only people who are well trained in a specialized field, but they want people of rather broad education.

Fritz: Yes. I think that business in the past fifteen years has been so extraordinarily good that many men reached the top in industry, engineering, banking and business because they couldn't help it. The market came to their doors. But now that there's a little recession, I think you'll see heavy mortality among the top echelons because of poor background.

Maunder: Yes. I was going to ask what was the real beginning of your interest in forestry and how do you trace that development in your life?

Fritz: I've often thought about that and wondered about it, but I think I can pinpoint it fairly clearly. My mother's father had been a soldier all his life, and when he was retired to the Civil Service, as often happened in Germany, he was made what in this country would be called a ranger in the Württemberg Forest Service. The King owned the forests. Grandfather was probably in charge of a small district.

Now it would appear that having a grandfather and also an uncle who were in the Forestry Service in Germany, that would have been an influence, but it had none whatever. In fact, it rarely occurred to me that grandfather was a forester at one time.

The real start, I think, came while I was a junior in engineering

Fritz: at Cornell. I had made a Sunday trip, or a hike, with some of my classmates, although they were civil engineers while I was a mechanical engineer. On this walk (and of course, the country around Cornell campus was wooded and beautiful) they got to arguing about the identification of certain trees. I couldn't contribute anything because a tree was just a tree to me. They were arguing as to whether a certain tree was a hemlock or a spruce. To me they were both evergreens and looked pretty much alike. But the fact that there was some point of difference made an impression and I looked up some information on trees in the library.

Now at this time also--that was 1906, 1907--it was the era of preaching by Gifford Pinchot and Theodore Roosevelt in behalf of conservation, and the two men were in the newspapers a great deal. T. R., of course, had the big platform. Pinchot fed him the material although he himself was an excellent speaker and an excellent writer. I read everything that the newspapers published about these two men and also read some of their articles.

It happens that at that time I was enrolled in a public speaking course, and one week we were asked to prepare a speech, to be given the week following. We were permitted to copy a speech from someone else or write our own. So I thought it would be a good idea to make a speech on conservation. I took some of Pinchot's stuff and some of Fernow's, and some of Roosevelt's and some of the others, and fitted them together and had my own speech. I still have that speech at home, written in lead pencil on yellow paper. I must look it up and preserve it.

Mauder: One question, Emanuel. Was all of this reading and acquaintance with the controversy over conservation derived from reading what we might call the popular press, the newspapers and popular magazines, or did you delve into the more specialized periodical literature?

Fritz: Yes, it was, most of it, general stuff for popular consumption, and as I look back on it, it was a strong pitch to get the public interested in conservation. There was very little specialized material available. But I did get a copy of Pinchot's Primer of Forestry. My copy carries the date I got it--January 20, 1907. I also got a copy of Filibert Roth's Bulletin Number Ten, on wood, published in 1895.

Mauder: How about the American Forestry magazine?

Fritz: Well, at that time it was published in a different form, and I saw very little of it. But in the engineering magazines that I read, there were occasional articles on wood and the likelihood of a timber famine. Of course, that would be of interest to an engineer because wood in those days was an important engineering material.

Fritz: Well, the reading and contact with the wonderful outdoors at Cornell, which was quite a thing for a boy coming from a large city, I think was what sparked an interest in my surroundings--the trees, plants, geology, and so on. Pinchot, being a forester, spoke and wrote mostly on forestry.

While I was at Cornell, I learned that it had had a forestry school but that it had been closed a year or two before I entered. I made some inquiries about it and learned about its fate. Incidentally, one of my classmates, who was majoring in Liberal Arts, was the youngest son of Dr. Bernhard E. Fernow. The son was named Fritz. his first name. It happened later in my senior year, he was the stroke of the Arts College crew and I was the stroke and captain of the engineers' crew. Although the engineers had the best crew, of course, we had a little hard luck with our number two man catching a "crab," and then another one, and letting the Arts College crew get ahead of us and beat us; but it was nice to be beaten by a fellow like Fernow.

Come to think of it, Fernow may not have been the stroke; it might have been LeRoy Goodrich who later became an attorney and is still living in Oakland, California. Rowing was my principal interest in athletics in college except for some cross-country running, but rowing better fitted my physical dimensions which weren't too ample anyway. I got off the track somewhere, didn't I?

Maunder: Were you ever influenced at this time directly by anyone in forestry? Were there any holdovers there at the university from the School of Forestry who influenced you in any way?

Fritz: Not that I know of. I had no contact with them whatever. Of course, the Engineering College was at one end of the campus and the Agriculture College was at the other, and engineers in those days looked upon the agricultural students as "hayseeds" and didn't mix very much. We rather looked down upon them; and furthermore, the Agriculture College was a state-supported college while Sibley College at Cornell was private, and as youngsters we probably considered ourselves a little superior.

I remember one day at the boarding house--I was not a fraternity man--one of the waiters, who was a short-course student in agriculture during the winter, was asked by one of the boys at the table, "Are you going to the fencing match tonight?" And he replied, "Fencing match tonight? We do our fencing in the spring." So that, I think, shows the gap between the agriculture students and the engineering students in those days.

No, no individual had anything to do with it at Cornell, only the reading; and if any individuals had an influence I would say they were Gifford Pinchot and Theodore Roosevelt, but only in a vicarious way and because of their writing.

Fritz: I might add that in 1911 while I was back on the Cornell campus for summer school to study botany, I met the dean of the College of Engineering. He remembered me and asked what I was doing. I told him I was going to study forestry and lumbering, and he said, "Why do that? There's no future in it. Wood is an obsolete material, not only because it is being cut too fast but also because metals will supersede it."

In other words, lumbering was a dying industry and therefore forestry would have no future. That was Dean Dexter S. Kimball, a fine man, and a classmate of Herbert Hoover. He was reared in the Seattle area and he apparently had no use for the lumber industry because of its destructive nature in those days. But like most people at that time, he saw only the destruction rather than the reasons for it, nor did he do anything to find an explanation of the situation. Pinchot was in the same category.

At Cornell, I had a lot of spare time because, although engineering was a pretty tough course, my advance credits gave me considerable leeway. So I spent a great deal of time in reading magazines and books. You may remember possibly the old World's Work magazine and the old Munsey's and the old magazine that carried the articles by the woman who castigated Standard Oil. What was her name?

Maunder: I know who you mean--Ida M. Tarbell.

Fritz: They were classed as "muckrakers." They saw only the dark side of the cloud. My favorite magazines were Iron Trade Review, Atlantic Monthly, Outlook and Literary Digest.

Actually my interest in forestry didn't develop and didn't really come to a head until I had graduated and moved back to Maryland with my folks in Kenwood Park outside of Baltimore, and I was exposed to the outdoors more than I ever before had been. While there, I had a chance to do a lot of building. The house had not been finished when we bought it. Only the six rooms on the first floor were finished. The second floor was a huge open area and there was an attic above that, or could have been, so I laid out the six rooms for upstairs and had a carpenter put up the studs and so on. I helped him.

We had only kerosene lamps, so we had power brought a mile from the main line to our house, and I wired the entire twelve rooms with concealed wiring. This was quite a job in a house that's already partly completed. I put in a pressure water system, a sewer system, and built a driveway with concrete curbing, and stuff of that kind.

All the time I was interested in what the men were doing in the garden, and once in a while I'd help them and when they'd help me we'd talk about plants. So being in a locality where there was

Fritz: considerable farming and plenty of opportunity to hike, I got interested in knowing one tree from another and also one flower from another. I bought myself a copy of Franklin Hough's Trees of North America. It pictured and described not only the tree but also its wood. This was a lucky selection. I still have the book. It was an excellent job and just a few years ago I recommended to Doubleday that they get the plates and republish it, only to find out that another publisher was on the way to doing it.

From this book I learned the trees on our own place. We had about three acres of woodland, mostly oaks, and then the neighbors' lots had many other species. There must have been twenty species of trees in that locality and I identified them all from that book, or I thought I did.

I also collected wood specimens from some of these trees, and when I entered forestry school several years later, I had a good collection of wood samples. That is, the samples were good, but many labels proved later to be incorrect. I had those samples until the year I was retired from the University of California, when I gave them to one of my students--after I corrected the labels!

It was a lot of fun collecting wood and finding out some of the differences. Of course, while I was at the Polytechnic as a student I got an excellent training in wood working as well as metal working. So wood collecting became somewhat of a hobby, and it still is. When I returned as a teacher in engineering, I used the school's excellent facilities for preparing specimens.

As I look back on it, I can understand why laymen know so little about wood. I knew nothing about wood. Wood was something that was easy to saw and easy to plane and easy to nail and put together. We could tell walnut from oak and soft pine from hard pine, but beyond that we knew nothing. I sympathize today with people when they can't identify woods because their eyes have just not been opened up to its distinguishing characteristics. As I said, that Hough book was the starting point of my interest in wood technology as well as an interest in the identification of trees.

So, in answer to your question, you might say my interest in forestry began while an engineering student at Cornell, and that my interest in wood began while a student and teacher at the Polytechnic in Baltimore. The interest was whetted by my parents having moved to the country. When my brother Ted was transferred to Cuba and thus scotched our joint poultry idea, I started thinking of forestry. Perhaps the crusading spirit of the times also had an effect. Like many young men, I had more than a little of it. Perhaps too, I inherited some of my father's idealism but my mother's practicality probably helped toward a sounder balance. Years later that spirit received some hard jolts when I noticed that crusaders for conservation were, like some religionists,

Fritz: not without a selfish interest and hypocrisy.

It seemed such a natural thing in those days for a man to go into conservation work because it was certainly a good movement. Just the definition of the word--wise use--would get a young man interested, especially one who had some altruism and also a desire to get into some kind of public service.

Teaching at Baltimore Polytechnic

Fritz: I might say that I would never have been a teacher in the engineering department if it hadn't been for the depression of the years 1907 and '08. I was headed for the Pennsylvania Steel Company at Steelton, Pennsylvania, now a subsidiary of Bethlehem, in the chief engineer's department. I worked there the summer of 1907. Apparently he liked my work because he invited me to come back, and told me he had a very fine job for me, and asked me to write to him.

I did write to him in February of 1908 but industries at that time were laying off men rather than employing them. Although this was a large company, they laid off hundreds, but I had a very wonderful letter from Mr. Hawkins, the chief engineer--Elmer Hawkins, I think his name was--who said he regretted very much that conditions were such that he couldn't give me the job he had promised me. So I was out on my ear and I had to look for something else.

So I took a job with the Baltimore and Ohio Railroad as a special apprentice, a two-year apprentice class. In order to get into that class one had to have a mechanical engineer's degree or a civil engineer's degree. I worked in the Mont Clare shops helping take down and reassemble a locomotive.

Just prior to that, the Polytechnic Institute principal, Lieutenant King, asked me if I would consider going to the Polytechnic as a teacher. Naturally I jumped at the chance because the B & O employed us for not much more than twenty-five hours a week, and at fourteen cents an hour, I was hardly making much more than carfare and certainly not board and room. Possibly the time I had off in the teaching years gave me a chance for more reading and more thinking than I would have had if I had gone into an eight, nine or ten-hour day job. Otherwise, I might have remained in engineering.

I taught at the Polytechnic Institute for four years after my graduation from Cornell. During the week I had a room at the YMCA with my brother Ted and on Friday afternoon I would go home and spend Saturday and Sunday. All the vacation days were spent out there except the long summer vacation.

The more my interest was excited in plants, the more books I got hold of and read on the subject. We also subscribed to a beautiful

Fritz: magazine called Country Life In America. It was a very fancy magazine--about the format of Fortune today. From the reading of course we learned more and more--or I did; I was the only one interested. My youngest brother was living at home while he was a student in medical school, so we talked about biological things once in a while.

Botany in Cornell Summer School

Fritz: Anyway, I kept on reading about forestry and began to ask my uncle, my mother's brother, about what forestry was like in Germany; and mother told me something of her father's life in the woods and the activities. Then I made inquiries about forestry schools. I learned that Cornell was going to have one again, Yale had one, Michigan, and there was one at Biltmore.

I also learned, to my dismay, from the literature they sent me that in order to enter, one must have botany. Well, I had no botany nor any other biology except what I had read on my own, so I thought if I have to have botany to enter, then I'd better study it in summer school.

So in the summer of 1911, I went to Cornell summer school to study it. That was a very happy experience. We had excellent professors. One was W. W. Rowlee; another was Harry P. Brown who later became professor of wood technology at Syracuse and was a close friend until he died. The third was Dr. Anderson who gave physiology; Brown taught morphology and Rowlee gave trees and other subjects. Anyway, they were excellent teachers and my classmates were in part students who needed some extra credits or some makeup work, and a very large number of them were school teachers.

I say it was happy because of the close relationship between students and faculty and also the thrill I got out of studying botany. I discovered that the Latin and Greek names were not so difficult and also that botanical science followed natural rules like physical sciences and wasn't so difficult, but if anything is interesting, it simplifies itself from the start.

We made a number of field trips in addition to having the laboratory sessions, and at the close of that six weeks' concentrated botanical course, I determined in another year to enter forestry school; so I returned to the Polytechnic for my fourth year of teaching and gave notice that next spring I would quit. Incidentally, the classic names helped improve my interest in English, so much of which stems from Latin and Greek.

In the same year, in Baltimore, I enrolled in an afternoon course in botany given by a Baltimore City College teacher. The inside lab work and the field trips were very helpful in spite of the

Fritz: distraction of the women, mostly natural science teachers, I being the only male!

Maunder: You were teaching at the same Polytechnic Institute from which you had been graduated?

Fritz: The same school. The principal was the same principal when I was a student at the Polytechnic. He knew that I had a great respect for him, and he liked my family and even though I was the usual hell-raising kid, he forgave a lot of that. He bailed me out a number of times when I got into trouble, thinking that maybe I'd settle down after I graduated from college and got a real job.

In the teaching I had mostly shop work, the machine shop and the pattern shop, and believe it or not, I also had a class in blacksmithing which was very, very interesting. Blacksmithing in those days was a part of engineering. A man had to know how to make a weld that would stick and would be as strong as the component pieces. A blacksmith in those days was called upon for a lot of work that a machinist couldn't do on his machines. Of course, it was also a good experience to know what the metals were capable of doing, especially in heat treatment.

Gradually I was given more and more responsibility, and when I decided to quit teaching, I was told by the principal that he regretted it because he had me lined up to head the engineering department in the year that was to follow. I had previously turned down a chance to go to Purdue as instructor in engineering and get a master's degree in engineering at the same time, but that came when I was weakening on engineering, and I decided that I'd better stay where I was and make up my mind about what I wanted to do.

It's a pretty good example about how a lot of boys go to college not knowing exactly what they want. In my case all my background had been engineering, seven years of it in the Polytechnic, so it seemed only natural to elect engineering in college. But it turned out to be the wrong thing--for a time, as you'll learn when you query me about what I taught at the University of California.

II YALE FORESTRY SCHOOL

Classes, Professors, and Field Work

Fritz: I had learned, as I said before, that Cornell was going to reopen its forestry school after a lapse of some years, and it had already appointed a dean; so while I was on the campus in 1911 for the summer school, I went up to the College of Agriculture and called on this dean, or the man who was to be dean. It turned out to be Walter Mulford. I told him if there was to be a forestry school there, I'd like to be considered for entrance because Cornell was my undergraduate university and I'd like to go there; but I was treated so coldly and Mulford had his watch in front of him and kept touching it every few moments, indicating that I was a very unwelcome intruder, so I quickly grabbed my straw hat and walked out.

(As a strange coincidence, Mulford was the head of the Forestry School when I came to the University of California to teach, and he was my boss for about thirty-two of the thirty-five years I was on the faculty. So I was right back in engineering because I was to teach sawmilling and wood products.)

Then I decided to enter the Yale Forestry School. It was a toss-up between Michigan and Biltmore and Yale, but I decided as long as I had to pay my own way, I might as well go first class and so I selected the Yale Forestry School. Biltmore closed the year following so it was fortunate I didn't enter there. Perhaps I should have gone to Michigan because the Michigan professors, at least some of them, were more practical than the ones at Yale.

Maunder: Who was at Michigan at that time?

Fritz: Filibert Roth, a German forester, was the dean.

Maunder: Then you went to Yale in 1911, is that right?

Fritz: Nineteen-twelve, the following year. The course at Yale at that time was wholly prescribed. There were no electives. The course began in June, or was it July, on the estate of Gifford Pinchot near Milford, Pennsylvania. He called his place "Grey Towers." We were in the summer school there in tents for twelve weeks.

It was a wonderful locality, very similar to the one in Ithaca, and had the same land formations and the same origin apparently-- a number of deep gorges in slate and shale, beautiful waterfalls and very interesting woods, mostly hardwood. The school in earlier years had done some planting so there were some plantations available for study.

Fritz: That summer of twelve weeks on the Pinchot estate was a clincher, and I was more determined than ever to complete forestry. It wasn't so difficult after all, learning the botanical names, biological terms and so on. But I was disappointed over some parts of it. For example, we had a course called mensuration, that is, tree measurements, and they used some statistical methods which were very, very crude, and they applied statistical analysis to an object which seemed to me was not too well suited to statistical analysis because it was so extremely variable. I still feel that way about it today. Some bad crimes have been committed in publications by applying statistics blindly without a good enough knowledge of tree physiology.

The teachers in the summer session were Ralph C. Hawley and Sam Record. Sam J. Record was pretty much of a humorist and made a game out of identifying the trees. Hawley was a serious fellow, a very practical, no-nonsense man. In my opinion he was the best, as to realistic forestry, of the entire faculty, as I met them later on in New Haven. He knew his stuff and he knew the limitations of the knowledge of the day. He had an objective in management. He had actual trees and forests to manage whereas the others were more academic.

This was a few years after Henry Solon Graves had left to become, in 1910, Chief of the U. S. Forest Service. Pinchot, as you will recall, was thrown out by President Taft. We forestry students, of course, were being inoculated with the philosophy of the day that Pinchot was a sort of messiah in forestry and that everything he did was correct, so we swallowed it all. Later I had to change my mind about some of it. As I look back, I think Pinchot deserved being discharged from his Chief Forestership. He was certainly insubordinate and I believe also he got to the point where he had about run his course anyway.

Pinchot did a magnificent job in the basic legislation and in organizing the U. S. Forest Service. It was organized on the basis of railroad organization with departments and branches and a chain of command and so on, but the odd thing was that nobody in the Forest Service knew much about the subject. They were mostly fellows with the same education I was getting and without very much experience. Pinchot, of course, had gone to a forestry school in France--Nancy. Henry S. Graves, who followed him as Forest Service Chief and the first Dean of the Yale Forestry School, was also a graduate of a forestry school--this time, in Germany. Although they both wrote books, they were pretty much on the German pattern.

I must say this: Pinchot's principal contribution to forestry understanding was, in my opinion, his Primer of Forestry, which came out in two volumes in hard covers. In those days one could get Department of Agriculture publications free. I got the Pinchot Primer of Forestry while I was still at Cornell, in 1907. I still have these books and the date is still in them. At the same time

Fritz: I got a copy of old Bureau of Forestry Bulletin 10, of 1895. The title was Timber by Filibert Roth. That was an exciting thing; that was more nearly in my field. That was wood, an engineering and building material, and I learned some basic facts about wood from it to help me in my collection of wood samples.

I still look upon the Primer of Forestry as the best book for an American forester to read first. It has all the framework of forestry within a very few pages, and excellent illustrations. Much of the material, of course, is based upon European experience and practice. The books on silviculture of today can't teach a man any more than those two volumes of Pinchot's.

The silviculture books of today are written too much from the office desk and chair by men who have had very little experience in the woods. They jump in and out of the woods from the highway, pick up a few scattered thoughts and come back and put them into print. The only way to learn silviculture, I believe, is to get the basic facts out of a book like Pinchot's, and then spend a lot of time deep in the woods really observing and trying to interpret what he sees--at least, try to piece together the story as the forest develops.

Well, Henry S. Graves was the Chief Forester in my student days, and the Dean of the Forestry School at Yale was James W. Toumey. Professor Toumey was a delightful and gentlemanly person. He was a botanist, very heavily interested in trees, and he had had some experience, I believe, in the old Bureau of Forestry trying to set up some nurseries. Toumey was, in my opinion, a good teacher. Some of my classmates didn't think so. Though he read the same lecture notes every year, he had an inflection and he expressed himself in such a clear manner that it was a pleasure to hear him speak. He made dendrology a very intriguing subject.

At Yale we had a lot of field work, an excellent idea for any forestry school. We were out once or twice a week with Jim Toumey and once or twice a week with Ralph Hawley. These field trips were eye-openers. They began to make the whole story of the forests unfold. Knowing something about trees made ordinary hikes for pleasure much more entertaining and satisfying.

Some of the geology and soils lore that the professors spoke about in teaching us about silviculture rubbed off on me and added to the value of the field trips. (I had never had a course in geology.) It happened also that one of my classmates, Temple Tweedy, had been a major in geology as a Yale undergraduate. His father was in the U. S. Coast and Geological Survey. He and I used to take hikes on which he would tell me a good deal about land forms and the glaciated country in the New England states. I recall one time he pointed out some scratches which he claimed were made by the glaciers on some of the rocks around New Haven. Then on East Rock, on another hike, he pointed out the pentagonal, or was it hexagonal, pattern of lava

Fritz: "crystals." I'd never seen them before. In fact, rocks were just rocks to me before that and soil was just dirt. One learns as much from his fellow students as he does from his professor, especially in graduate school where the students come from a number of other universities and from many different major subjects. That was certainly true at the Yale Forest School.

Maunder: Who were some of the other professors at Yale?

Fritz: Jim Toumey gave the course in dendrology and silviculture, that is, the lectures on silviculture. I think it was called "Silvics" the first semester. H. H. Chapman gave forest management, as it was called, and he gave another course too. I think it was forest economics. Then Sam Record gave the course on wood, its properties and uses, its anatomy and so on.

Ralph C. Bryant taught us logging and lumbering. He was a most likable man. I learned early that he was the first forestry graduate of an American forestry school--Cornell. Cornell, of course, had the first forestry school and he was the first one to graduate. Being four years or more older than most of my classmates, Bryant and I became very close friends. I was also very close to Sam Record and when he wrote his book on the mechanical properties of wood, I helped him on it and got credit for it in the preface. Of course, that was very simple because I had had so much of that kind of material at the Polytechnic and also at Cornell.

Maunder: What else can you do to fill us in on the history of this important school and its faculty?

Fritz: Of the men I have mentioned, I would say that Hawley and Bryant had the most practical approach to forestry. They believed that forestry had to pay before it would ever be practiced. They were also decidedly not socialistic in their viewpoints. In fact, I don't think any of those five men (Hawley, Bryant, Record, Chapman and Toumey) had a socialistic viewpoint.

On the other hand, Chapman, for one, was very anti-industry; and in his lectures, which were extremely involved and very difficult to follow, he would frequently resort to castigating certain individuals in the lumber industry, and not only in that industry but in forestry itself. He would even lay out Gifford Pinchot for some things that he did. In fact, we got the impression that no one was right but Chapman.

Maunder: To what do you attribute this quality?

Fritz: I would say that he was just naturally a pugnacious person and he comes apparently from a line of square-jawed people. I understand that his grandfather, Haupt, for whom he was named, was a general. I think he was the Quartermaster General of the Union armies in the War Between the States. I believe that in the past few years Herman Chapman has been writing a sort of a biography on the old

Fritz: gentleman. He probably was a good Quartermaster General. I understand from those who heard more about the biography locally that Herman Chapman himself felt that the old man was a little too high-handed.

Maunder: Well, Chapman has had a rather influential part or role in American forestry circles over the years, hasn't he?

Fritz: He had a very great influence. He gave the impression of sincerity, and I believe the man really believed what he said, but he was very, very suspicious. He was very much like Theodore Roosevelt. He was easily led into quarrels by some who had ulterior motives and used Chapman as their hatchet man. He loved a fight.

Maunder: Did you ever go on any of the field trips in the South with H. H. Chapman?

Fritz: Yes. As I said before, Yale had a great deal of field work, and that was in my opinion the lifesaver. If they had taught forestry only from lectures and from books, it wouldn't have been worth a damn. You must remember that most of the students were reared in an urban environment. The field work is what made it a training. In the field, a man could see for himself and draw his own conclusions.

We started with twelve weeks on the Pinchot estate in New Haven. We had field trips several times during the week, and then at the end of the first year--it was a two-year course--we spent two weeks in the Adirondacks with Ralph Hawley at Ne-ha-sa-nee Park. It was a private estate, a wild, beautiful area.

Most of us took jobs in the woods during the summer of 1913. The second year, the senior year, closed a few weeks after Christmas and we were all ordered to the South for three months. Chapman was in charge and handled the forest management instruction while Bryant handled the work in logging and milling.

My class had its field work on the property of the Great Southern Lumber Company in Mississippi, a few miles from Columbia in Marion County. That was on the Pearl River, all virgin long-leaf pine timber except for some second growth which occupied farm lands abandoned after the Civil War. Two weeks of those three months were spent in Bogalusa, Louisiana, at the company's great sawmill.

Maunder: What would you have to say about the pioneering that some southern companies were doing in conserving the natural resources?

Fritz: Not so much conserving, but everywhere the doors were open to the professors, especially Bryant who was teaching lumbering. They were open to Chapman also. Chapman claims to have initiated the idea of burning longleaf pine lands to aid the seedlings overcome a needle disease.

Fritz: Anyway, these lumber people felt that if there was anything in forestry they'd better find out what it is, and they gave the school permission to hold its senior field work on their property. Both Chapman and Bryant did consulting work for several companies.

For example, I recall we had to do not only forestry work but also logging work. We were ordered by Ralph C. Bryant to make a study of log lengths. Logs in those days were mostly sixteen feet long. With a tape, we measured each log to the nearest inch, plus a trimming allowance. Then we made a report on how the log lengths varied and what effect this had on the financial status of the company.

(Of course, if a log was one inch too short then the log really was two feet less and would have to be knocked down from a sixteen to a fourteen-foot log because the lumber lengths were all in increments of equal two-foot lengths, but if the log was an inch over, it didn't make so much difference, although that inch might have made it possible to add two feet to the top log, depending on imperfections.)

Well, we made a report and that report found its way through Professor Bryant to the office of the manager of the company in Bogalusa, Mr. Sullivan, quite a character and a big man in that region. Apparently, we hit the jackpot. He had us in his office one day--the class was small, only about twenty, and we went down there in halves, so my half of ten students was in the office--and Mr. Sullivan said, "Well, boys, I'm glad this season is coming to an end. You've been an awful lot of trouble to us. You've been in the way of my logging crews, you've been riding our log trains against our safety rules, and I've seen some of you ride the tongs at the loading machines, and we've spent a lot of money building a camp for you," and he went on in that vein for a little while.

We were getting a little nervous and we thought, well, maybe we weren't so welcome after all, when very suddenly he changed his attitude entirely and developed a broad smile and grin, and he said, "But boys, I want you to know we've made money on you. Do you remember that report that you wrote about the log lengths? Well, I didn't know that that was going on in the woods. My foreman didn't tell me about it so I had it checked by one of my own engineers, and sure enough, the log lengths were not as correct as they should have been.

"So all the expense that you boys have put us to has been more than compensated for by the saving we have made in watching our log lengths a little more closely. I want you to know also we were actually very happy to have you here and we hope that some of you will want a job with our company when you graduate." Then we felt better about it.

Incidentally, that sawmill was the biggest sawmill in the world at the time. As I recall, it had four sides, four band headsaws, two gangs, several resaws, and while we were there they were adding a

Fritz: twin band headrig for slabbing a small log on two sides and then running the cant to a gang mill. The plant had a huge burner which was about thirty-five feet in diameter and more than a hundred feet high. The refuse conveyor to the burner was chock-a-block full with refuse all day long. The sawmill was really a wonder from an engineering standpoint and for me it was a lot of fun. It was the only big sawmill I had ever visited, the sawmills I had visited before being very small in New England and in Maryland, but this mill was really something big.

When Bryant asked us to prepare a report on the entire operation at Bogalusa, I really had a field day. My mechanical drafting and my knowledge of engineering, steam engineering in particular, and moving parts, came in very handy and I had a lot of fun writing the report. I spent my Saturdays and Sundays doing it and was complimented by Bryant when he said that he'd like to have that report to copy for the Yale Forestry Library. Whether it's there now or not, I don't know.

Maunder: You don't have a copy?

Fritz: I had my own copy for many years, and I believe that I turned that one over to the Yale Forest School Library. I don't recall, but I think it's there. It had something like 120 pages and was very well illustrated with pencil drawings of the plant. I was able to help my classmates a good deal on that study because none of them had any mechanical training, and I recall several of them standing at the log deck wondering what made the carriage go back and forth when one of them said, "I know how it works. That boy riding the carriage presses a lever and the steam goes into that pipe under the carriage."

Well, actually the pipe under the carriage was the pipe that led steam to the setwoods and the carriage rider had nothing to do with the forward and back motion of the carriage, but that was to be expected when young fellows were thrown into a big plant like that without any engineering background. Of course, as a teacher later on, I felt it was not good practice to take a student to the very large sawmills but to take them to a one-side mill where they could study every step more thoroughly at the same time.

Maunder: Did you study the use of fire in the woods in the South on these field trips?

Fritz: Oh yes. Of course, we had fire protection courses in New Haven, and one of the professors would frequently blow his top because of the carelessness of the American public with fire, and particularly the lumber people, and more particularly, the woods natives who fired the woods each spring "to kill ticks" and invite more grass.

As I said earlier, Chapman gave the use of fire, as a silvicultural tool, considerable study. There is a classic set of editorials in

Fritz: the local paper of Crossett, Arkansas, in about 1930, berating the Yankees for trying to stop the wild fires set annually by the natives. Chapman's idea was to stop all burning except an occasional one under strict control to remove the high grass around longleaf pine seedlings. The seedlings were not permanently injured. Chapman had a running feud with public foresters and extension agriculturists on the subject.

Gifford Pinchot

Maunder: Could you give us a little bit of the picture of the controversy over conservation as it was going on at the time you were a student in college? Surely you must have been on the inside of a great deal of discussion there at Yale, because it was the seat of the Pinchot-Graves forestry group, and there must have been a good deal of discussion within the ranks of forestry students and faculty about all this at the time.

Fritz: Well, of course I was only a student but I was four or five years older than most of my classmates. I heard the professors talk about the matter, and I read a great deal about it. I think there should never have been a controversy over conservation. The connotation of conservation, if one does make his own definition, is something everyone would endorse. But men like Pinchot made an issue of it.

By constantly feeding information to the general public of a kind designed to frighten, conservationists made a lot of enemies; and I feel to this day that if Gifford Pinchot had then taken a different attitude, forestry would be much farther along today than it is, and there would not have developed that schism between foresters and the timber owners that held it back.

It was quite a shock to me, coming from the engineering field where controversies were pretty well limited to technical matters. Controversies in conservation were too much like those in religion of which I had heard enough as a boy. The whole conservation movement, which was all forestry in those days, was pretty much slanted. There were certain people who were determined to get their views adopted by the general public. Even to this day, conservation is a wonderful platform for a politician.

I never knew Pinchot as intimately as those associated with him in the Forest Service, but I saw a good deal of him. I first met him while I was a student in the summer camp of my junior year at the Yale Forest School. As I told you earlier, we started our Yale training in camp on the Pinchot property near Milford, Pennsylvania. The house looked to me like a baronial castle.

We students one day were invited to Grey Towers for what you might

Fritz: call "tea"--Pinchot at that time was a bachelor. We were all delighted to meet the great man. Until that time, I had never met a man of such captivating personality as Gifford Pinchot. He had a magnificent bearing; he was tall and straight, above six feet; he looked distinguished with his wonderful mustache; and he spoke with such fervor about politics, conservation and forestry that I was captivated by the man.

I regret that, in later years, I felt justified in looking at the man in an entirely different way. He was canned by President Taft, in 1910, for insubordination. When I entered the forestry school in 1912, the matter was still fresh. Pinchot, of course, being a man of tremendous energy, had to have something to do. He was wealthy, and he had so much experience with politics in Washington that the natural thing for him to do was to go into politics. Politics ruined the man as far as I'm concerned because then he exhibited qualities that no one suspected before--an uncontrollable selfishness and vindictiveness.

Maunder: In what ways did these qualities manifest themselves in your observation?

Fritz: By the way he talked and acted. The vindictiveness first showed up in his helping to form the third party. His friend, Theodore Roosevelt, was not above some vindictiveness himself. Pinchot, standing on the lawn of Grey Towers, gave us a talk about what happened at the Bull Moose Convention in Chicago in 1912; how important it was to put T. R. back into the White House because he was the real strong man. He was fervid but not too convincing. Though I was captivated by his personality, he spoke too much like a hell-fire and brimstone Sunday preacher.

I was later soured on Pinchot by his injecting politics into his own department of forestry when he became governor of Pennsylvania; his determined effort to socialize the forest industries; his wearing two hats, one for political speeches and one for Sunday; and his downgrading of county and state governments without doing anything to improve them. He seemed to regard the federal government as the only form of purity and the only one to wield a stick. He craved power.

Taft was no weakling. I've since met some people who were very close to him from whom I learned much that is not in print. I think Taft's place in history will grow as the years go by, pretty much like Herbert Hoover has grown in stature after he was separated from the White House by the voters.

Theodore Roosevelt's suspicions were easily aroused, and I think it was this quality in T. R. that was played upon by Gifford Pinchot, especially while T. R. was in Africa, that brought about the formation of the third party, the so-called "Bull Moose," or Progressive Party. Of course, that was just Gifford Pinchot's meat.

Fritz: Men like Harold Ickes who joined with Pinchot in promoting T. R.'s candidacy were of a similar order--idealistic, dedicated, aggressive, egolstic, and over-zealous.

Maunder: Do you think that the Bull Moose Party might never have come into being if it hadn't been for Gifford Pinchot?

Fritz: I do, indeed. I think also that T. R. would never have been so violently turned against President Taft if it hadn't been for Gifford Pinchot's needling. Pinchot, of course, was somewhat vindictive and he was going to get even in some way, and he did so by setting up a third party. It killed William Howard Taft politically and made it possible for the Democrats to win. The election of Woodrow Wilson pleased me because it seemed to be time for a change, and Wilson was a man of great learning and distinction in the field of government. I would have voted for him, but living in New Haven, Connecticut, at the time and absentee ballots having not then been permitted, I lost my vote in that year.

Maunder: Would you rate Taft as strong a personality and as great a president as either Teddy Roosevelt or Wilson?

Fritz: He accomplished a great deal in a quiet way, and possibly more within the lines of legality. Theodore Roosevelt acted and asked questions afterwards. A good example was his deal for the Panama Canal Zone. Taft didn't seem to care so much about preaching to the public. Woodrow Wilson, of course, was an excellent president but his idealism had the better of his practical side. I'm speaking as one who knows nothing about politics except that it stinks. The opponent is always wrong if he is of the other party and if his proposals would strengthen his party. It's a case of party before country.

Maunder: Well, now, what was the row between Pinchot and Ballinger all about from where you observed it? How do you interpret that fight?

Fritz: I was then only a student. One of the professors harangued us against Ballinger, but I knew too little about it to judge. However, I felt that his accusers were making a mountain out of a molehill and were out to get somebody for some reason I didn't understand. I believe that Harold Ickes was quite sincere when, in later years, he said that he was wrong about Ballinger. Ballinger was probably a scapegoat. Pinchot, of course, found the controversy just wonderful to get himself before the public as its champion. Pinchot loved publicity. He was quite an actor.

Would you be interested in a story told me by George M. Cornwall, founder and editor of The Timberman, published in Portland, Oregon?

Maunder: I would.

Fritz: I knew George Cornwall very well. For a number of years we lived

Fritz: in adjoining blocks in Berkeley, and he often came to our house. He knew the situation as well as Pinchot, how the forests were being handled, and did a great deal to improve it through his magazine and the Pacific Logging Congress, which he founded.

I asked whether he ever met Pinchot, and he said, "Yes. I must tell you about the first time I ever met him. It was at the Davenport Hotel in Spokane, Washington. Pinchot was out there for some kind of a meeting, and being a publisher of a trade magazine, I felt that I should interview him."

So Cornwall went to Pinchot and asked for an interview. Pinchot said, "Well, I'll be glad to be interviewed, but let's go up to my room where it will be quiet." When they got to his room Pinchot said, "I can think a lot better if I lie flat on my back on the floor," and Cornwall, being very quick-witted said, "Well, I'll lie down right alongside of you with my notebook and you go right ahead."

So he put a pillow under his head, and Pinchot started off giving some of his background, about his father, how he happened to go to France to study forestry and how he got into forestry work in this country. In short, it was something like this, as I recall it: Pinchot, feeling that, as a wealthy man's son and a Yale graduate, he had an obligation to improve the world, discussed it with his father. His father asked, "What do you want to do?"

Gifford replied, "I'd like to be useful and I think this conservation movement which is being talked about so much nowadays should be a good thing," and the father said, "Okay, what do you want to do about it?" The reply was, "I want to go to France and study forestry." This shows Pinchot's fervor for conservation came early and undoubtedly was sincere.

Maunder: Did George M. Cornwall's account of this interview appear in the Timberman?

Fritz: That I can't tell you. The interview took place possibly in 1910, maybe earlier. I understand the Timberman has developed an index for all its back issues so you might be able to find it there.

Pinchot's Breaking New Ground has got to be read with some understanding of the times, of the man himself, and of the man who is thought to have prepared the material for publication, Raphael Zon. The book is one-sided in glorifying Pinchot. It is silent on other points. For example, you won't find Hetch Hetchy Valley mentioned, and certainly not his part in turning Hetch Hetchy over to San Francisco to be flooded for a reservoir. Another example is the sketchy and down-grading mention of Dr. C. A. Schenck, the stiff-necked German forester Pinchot had imported.

Maunder: Of course, isn't that typical of almost all books as memoirs, that

Maunder: they hold forth the things that people like to remember about themselves rather than being very critical of their past?

Fritz: Yes, that may be true, but Zon worshipped Pinchot and was himself a vindictive type of person and not above plagiarism.

Maunder: Could you spell that out, the fact that Zon was, as you say, a plagiarist? In what area did he plagiarize?

Fritz: I recall Zon coming to Fort Valley, Arizona, where I was in the Forest Experiment Station. In my presence at least, he said nothing that was helpful. When he left, my boss, Gus Pearson, a wonderful boss for anybody to have, was quite disturbed. He didn't trust Zon because Zon would go through our data and when he found something he could use, it came out for his own use.

Several years after I resigned as editor of the Journal of Forestry, I got the Russian professor, Vyzsotzky, to prepare an article on shelter belts. He was then about eighty years old. He was described to me as being the leader in Russia of shelter belt science, and even though it was in Stalinist Russia, a letter went through. I suggested that he write an article on shelter belts because that was a big issue of the day when President Franklin Roosevelt was asked to crisscross the whole continent with shelter belts, to ameliorate the climate even in distant cities.

Maunder: Wasn't the major reason for the shelter belts to alleviate the dust bowl problem?

Fritz: The dust bowl focused attention on the benefits of windbreaks. But a government employee thinks expansively, and simple windbreaks became border-to-border belts of trees. Windbreaks are an old story in the United States--on the plains, in the California citrus area, and elsewhere, long before the invention of the equally expansive New Deal of F. D. R.

Maunder: Where did Zon get involved with this Russian scientist?

Fritz: Well, he wasn't involved with him directly. I wrote to the professor for an article on shelter belts, and I told him in my letter, as I recall the letter, that there was so much controversy about shelter belts, I think the Journal of Forestry should carry an article by someone who knows about shelter belts, how they operate, and how good they are for ameliorating climate in the immediate vicinity.

I told him also that much of our data on windbreaks seems to have come from Russia. Professor Vyzsotzky came back very promptly with an article that was published in the Journal of Forestry when Franklin Reed was the editor. In the last paragraph, the author accused Zon of using his material without credit. The Vyzsotzky article was really excellent and gave us a better

Fritz: understanding of shelter belts and how they operate.

Maunder: Is the correspondence you had with the Russian author still in existence?

Fritz: It's in my files in Berkeley.*

Maunder: That would be very interesting documentation to back up this oral history interview.

Fritz: I hope some day to go through my correspondence files and winnow out the letters that might have some value in the future. I must have several thousand or more--much more than that--to go through. I started on it several years ago and got as far as the letter D or E. It thinned the files considerably, but even then they contain some stuff that isn't worth saving.

Maunder: May I make a suggestion to you in that regard? Don't do too much winnowing because the person who is a skilled manuscripts expert would find things of historical interest which you might think very trivial or minor in interest.

Fritz: Before we go on to another topic, please let me say a little more on Pinchot. I have been critical of him so far in this interview. Others, too, have been equally critical, for example, Wallace Stegner in his book, Beyond the Hundredth Meridian (Houghton-Mifflin Company, Boston, 1954). Nevertheless, Pinchot's lasting merits outweigh his demerits. He was an excellent organizer and administrator.

The U. S. Forest Service is his monument. It has sturdily continued the high standard of public service inculcated by Pinchot. His charm and general charisma drew a large coterie of enthusiastic supporters. He had enormous energy and drive and inspired his colleagues to work as hard as he drove himself. He must be recognized forever as the leader in a great cause.

Contrasts in Forestry Education

Maunder: I'd like to throw out one more question before we leave the discussion of your education. How would you contrast engineering and forestry education in those days?

Fritz: There's no comparison. Even in those days, engineering was really

* The Papers of Emanuel Fritz are deposited in Bancroft Library, University of California, Berkeley, California.

Fritz: a tough subject. It was about as tough as medicine. I saw what medicine is like because my younger brother was a medical student, and while he had thicker books than I had, he didn't have to work any harder than I did. It meant sitting up late at night and doing mathematical problems and laboratory reports, engineering test reports and so on. Two, three, or four of us who worked together would often sit up until one and two o'clock, working up the data. Of course, it could have been done in much less time, but my party happened to be interested and wanted to turn out reports that we could use ourselves later on in engineering practice.

Maunder: Do you mean that this kind of hard work was not necessary in forestry education? There was no burning of the midnight oil?

Fritz: Not at all. I probably had to work harder than the other students in my forestry class because I had no background of biology, and it was rather tough having shifted from a physical science to a biological science, but at the same time it was a fascinating subject.

I think our forestry professors did the very best they could with the equipment they had. By equipment, I mean the knowledge of forestry. What they taught us is what they learned only a few years earlier from their own professors, and they in turn got it from the Germans or the French. So there wasn't too good a basis for forestry in America. It was mostly forestry by the book.

Of course, in a course like dendrology given by Jim Toumey, that was different. That was merely applied botany and Toumey did have a great background in biology and botany, and he made the course in dendrology extremely interesting. He actually made the trees live for us, and although we had never seen many of those trees except from his word pictures, we could get pretty good mental pictures of the trees he was talking about, and we had to learn about five hundred. Nowadays I think they teach only about fifty or seventy-five, picking out the most important commercial species.

Well, as to the contrast between the two, there couldn't have been the thoroughness when I was a student that is possible today. Most of the teachers at that time didn't have a biological background and no background in economics, or a very thin one, and no background in engineering. It's amazing that they did as good a job as they did. In contrasting the two, I would say that in engineering, we had such a broad background for engineering in mathematics and physics, a little bit of chemistry, a world of theoretical mechanics, and laboratory work, and actual work on machines that could not have been duplicated at that time in forestry.

The forestry teachers of today are equipped far better than we were in my own teaching career, and the students we have today are those who will become the teachers of the future and, in turn, will be far better equipped than the present teachers. Of course,

- Fritz: that's true of the entire teaching profession. Does that give you somewhat the idea?
- Maunder: I think so. Do you think there is much difference in teaching techniques today, in comparing them with earlier methods?
- Fritz: There was an awful lot of crusading that crept into teaching then. We don't get much of that today. For example, I think I said earlier that in one course, the professor would stop and in very strong terms, condemn this or that individual or industry. I'd never heard anything like that in engineering school, but it seemed to be the thing to do in forestry, and it seemed also that it was the purpose of some of the teachers to make zealots or crusaders out of their students. That's something I didn't like.
- Maunder: Do you think that could be explained by the fact that forestry was a new profession emerging on the American scene, and it was striving mightily for recognition by the dramatic method of taking up a holy crusade? Do you think that entered in, or is that not a valid interpretation?
- Fritz: Quite so. American forestry teaching was new. There was almost no practice of forestry in the woods. The first teachers had to write the textbooks. There was almost no research. Basic principles were derived from the Germans and French.

The conservation movement goes back many years. It had its formal beginning, I should say, in 1875 when the American Forestry Association was founded, and it had articulate proponents all the years since, beginning with a man by the name of John A. Warder and running all the way down into and through the Pinchot days. Some of the men who were in the top echelons of the Forest Service following the Pinchot days, and I would say a few even up to the present, also had that crusader idea. For a long time, I think some of the top Forest Service men tried to emulate or imitate Gifford Pinchot.

Some were socialistic and felt that forests should be publicly owned and managed. Socialism is only one step removed from a dictatorial and wasteful bureaucracy. For one who was brought up in the private enterprise atmosphere, as I was at home, socialism is anathema. We felt that one should work for everything he gets and be compensated accordingly. If he gets something for nothing, he has less respect for it.

I still think this theory is right. I couldn't stomach some of the propaganda that was handed out in the early days of my forestry career, that everybody, under pain of ostracism, should run for the banner of those who are arguing for federal ownership, or at least federal control. I do believe, however, that forestry teachers soon developed a strong independence of Pinchotism and helped halt the trend toward socialism.

Fritz: The lack of forestry was due to the abundance of timber which, in turn, begat too many sawmills and invited instability and a migratory industry. The owners were burdened with holding charges, taxation, interest, protection, administration and so on. A few of them made a lot of money and became wealthy men as a result of their ownership. But it was just like mining--it isn't every hole you dig that is going to bring up pay dirt. A lot of lumbermen went broke.

III BEGINNING A FORESTRY CAREER

The Context of Government and Industry

- Maunder: Let's go back to your career again and start you off as a practicing forester. When did that actually begin and where?
- Fritz: First of all, you're making it appear that my career was really of some importance. It is a fact that during my lifetime, I saw the conservation movement really get underway, the national forest system set up, the philosophy of liquidation changing over to a philosophy of holding and tree farming, also a change in the attitude of the federal government, and of course, a big change in the national forest system in that the public lands are now actually in the timber selling business in a big way. But my own part was that of an individual.
- Maunder: There have been some big changes in industry, too. It has often been characterized as being a sick industry in those days, Emanuel. How would you characterize the industry as you recall it in the years just preceding World War I?
- Fritz: As I said earlier, there was too much timber available for cutting. It would have been better if more of it had been kept on ice in the public domain and sold only as the market needed it. By "sold," I mean "in fee." Before World War I, the wail was, "What's wrong with the lumber industry?" Whatever was wrong was the result of too many land owners forced into building mills to earn funds for taxes and interest. The consequence was too many mills, overproduction, and no, or too little, profit.
- Maunder: You mean a really sick industry?
- Fritz: It was sick in the same sense that farming has always been sick. Too many men were trying to produce a product that too few people were ready to buy. In lumbering, the very fact that certain people owned timber was an impelling motive to operate that timber, to get it off the stump, through the mill and into a salable product before the bond holders would foreclose. The result is that the producing capacity of the sawmill industry was far above what the market required.

You still have the same thing in farming today except that in farming you are actually paying a man to create a surplus whereas in the lumber business, those who created a surplus suffered from it themselves, and of course made the rest of the industry suffer also. That has now changed because the economic situation is different, the preponderance of old growth is now a thing of the past, and those who own what old growth is left--what's in private hands--know that they've got to husband it and handle it more carefully

Fritz: than they ever did. They're now making money, making money as industrialists rather than merely as timber holders, and they have set up the successful tree farm system at no cost to the public.

Mauder: You recall Thomas B. Walker, the lumberman who came out here from Minnesota and became a big pine land owner in northern California? He wrote an article for the editor of Sunset magazine in January, 1910, entitled "Forests for the Future." In this article, he evidenced a serious concern for conservation of forest resources and he recognized some of the main reasons why the harvest of wood up to that time had left approximately two-thirds of the product to waste and took only one-third for use.

He cites as the main reasons for this rather terrible waste: 1) excessive local taxes on standing timber, 2) competition of more cheaply produced Canadian lumber (and this reason Walker said was very much overlooked, yet in his estimation it was perhaps the greatest factor responsible for waste in the woods), and 3) need for conservation and reforestation was fully expressed at the time, but no definite plan was suggested by anyone or outlined by anyone, whereby and through which provisions for future supply could be provided either by the Forestry Commission or the Forestry Department or any other group of the community.

Walker in this article purported to present a practical plan which he thought might deal with this problem, and the plan which he proceeded to outline involved a pattern of government control and regulation, both of prices and of labor and of the tariff and all the rest, which would seem rather far down the road to socialism by many businessmen today. Yet here was one of the biggest businessmen in the lumber industry of his day suggesting a plan of this kind. This was in 1910.

Fritz: Do you recall the month in which that appeared?

Mauder: That was in January, 1910, pages 59 to 65, Sunset magazine.

Fritz: I must look that up. I didn't know about that article until you mentioned it, but I must say that it certainly was not in character for T. B. Walker to ask for public regulation because he was first of all an individualist.

Mauder: I think you'll find the reading of that article quite a surprise. It certainly was to me, to see this coming from the pen of a prominent businessman.

Fritz: He was a very large owner, and he spent a great deal of money assembling that big property from the small separate ownerships, but I can understand in a way why he should have felt that way at that time. I recall that in 1915 when I was in the Forest Service in Montana, I was one of the younger assistants on a study of the lumber industry in the Inland Empire, and some of the lumbermen I

Fritz: talked to had somewhat the same idea, that the timber should never have been allowed to get out of government hands on such a large scale. Of course, that sounded all right at that time, but looking back, I don't think it would have solved anything because the government is not better than private industry in managing a business.

Now Walker, like some of the others, understood that the producing capacity of the sawmills was far greater than was required by the market, and by having some kind of control, I think he felt that it would prevent the construction of some sawmills which made it impossible for a reasonable number to operate at a profit.

Maunder: He also indicated that he would be in favor of curtailing the production of those sawmills which were already in production. In other words, they could only produce a certain percentage each year. This was part of his plan.

Fritz: That sounds almost like the crop-control schemes of today. It probably would have been a good thing if it could have been run by the industry itself. I'm much more in favor of self-policing than of federal policing.

Maunder: I think it was Walker's idea that this thing should be tried first of all on a voluntary basis and that if this failed, then the federal government should step in and lower the boom on those who wouldn't abide by the regulations.

Fritz: I want to digress for a moment because I feel that the federal government is basically responsible for that situation. The federal government, beginning in the early 1860's when Abraham Lincoln signed the Homestead Act, started the breakdown of the timbered domain into small ownerships. The philosophy was to get the land into the hands of the public in 160-acre parcels. The law was designed primarily for homesteading prospective farm land, but it was absolutely bad and self-defeating when it was applied to timberland.

I think that was brought out very, very well by an early director of the U. S. Geological Survey, Major J. W. Powell. He got himself into a lot of unpleasantness because he protested the application of the Homestead Law to the timbered areas of the West. That has been brought out again in more recent books bearing on Major Powell's life and his philosophy, and also books on the winning of the West.

Maunder: In other words, the western lands, forested lands, were not susceptible of development in the same way as the prairie farm land?

Fritz: Correct.

Maunder: Would you explain a little bit how you feel it would have been better, how the land policy of our government might have been more wisely carried out?

Fritz: First of all, let's see how it actually worked out. The Homestead Act made it possible for a citizen to obtain title to 160 acres of valuable timber. Later the Timber and Stone Act was passed to provide for a similar breakdown. One hundred and sixty acres might make a good farm, but it can't support a sawmill. It takes a large area of timber to operate a sawmill economically and certainly a great area to do it on a sustained-yield basis.

By breaking the land down into 160's, Congress practically invited the patentee to cash in at once by selling to a sawmill man. Being mountainous and rough, the land couldn't be farmed anyway. Many of these 160-acre "claims" were settled on with full knowledge that the timber was easy to sell. Fraud was invited. Timberland locators took train loads of "homesteaders" west, went through the simple formality of filing each on a 160, paid each one maybe \$150, and sent them all back home. This is only a slight oversimplification of the situation.

In other cases, the timber agent would file fraudulent claims for nonexistent people. Thus large blocks were reassembled. The agent was actually representing a timberland investor who financed him. It caused a scandal and some agents, along with several congressmen, were jailed. The U. S. was paid the full price per acre, but the intent of the law was clearly violated, even though the intent was an error. What Uncle Sam had fragmented, the timber investors reassembled.

Unfortunately, the process of reassembling the quarter sections into manageable blocks stopped too soon. As a result, we suffered the consequences up to and through the 1940's. Northwestern California presents a good example. There, many of the "homesteaded" or Timber and Stone Act quarter sections remained in the hands of the original patentees or their heirs. This was in a region of Douglas fir forests, east of and adjoining the redwood forest belt and considered inaccessible.

Came World War II with its tremendous lumber requirements. It happened that many of the small loggers of Oregon and Washington, finding themselves out of timber and hearing about the large area of "inaccessible" Douglas fir in northern California, looked it over and liked it. Much of it was owned by ranchers who had tried for years to get rid of it by burning to create more grass. Some sold their stumpage for as little as one dollar per M board feet, at which price even a small logger could afford to build roads into it.

The result was a multitude of small logging operators each laying out his own road system, independent of his neighbor. Small loggers generally are heavily in debt for equipment and working capital. So they had to economize and did so by doing horrible jobs of high-grading. The lands still show the effect. They and the owners took unfair advantage of the state's Forest Practice Act, passed in 1945. Now some areas are a shambles, even unfit for grazing.

Fritz: As I said earlier, it was a mistake to throw the timbered parts of the public domain into the laps of the general public just by signing the two land laws I mentioned. The eventual owners, most of them, had to be able to buy solid blocks cheap and hold them until the market justified another fully integrated lumbering operation. Much of this land has been held thirty to forty years to give the eventual sawmill another twenty years of life. The last acre of some of it will not be reached until the year 1990 or 2000. All the while, it is being taxed but returns no dollars.

Maunder: This is one of those things where we can look back very easily with the advantage of hindsight and say that this was a bad law from a certain point of view. Of course, it wasn't as easy to see it in those days as it is now.

Fritz: There were people who saw it. Major Powell saw it. The lumber people saw it. Otherwise they would not have undertaken the re-assembly of the fragments into large efficiently operable blocks.

Maunder: But that didn't come until considerably later than the 1860's, am I not right?

Fritz: Major Powell was a contemporary of the early founders of the conservation movement that jelled in 1875 with the formation of the American Forestry Association. They were still for reconstituting solid large tracts in the 1930's when land was cheap. Uncle Sam should have done better.

But such things move slowly--take, for example, the wasteful mixture of public lands in the Oregon and California Railroad land grant areas. Here, 2,500,000 acres of Douglas fir, administered by the Bureau of Land Management of the Department of the Interior, intermingle with National Forests of the Department of Agriculture in a checkerboard pattern. Many people have recommended that trades be undertaken between the two bureaus, the state of Oregon and private owners to eliminate the checkerboarding. While in the Interior Department on a three-month writing assignment in 1938, I tried to stir up some active interest in the realignment of the lands for more economical administration and operation but got nowhere. Federal bureaus cherish their status quo.

In the New Hampshire Forestry Department

Maunder: Suppose we go back again to your early days after leaving Yale. You had worked in New Hampshire for a while. What was your job?

Fritz: I was in New Hampshire on three jobs: the summer of 1913, two weeks at Christmas, 1913, and seven months after graduation in 1914.

The summer of 1913, with the help of two boys, I made a forest

Fritz: survey of two properties, of about five hundred acres each. One was on Sunapee Lake and the other was on Thorndike Pond. They were small properties owned by wealthy people who had heard a lot about forestry and wanted to give it a fling to see what was in it. I might say that an awful lot of people in those days heard about forestry and thought they'd look into it, but generally were disappointed because it just didn't make sense when there wasn't a market to buy their forest product. Also, good forest practices cost money.

However, I still think that there are a lot of things that an owner could have done that wouldn't have cost him much but which would have left his land in a more viable condition after logging. You can see that all over the West where some good practices were followed merely by chance.

Mauder: Were you making up these management plans as a private consultant or as a member of the Forest Service?

Fritz: I was employed as an assistant in the Forestry Department of the state of New Hampshire. Edgar C. Hirst was the State Forester, a very fine man. It was a great pleasure to work for him. In fact, all the immediate bosses I had in state and government service in forestry were top men.

Mauder: Is this the same Edgar Hirst who is now a banker?

Fritz: President of the First National Bank of Concord, and still a factor in New Hampshire conservation, and particularly forestry. I think he's president this year of the Society for the Protection of New Hampshire Forests.

That was an interesting experience, that summer in New Hampshire. Here was I, a graduate student at the Yale Forestry School, sent out to make two management plans, and frankly, I was confused as to the application of the theory I had learned in the classroom. Perhaps too, I had some skepticism of its practicality. When I was a junior at Cornell in engineering, I could have gone out and done a more responsible job in sawmilling. But I think that the lack of competency in forestry was largely due to the newness of the art, and perhaps it was still as new to the teachers. However, I think I learned a great deal on these jobs that was of inestimable value later.

Mauder: Forestry was just beginning to get its feet under it in this country and had nobody of real experience on which to draw.

Fritz: That's right. I don't lay it to the teachers. Perhaps being city bred made the forestry management phase a mystery. I still have the maps I made for those two plans and they look pretty much like Joseph's coat because of the many colors.

Mauder: Were your plans followed?

Fritz: On Thorndike Pond, when the word got around that there were so-called timber cruisers on this property, a wealthy man who owned property on the other side of the lake--a wealthy Bostonian who had a summer house there--thought, "That property is going to be logged off. I'd better buy it before it's logged to preserve my scenic view."

My report was instrumental in his buying the property in one block. The owner was a woman from New Jersey who inherited it and had no particular use for it as far as I could see. It was all volunteer growth, second growth pine and hardwoods.

My other area I think was cut somewhat according to my plan, but if I was correctly informed by the source, the owners were talked into cutting it more heavily than was recommended, probably talked into it by a logger. Too often a land owner thinks the logger knows more about values than the forester, and he falls for the logger's pitch. We've had a lot of that in California in the last fifteen or twenty years. When the owner discovers that he was overinfluenced by the logger, he gets pretty mad. Then he calls on foresters to help bail him out.

Mauder: After your summer's experience in New Hampshire, where did you go?

Fritz: I had to go back for my senior year at Yale. The senior year ended in June, 1914, but in March, the class went to Mississippi for three months of field work. I had no desire or intention of going back to New Haven to get my Master's diploma handed to me from the platform, so several of us took passage on a boat from New Orleans to New York, a five-day trip, and while we were at sea they were holding the commencement exercises in New Haven.

I had thought I might get a job with the U. S. Forest Service. I had my Forest Service examination behind me in which I didn't think I did too well. I had a good passing grade, and I should have done much better but, during the two seven-hour exam days, I had a very severe and painful attack of lumbago which made it impossible for me to move in the seat, not even to go out to the toilet.*

So one part of the examination (Forest Management) I never reached, but I got a passing grade; and I understand I would have been given an appointment but Congress was slow in passing the appropriation bill and I figured that any Congress that is so slow in passing an appropriation pay bill wouldn't have much interest in its employees, so I thought, "To hell with it," and took the first job that came my way and returned to New Hampshire.

*The lumbago is a souvenir of two weeks on the Yale Forest at Keene, New Hampshire, during the 1913 Christmas vacation, where I was employed with two classmates to cut gray birch to release the white pine seedlings it was choking. The souvenir is still with me.

Fritz: The State Forester of New Hampshire had asked me to come up there to make a number of what he called "panoramic lookout maps" for use on lookout stations for aiding the lookout man in identifying the location of fires. The map was twenty-six inches in diameter; there was a three-inch wide ring on the outside and twenty inches inside the ring. To the twenty-inch area was fastened a planometric map and in the three-inch annular area, I drew in the panorama, the entire view from the lookout station.

It was done with a very clever special type of alidade. It was very crude. It started as a two-foot carpenter's folding rule at first, with the six-inch ends turned up with a piece of stiff paper on one end which could be moved up and down with the line of sight. It was developed by Professor F. B. Knapp, of the Eric Forest School at Duxbury, Massachusetts, and the New Hampshire State Forester took it up. A man by the name of Falconer, who was then employed by the State Forester, made a better instrument of brass, and I used the one he developed. Before I quit I had a still better one developed. I changed the rack and pinion to a screw thread to give it a finer adjustment.*

I made fifteen of those maps, from Pawtackaway Mountain in southern New Hampshire all the way up to Deer Mountain in northernmost New Hampshire, including several mountains in the White Mountain area. I had to climb so many mountains--not only the lookout mountains but other mountains to get the terrain--that it never occurred to me that it would be of any interest to climb Mount Washington. I saw this fine mountain from all sides and I didn't see anything could be gained by getting on top of it.

That was an interesting experience too. It taught me an awful lot about at least one state and one state's forest fire organization and the growing pains of state forestry. This is a good time to give Ed Hirst credit for being one of the top men among state foresters of his day. He was a good organizer; he was a fine man to work with and for, and he gave his assistants a lot of authority, a lot of responsibility and a lot of time to do a good job. New Hampshire, I think, was the first to use a circular lookout map board.

Maunder: You hear a great deal about the contributions which the U. S. Forest Service made, especially in such areas as the fighting of forest fires in the early days. What about the state forestry agencies? Were they also in the front rank of this movement?

*The New Hampshire circular fire locating map and the alidade are described in the Timberman, 1915 (Portland, Oregon). Also in the Sibley Journal of Engineering of December, 1917, and The Geographical Review 6:6:501-503. The lead paragraph of the Timberman article was prepared by the Forest Service District Office, and Fritz' by-line was replaced with the District Forester's name to make it an "official" contribution.

Fritz: I think they were about on a par. Of course, the Forest Service wasn't set up until 1905 while some states were in the fire protection business before the federal government. The state of California, for example, set up a Board of Forestry way back in the 1880's and fire protection was one of its objectives. It didn't amount to much, but no fire protection effort in those days amounted to a great deal. Most of the effort was directed to the public to educate it as to the need for protection.

Maunder: But did they pioneer the field?

Fritz: Both state and federal foresters did. They cooperate now more than ever. New York and Pennsylvania, Maryland, New Hampshire and California I would say led the parade. I was quite surprised to learn when I came to California that California was so early in setting up a Board of Forestry.

The U.S.F.S. was set up in 1905. In 1910, it had the great 2,000,000-acre fire in the Inland Empire. This fire I think came at a good time. It brought more attention by Congress and more money. Looking back, all fire protection efforts seem pitifully feeble. But improvements came rapidly. Not only was it necessary to learn how to fight fires, study causes and invent equipment, but the biggest obstacle was public apathy--really worse than that because many locals believed fires a good thing! From these small beginnings, we now have forest fire organization and equipment similar to a military campaign.

Maunder: Do you recall anything more about your experience in New Hampshire that would be of value in regard to the history of fire fighting or any other aspect of forestry?

Fritz: Well, it was cut and try. We tried this and tried that. It was felt that when you have a fire, in order to put it out, you can't go to the city fire department and get a hook and ladder truck or a steamer to go out there and put it out. It had to be fought by hand, and that called for hand tools: shovel, mattock, pick, and so on, and a little later, hand pumps for spraying water on little fires.

The State Forester in New Hampshire had one of his men design a tool box in which he would keep fire fighting tools, and these boxes of tools were distributed here and there in critical areas. I recall one day one of the men--I think it was Falconer--set up the box outside the State House and brought along all the tools to see how they would fit in the box. Being interested in photography at the time, I asked him to arrange all the tools in such a way that the box would show open and the tools would be displayed to show what goes in. I took the photograph which the State Forester later used in his annual report, one of the first photographs taken of a box of fire fighting tools.

Fritz: Fire fighting was hard work, of course, especially with hand tools, and more often than not the fire got the upper hand, that is, during periods of real fire weather.

Well, the experiences in New Hampshire were especially valuable, I think, in teaching me a little more of woodsmanship. I was alone most of the time on the mapping job. I didn't know the country although the maps were easy to follow.

Maunder: What was your base of operations?

Fritz: Concord was the headquarters, but I was there very little until the winter.

Maunder: You were in the field most of the time?

Fritz: Yes. I would come in to Concord once in a while to make a fresh start. Travel was by railroad, horse and wagon, and afoot. I would go by railroad to the nearest station to my next mapping mountain, and would then get the local fire warden, who was a part-time man, to drive me to the foot of the trail, or I would hire a horse and buggy and have somebody drive me over. Once in a while there was an automobile available.

I recall one time I was in a stagecoach, one of the last of the old Concord coaches left. It was a coach that oscillated back and forth between the railroad station and the famous Agassiz House at Bethlehem, New Hampshire, the only stagecoach of that type I ever rode in.

The job gave me a pretty good idea of mountain forms and of forests, and being alone, I had a lot of opportunity to size things up. I think that was the best education in forestry so soon after leaving school. Being out in the woods on my own made it possible to really see what has happened after logging and try to figure out why.

Of course, there was still some virgin timber in some areas in New Hampshire--in the neighborhood of Waterville, for example, and in Coos County, the northernmost county in New Hampshire, and on McGalloway Mountain--that was all virgin--and on some of the others. And the lookout men told me a great deal. They were mostly woodsmen, trappers and hunters and so on. They were a great source of woods lore and woods knowledge, which has been very valuable.

It's regrettable that we can't have in our forestry profession today men of that type. They were really good. They knew the woods and how to get around. They didn't bitch about the weather and worked long hours. They enjoyed every minute of it. They knew how to swing an axe; they knew how to find a corner; they knew how to follow through the woods on a straight line; and they were men to watch because you could learn from them. Sometimes

Fritz: they played some pretty mean tricks on city boys like myself but we had to take them in good humor. It was all part of the training.

Maunder: Do you recall any of those tricks?

Fritz: I remember one old ranger--that was in the Forest Service after I came West. He made me believe he had no more saddles. Of course, he's going to have a saddle for himself, and the supervisor must have a saddle, and the timber salesman must have a saddle, but this new guy over here, Fritz, he's going to have to ride this old flea-bitten mare bareback. Well, I'd never ridden a horse before but this horse had such a broad back that I couldn't fall off of it, so I made it all right.

They also played tricks on one another. They were a good lot and I enjoyed those fellows. They even played tricks on the supervisors. The supervisors, as woodsmen, were as green as some of the assistants.

Maunder: They used the experiment of the observation tower for the first time in New Hampshire, didn't they?

Fritz: I don't know where the forest fire lookout stations started. At first, there were no towers. Observation was from a cleared mountain top. New Hampshire had plenty of mountain tops; it also had some crude towers. Some of the towers were merely poles set up like a frustum of a pyramid with a platform on top. I have an article, "Recollections of Forest Fire Detection of Fifty Years Ago," that appeared in Volume 22 (1962) of the Loggers' Handbook.

I had some interesting experiences on those towers; some were not safe to climb. I recall the one on Deer Mountain in New Hampshire. That was only a platform of peeled poles slung between the tops of two spruce trees, right on top of the mountain. When the wind blew, those trees swayed and the platform, of course, aggravated the swing. When I arrived on that mountain to make my panoramic map, I was told that there was my tower, and that if I had to make a map from it, I'd better get up there and start before the wind blows.

I couldn't work except in the early and late hours of daylight, when the sun was coming up and going down and would silhouette the ridges. I couldn't do very much at midday. I guess I was about a week making that map. Generally, it took anywhere from five days to two weeks. I lost a lot of time on account of fog and clouds.

When I got to the end of my panorama mapping, I yelled down to the lookout man, "In about half an hour, I'll be finished drawing, and I want you to come up and give me the names of some of these valleys and ridges." And his answer was, "Young feller, I'm not going up on that platform, either alone or with you up there with me. I've never been up there and I'm never going to go up there. It isn't safe."

In Montana and Idaho With the U. S. Forest Service

Maunder: Emanuel, you told us about your first experience as a practicing forester up in New Hampshire. You went on from that point to what other work?

Fritz: The New Hampshire job was a temporary one. It involved the preparation of about fifteen of these panoramic maps, and after I had completed the office work during the winter in Concord, I was through. About a month prior to that I was offered a position in the U. S. Forest Service by David T. Mason. I had already turned down two offers from the U.S.F.S., and the third was to be the last; and since my New Hampshire job was to come to an end, I took the Forest Service job which would assign me to Missoula, Montana, under D. T. Mason. I had met Mason a few months earlier when he lectured at the Yale Forest School.

Incidentally, I had never had any expectation of moving west because New Hampshire looked good to me, and even though the job in the state Forest Service was not permanent, I thought New Hampshire would offer an excellent opportunity to invest savings in abandoned farms and bring them back into timber production. Land was cheap. One could buy an abandoned farm for two or three dollars an acre, which would be a good investment for tree planting.

The job in the west turned out to be part of a study of the lumber industry. It was to be nation-wide, and, as I recall it, William B. Greeley was to head it in Washington, and Mason had charge of the Inland Empire division, and I was merely an assistant to obtain data in the field.

Maunder: What was the year that you moved to Montana?

Fritz: That was January, 1915. My work on that project was to visit lumber company offices in northern Idaho, and also in eastern Oregon and Washington, to obtain data on price fluctuations, production, shipments, and so on. I was in the offices of the Humbird Lumber Company, the Potlatch Lumber Company, the Palmer Lumber Company in eastern Washington, the Spirit Lake Lumber Company, and several others, taking data from their old invoices. The lumber industry received the field men very cordially and was very friendly.

Apparently, the study was undertaken by the Forest Service because it wanted to ease off some of the criticism the Bureau of Corporations had provoked by its very unfriendly report of several years earlier. It seems that the Bureau of Corporations, without any understanding of the lumber industry's situation, made some statements which the industry resented and which the Forest Service men felt were not justified or correct.

The new study was undertaken to get facts from the standpoint of

Fritz: men who knew something about the industry. It was a very pleasant assignment. The treatment I received in the lumber company offices was, as I said, friendly, and I met many new people and found out what the lumber industry is in various parts of the west and had an opportunity to visit some forests and some forestry offices, all of which added up to some additional experience.

Maunder: Specifically what data were you collecting?

Fritz: Data on prices, shipments, production

Maunder: Over a period of years starting with the origin of the company?

Fritz: As far back as the records would permit.

Maunder: What did you encounter in the way of record resources?

Fritz: Some companies had preserved their records very carefully in specially made boxes for their storage. Apparently after storage, they were not again touched because I noticed the dust on the tops was undisturbed.

Maunder: Which of the companies that you visited had the most complete records?

Fritz: Potlatch at Potlatch, Idaho. They had perfect records. The manager at Potlatch was A. W. Laird. Mr. Laird was a wonderful type of man, a real gentleman, and apparently a good manager. He was very friendly. One day he passed my desk, and he put his hand on my shoulder and said, "Young man, how are you getting along?"

I said, "Very well, sir, and I want to thank you for the courtesies shown me and the cooperation of your staff," which got him to conversing, and he said, "We like you men from the regional forestry offices but we are never sure what will happen to the data when it reaches Washington where it might be twisted around to serve somebody's own purpose." That comment has never escaped me and many things that have happened since have convinced me that Mr. Laird was correct in his suspicions.

Maunder: Can you point out any instances in which data that you collected and which subsequently was forwarded to Washington was treated in that way?

Fritz: Not in the lumber industry study. I think that was a very honest job, possibly because Greeley was a man of a very high standard of professional ethics. But in the 1930's, I think, a report was prepared in Washington, a rather extensive one, known as the Copeland Report. Some of the chapters were signed by members of the Forest Service, but several told me that their statements were revised in such a way as to slant them in favor of the Forest Service's contention that the lumber industry must be controlled.

- Maunder: And was this a violation of the original report that they had written, a violation of the spirit and the facts of what they had originally stated?
- Fritz: The spirit was completely different in the Thirties than what it was before World War I, the short time I was in the Forest Service.
- Maunder: No. I mean these field reports were twisted, you say, in the 1930's in Washington so that they said something different than what the field man had intended them to say. Is that your interpretation of this?
- Fritz: No, these were not field men; they were office men. One in particular was on the Washington staff. Most of that report was prepared right in Washington--at least, assembled--and one of the authors was very unhappy over the fact that what he wrote was changed considerably.
- Maunder: Do you remember the name of that author, the man who was unhappy about the change?
- Fritz: I don't want to mention his name right now. He's no longer in the Forest Service and he's still living. I don't want to involve him.
- Maunder: Well, you went from Montana to Idaho and Arizona. Can you tell us something about that experience?
- Fritz: The field work on this lumber industry study was completed in a few months and then I was transferred to the Coeur d'Alene National Forest at Coeur d'Alene, Idaho. The supervisor of that forest was Meyer H. Wolff, a Yale forestry graduate, 1909, and a native of Russia, but educated in New York City and Connecticut. In the office also was R. C. Egelston, a Yale 1910 forestry graduate. Later on there arrived Charles K. McHarg, also a Yale forester, 1913, and since I was 1914, we had a nice age distribution and four Yale men on the same forest. This didn't sit very well with some of the young foresters from other schools, but I don't think there was any real resentment. We got along very well.

The supervisor, M. H. Wolff, was Jewish, and some men didn't take very kindly to him, especially some of the rangers, but he and I got along famously. When I was transferred a year later from his forest to Arizona, we parted as very good friends and kept up a correspondence for all the years until his death. He was typical of the early foresters. He was very zealous; he saw to it that the Forest Service got all the breaks in his dealings with others; and he was very close in spending money on the ranger districts but he gave all of us considerable leeway to carry on our work without interruption.

Some men were constantly at loggerheads with him, but I never had any difficulty with him. In fact, I enjoyed working with him. For

Fritz: example, it was the first year that the Forest Service was to have a man on each forest detailed to specialize in fire protection, so I was to be the fire chief of the forest, in effect. I was hopelessly incompetent for that job, coming from the East as a city boy and only recently graduated in forestry, whereas the local rangers, all of them old-timer woodsmen, very competent and very experienced, knew more about fire fighting and fire protection than I would learn in ten years. They knew how to get around, they knew the timber, and they were very clever in their personal relations.

Maunder: These were all men recruited right from the neighborhood?

Fritz: That's right, yes. Most of them started in the Lake States pine forests. The Inland Empire, being a pine region, attracted a large number of loggers and lumber people and others, woodsmen, from the Lake States. Incidentally, when it was said that the pine forests of the Lake States would soon give out, some people moved to Idaho to take up a forest "homestead."

Maunder: What would you have to say about the early efforts to fight and control fire in the Idaho area, the Inland Empire?

Fritz: It was a tough job, and even though the rangers knew their way around, they were not able to cope with some of the fires because the only equipment we had were hand tools--shovels, mattocks and rakes. Trailing a fire was all hand work and we never had enough manpower. So even though the rangers were good woodsmen, they didn't find fire fighting in that forest type too easy.

But fortunately for me as a newcomer, the year 1915 was a very easy fire year. We had just one fire of any consequence and that was on Big Creek. It was rather important because Big Creek contained some green white pine timber of considerable value. Most of the Coeur d'Alene Forest was burned over in the great 1910 fires. You know as much about the 1910 fires as I do. They have been written up a number of times. The Coeur d'Alene Forest took an awful beating.

Maunder: Well, what about this fire you dealt with in 1915? What was the extent of the fire and what was your role in the fighting of it?

Fritz: What do you want--a sort of blow-by-blow account?

Maunder: That's right.

Fritz: Well, it happens that I was on Downey Peak lookout station, on a lookout inspection trip to see how the lookout was operating and what his equipment was like, what was needed, and so on. While on that mountain, I saw a thunder storm come up, what we called a dry storm. We could see it coming; those storms always carried considerable lightning. The lookout tower was a wooden structure only about fifteen feet high, and I thought that here was a good opportunity to see how the lookout man works when there was a lightning

Fritz: storm brewing. I saw plenty! As soon as the storm approached the lookout point and lightning began to strike close by, he lit out for his cabin down near a spring on the slope of the mountain. Knowing altogether too little about the playfulness of lightning, I stayed on the tower and recorded twenty-two or twenty-three strikes, several of which smoked up but then died down. One, however, remained large and was actually growing.

While each one was reported, no one could do anything about them because there wasn't enough manpower. The ranger would merely say, "Well, keep your eye on it," which I did. But the one fire at the head of Big Creek was booming up, and I called Meyer Wolff, the supervisor, on the field telephone. He was elsewhere in the woods, and I told him that the fire seemed to be mostly outside of our forest but on the Cabinet National Forest side, which was the Montana side.

He instructed me to go to the fire myself and represent the Coeur d'Alene Forest interests. This was the next morning, and I started off about five o'clock in the morning. I couldn't walk in a straight line to the fire because of the terrain, and I figured I could make better time by staying on the trails, which meant going back down off Downey Peak in the opposite direction to the North Fork of the Coeur d'Alene River and then down to the mouth of Big Creek and then up Big Creek. It was about ten o'clock or later that night that I arrived at the fire.

Maunder: How many miles had you walked?

Fritz: Oh, possibly twenty. There was a trail but not too good. When I arrived at the fire, which was near the top of the divide, I found a Montana ranger in charge doing a good job and I felt that things were going all right. When I had a chance, I made whatever report could be made over the temporary telephone system we established with wires stretched out over the brush.

That same evening the ranger asked if I would go down to Big Creek and head off and direct a pack train which was expected to come in from the Coeur d'Alene side and give it directions. When I left, some of the men who had been on day duty for a number of hours were ordered to sleep, and as they always did and still do, they pitched their beds right on the ground.

I trailed off the mountain in the dark down to the creek and awaited the arrival of the pack train. I waited a long time and I was very tired from the long hike, so I decided to lie down and rest and I fell asleep. Very soon the pounding of the hoofs of many horses woke me up and a fire guard came in with his pack train--the one I'd been waiting for. I had a warming fire going so he was attracted by it.

He was pretty angry. He had had bad luck on the trail. One of his

Fritz: animals stepped off the trail and rolled off the slope into the creek and broke a leg and he had to shoot it. He also fired his pistol for help (we had pistol shot signals) but I didn't hear them--the creek was making too much noise. The animal that went off the trail, incidentally, was loaded with prunes and beans, so some men probably were happy over that, and others probably would have preferred to have the beans to what they actually got.

I prepared something hot for the packer, and while he was eating, there was a commotion in the woods and flickering lights, very small lights, so I rushed out into the woods and followed the trail for some distance when I met a number of fire fighters coming out of the woods with matches and candles and with quite a scare on their faces. They yelled out, "Run for your life, young fellow. The fire's following us."

I couldn't see how that could be possible so I found a tree with some low branches and climbed up as high as I could to get a better view of the slope. It was all black as night, so I decided that they were panicked by some very local disturbance, which proved to be the case, as I found out when I went to the top of the mountain with the packer a few minutes later. The fire apparently crept along on the ground and set fire to some low-hanging branches of a spruce tree. The spruce flamed up very quickly and as quickly went out. But the sleeping fire fighters were awakened, and when the sky was lighted up by several of these torches, they didn't stop to make any inquiries. Some ran down off the Montana slope, and some came down on the Idaho side.

One of them later sued, or threatened to sue, the Forest Service for a rupture which he claimed to have obtained on the fire. I remember the man real well. He was a first-class loafer and was one of the men we picked up along the railroad to fight fires. While he was found to have a rupture, it was an old one which he just figured he could use to get some money from the government.

After the fire a day or so later, when I went back to the railroad near Wallace, I met dear old ranger Ed Pulaski. He had come up on a speeder, or "hand car." By that time, some of the men were about to hold me up because I refused to pay them for the time they were asleep. Ranger Pulaski was an old-timer, a man who knew the characteristics of local people and loggers and drifters, and he suggested I add a few hours to the hours of actual work to give them some compensation for going and coming, but I still declined to pay them for the time they had been in bed. Anyway, Pulaski in his quiet knowledgeable way probably prevented me from taking quite a beating from these ex-fire fighters. Pulaski really deserves some comment at this point.

Maunder: He was a hero of the 1910 fires?

Fritz: Yes, he was a real hero of the 1910 fires and a modest man. He is

Fritz: credited with having saved the lives of a dozen or more fire fighters who, when they were overtaken by a rush of flames, were ordered into a prospect tunnel--mine tunnel--with Pulaski standing guard at the entrance.

Maunder: That's all very well documented.

Fritz: Yes, that's all well documented. There's no use going into that. I asked Pulaski about it once and told him I was new and would like to know some of the story, and he says, "Well, it's been told so many times, every time I hear it, it has gotten bigger, so maybe I'd better let you pick it up from somewhere else."

I learned a great deal from Ed Pulaski. He was said to have been a descendant of the famous Revolutionary War Pulaski. I had a number of experiences with Ed Pulaski which added to my respect for these old-timers who spent so much of their lives in the woods and knew more about the woods and the behavior of forest growth than we young fellows fresh from school. Although they perhaps didn't know some of the basic principles, they did know some of the more important things when it came to managing a forest. These old-timers were a very honest, hard-working lot.

Among these old-timers were fellows like Gus Yager, and then there was Jack Winnington. He was more of a miner than a woodsman, however. And Phil Neff. They were very interesting men. They were very clever in handling the young technical personnel from the eastern forestry schools.

Maunder: Are these stories part of the written literature?

Fritz: Some. Here's one, for example. Ranger Neff was in charge of the Nelson Ranger Station. It was the finest house in the forest, a two-or three-story building, and when I arrived there, I inquired how come he has such a fine home when the other rangers do not. Then I found out that he had been a contractor and builder, and being a type of woodsman who knew how to "work the angles," and knowing that he was allowed only \$650 for putting up the ranger station, he found ways to cut corners or to juggle labor so that he was able to build himself a very fine home. It was a home which this year would cost him \$20,000 to build. At that time possibly \$3,500 could have built it, but on the books it was only \$650. He did it by taking some of the fire guards when they were not needed on fire fighting, and he would go out and collect stones or saw lumber and fit it and erect it and so on.

Another time was my first trip to Nelson Ranger Station with a party which included Supervisor Wolff, the timber sale man, Calvin A. Dahlgren, an entomologist, Jim Evenden, Gus Yager and several others. We all rode out on a gas speeder from the end of the main line of the railroad, and apparently without too much warning to Phil Neff's wife for lunch. Of course, we couldn't carry lunches

Fritz: and there were no lunch rooms. It was the custom in those days to have the ranger or his wife prepare the meals and bed us down. Neff had four or five children, and his wife was a very courageous and competent woman. She had very little time to prepare lunch and other meals for this big party. She had expected a smaller group. Fortunately, one of the station men shot a good brace of grouse the day before. It was my first taste of the deliciously meaty blue grouse.

We were allowed to pay fifty cents, or was it thirty-five, per meal to a ranger's wife when she prepared our meals. It was precious little for the hard work, and I developed a wholesome respect for the wife of the ranger because of the work they were expected to do to help out their husbands without any additional compensation except for meals. They would have to handle the telephone calls while the ranger was away and even rustle labor and get equipment ready to ship out to them by pack train in emergencies. For none of this did they receive any compensation at that time. I mention this because I want to record the sizable contribution of ranger wives.

Another incident at the same ranger station: On one visit there was some delay in getting me off by horse to the top of Grizzly Peak from which I was to make a panoramic map, the first one to have been made in the West. To use the time, I took pictures of trees and of the ranger station in general. In the background of one picture was a partially completed structure which was part of the general scene.

Some weeks later when I returned to Coeur d'Alene and the supervisor, knowing I had photographs, asked to see them, he came rushing to my desk and said, "What's this building in the background in this picture of the Nelson Ranger Station?" I answered that I was told that it was to be a new barn. The new barn had been completed only up as far as the eaves, so Wolff, the supervisor, called in Gus Yager, another ranger who was headquartered in Coeur d'Alene but who had been helping Neff in building some of the structures.

Wolff asked Yager, "What is this building in the background?" Yager, straight-faced, told him that was the new barn. Wolff said, "Well, I thought I allowed only enough money to put up the foundation." Yager said, "That's right. All we've got there is the foundation."

Wolff caught on right away and saw that the rangers had stretched it a point, so he asked Yager, "How high is the foundation of a barn?" And Yager said, "Well, sometimes a foundation goes up to the eaves, just enough to hold up the roof." So Neff and Yager, by finagling equipment and labor and time and putting in unquestionably a lot of overtime, were able to put up the sidewalls on top of the completed foundation and got by by calling it the "foundation." The next year they were to get a little more money to put on the roof.

I mention that incident because it shows how difficult it was to get quarters and money for buildings and how little the rangers had

Fritz: to work on. From my own observation, the rangers got the small end of the stick when it came to providing the means for carrying on their work. Yet they were the ones who did the field work.

Fry: The U.S.F.S. had much trouble with fraudulent homesteading on the Coeur d'Alene. Did you see any of this?

Fritz: Yes, just one really small thing, but to me it was very big at the moment: to face a gun is not a pleasant experience. I met a man on horseback armed with a shotgun. I was afoot and had just exited from a side trail when he sighted me. It suddenly dawned on me that he was one of the last homesteaders to defy the government and he threatened to shoot any trespasser. It ties in with the application of the Homestead Act to lands that are not truly of agricultural character and should have been kept in a timber classification.

The northern Idaho country was well covered with valuable western white pines. A number of people moved out from the white pine region of the Lake States to the West to take up some of this land. A man might take up 160 acres and his girl friend would pick up another 160 acres. They would get married and have 320. The cost was small--\$2.50 an acre--which would make 320 acres of prime timberland cost only \$800. Most of the land was mountainous and not suited for farming. Lumber companies were willing to pay anywhere from ten to twenty thousand dollars for it, so if one could get patent he would sell immediately to a lumber operator.

When the Forest Service was organized, it examined a lot of these claims which were still in the hands of the settlers. For itself, it claimed that they were fraudulent, that the land was impossible to farm. It was fraudulent in the sense that it could not be farmed, but it was quite legal for homesteaders to take it up.

Some of the farmers fought it. To use the term, they were embattled farmers. They were never organized, though. They gave the Forest Service and all the men in it a bad time. I did not think it was quite fair to these farmers. They were practically invited out there to take up the 160-acre claim, and then they were kicked off.

Well, I was walking along a trail with my little pack and I saw a smaller trail turn off to the right. It was away from the Coeur d'Alene River. I just wondered where the trail went because I was trying to get thoroughly acquainted with the forest. I had every map imaginable and available with me. I was making notes on these maps to bring them up to date. I was adding trails that were not marked on the map because I was being trained to be a fire chief of that forest some day.

I got to the end of this trail, which went only about 150 feet. It stopped at a spring and there was food in the spring to keep it cool. I did not touch anything. I came right out again. I knew that there was a homestead close by, and I thought, "Well, this settler is

Fritz: taking advantage of the spring," which was very much his right and the smart thing to do.

When I came out to the main trail, here was a man on horseback with his gun across his lap pointed right at me. With very few words he asked me, "What are you doing in there?" I told him that I was wondering where this trail was headed and that I discovered the end at the spring, so I came out again.

Then he told me in no uncertain terms, "I don't want any Forest Service men on my land." I had a badge, of course, so I was easily identified. That badge could get you into a lot of trouble. It carries a lot of authority with it, but

Fry: But at that point your authority was pretty far away.

Fritz: Yes. I had no gun, probably would not have used it if I did have one. He told me that he did not want any Forest Service men on his land, and he said, "This is my land!" Actually, the Forest Service claimed it. I told him that I was on my way to some ranger station, went on my way, and that was all there was to it. It was a personal experience in how the thing worked. Every forester in those days had something like that and some had much worse experiences.

Actually, it was not wholly fair. The Homestead Law practically invited fraudulent "settling." This law was not adapted to the western mountain country because of its failure to regard terrain and other factors. The man I met on the trail claimed his right under the Homestead Law before the so-called "June 11th" forest homestead law was passed.

This little experience reminded me of my student days when I was in a camp in Mississippi, where some of the backwoods farmers were very suspicious of strangers. Shortly before we set up our camp, a farmer shot and killed an agricultural agent who was dipping the scrawny cattle to rid the animals of ticks. The farmers feared dipping would "hex" the cattle. So they were not going to have their cattle hexed, ticks or no ticks.

Maunder: Were you becoming disillusioned in forestry about this time?

Fritz: No, not on the Coeur d'Alene. On the Coeur d'Alene I enjoyed every minute. Wolff was so friendly, and I got along so well with the other men that I was very enthusiastic about the whole setup. And of course, Coeur d'Alene was a beautiful place for living. I thought it would make an excellent university town, and later on when I saw the University of Idaho at Moscow, I felt it was regrettable that the University was not built at Coeur d'Alene.

There was a big lake and beautiful scenery. There was also a boat club equipped with two four-oar shells, two pairs and two singles, and having rowed at Cornell, I joined the boat club and was soon

Fritz: rowing in the fours and the pairs. But I never happened to be in a boat for the two seasons I rowed that won anything but a heat, but it was a lot of fun.

I also met my future wife there. She owned a canoe, and after practice rowing in the morning before breakfast, and practice rowing between five o'clock and dinner, I would call on her and we would go canoeing for the rest of the night. Quite a workout for a youngster.

Maunder: Were you married there?

Fritz: No. I had no intention of getting married, but you never can tell what an infatuation develops into. That came later.

The work on the Coeur d'Alene was extremely interesting. At first I was quite disappointed at having been transferred or assigned to fire work. Several times I thought about having spent two years at Yale to become a forester, with silviculture as my main interest at the time, and then to be made into a fire fighter on a national forest. It didn't look good. But I soon learned that the protection branch of the Forest Service was the only real job that the Forest Service had. The rest of it was pretty much going around in circles and marking time. There was some timber sale work, of course, but not very much.

While I was on the Coeur d'Alene--I think it was in the fall of the year--a request came in from the Regional Office to make the annual report on some plantations that were set out on the land burned in the 1910 fires. Wolff said, "This is your job. As soon as you can get out there, you go out and make an examination and make the report. I don't think it amounts to a great deal because in the past the plantations couldn't be found, and I believe that most of them are dead."

So I looked up the old reports, and sure enough, I found that my predecessors had not found some of the plantations and reported them as lost. But I had to go out anyway to go through the motions of preparing the report. Reports, of course, are very important in any government office.

But I was not prepared for what I found. I actually located the experimental plantations of various hardwoods--hickory, oak, walnut, basswood and others. The seedlings were only a foot high or slightly more, and although they had no leaves on them, I readily identified them; and when I looked up the old reports again, I noticed that all of my predecessors had been trained in western forestry schools where they didn't have an opportunity to become acquainted with the bud characteristics or winter characteristics in general of the eastern hardwoods, which were planted experimentally on the Coeur d'Alene burns. So it was no particular credit to me, but with the training I had acquired at Yale from Jim Toumey and Sam

Fritz: Record on tree identification in the winter condition, I should not have missed them anyway. But there were some conifer plantations that were still intact, especially Englemann spruce. They were doing pretty well. But in general the plantations weren't doing too well. Here and there there were some natural seedlings coming up, and they seemed to thrive somewhat better, which gave me my first experience in plantations from nursery-grown plants as against naturally seeded.

Well, an interesting thing happened as a result of that report. I had a lot of fun writing it and brought in a lot of details that I had noticed and observed and felt they were important for someone else who might follow me. But somebody in the Washington Office apparently thought that here was a silviculturist that was being wasted on fire, so I was properly approached later the following spring about a transfer to a forest experiment station in Arizona.

I thought it was a good opportunity to get into silvicultural work and also to see the forests in an entirely new Region, and so I talked it over with Wolff. He kidded me quite a bit for being asked to go to desert country, which I thought the country was myself. Although I had studied something about the pine forests it didn't make much impression. But anyway he agreed to the transfer and wished me well.

Before I left the Coeur d'Alene, I prepared a number of memoranda, each one on a different item of forest protection. For example, one was on lookouts and the design of lookouts and the necessity for the type of glass to be used, the obstructions from corners and how they could be avoided, and water development, the height of the towers to get over the trees, and also the numbering of mile posts along trails and numbering these mile posts also on the maps so that a lookout man could report a fire apparently on so-and-so canyon along so-and-so trail near so-and-so mile post. I don't know if this was ever effective on the Coeur d'Alene Forest but I learned later it was adopted on the Nezperce.

Mauder: Was this an innovation in the Forest Service at the time?

Fritz: It was new, at least to me. Whether anybody else had thought of it and was responsible for its being adopted on one of the map systems, I don't know.

Mauder: You've never seen it written up anywhere?

Fritz: Only in my own memorandum. I also left, I think, a twenty-page or more memorandum on the preparation of panoramic lookout maps. A copy of that was sent to Bush Osborne, who apparently got the fire-finder map idea from the New Hampshire people, and as a result of my own memorandum he tried to work a panorama on his own fire-finding map, which was about the same diameter as mine.

These panoramic maps apparently didn't work out too well. Later

Fritz: on they used cameras for the same thing, but it developed that the lookout men were so experienced in the terrain that they didn't use the panorama anyway. By developing a system of triangulation and better pinpointing of lookout stations, the panorama wasn't actually necessary.

That panoramic map method was written up in the Timberman, and also in the American Geographic Magazine, of which Isaiah Bowman was the director. Bowman had given a course to the Yale Forestry students. (He later became president of Johns Hopkins University. A very fine man, very able man.)

Fort Valley Experiment Station, Arizona

Maunder: When did you go to Arizona?

Fritz: I arrived in Arizona in August, 1916.

Maunder: What was your new assignment?

Fritz: My new assignment was as assistant in the experiment station. The director was Gus Pearson, G. A. Pearson. I learned to love the old fellow. In fact, he wasn't much older than I was. He was of the class of 1907 or '08 of Nebraska, when Nebraska had a forestry school. Incidentally, Pearson was left at that one station until his retirement, and as far as I know, his is the only case where a researcher was left at one place long enough to really learn the local situation, and Pearson became an authority on ponderosa pine. He and I became very good friends and we kept in touch with one another until his retirement, and in fact, until his death. If his widow is still living, I expect to visit her this coming February in Tucson.

The Fort Valley Experiment Station was about nine miles north of Flagstaff at an elevation of about 7,250 feet, and Flagstaff I believe was about 6,900. Above us loomed the San Francisco peaks, one peak of which was 12,611 feet. It was really a beautiful country and I loved it at once. It was like being stationed in a huge park, but the fact that it looked like a park made it appear to me that it was no place for forestry.

However, I had to change my mind on that because it was a very good place to learn silviculture, primarily because the site factors were not too good. The only good feature was that they had some rains in the summertime, a total of about twenty-two or twenty-three inches of precipitation for the entire year. But it was more of a park-like stand of ponderosa pine up to about 7,500 or 8,000 feet. There the type changed to Douglas fir mixture, and then higher up to spruce and white fir. The spruce forest was a very dense dark one and I always enjoyed going up to it. We found that

Fritz: at about ten thousand feet. The timber line was about eleven thousand feet.

It was a very interesting place for one to be stationed, especially one who, like myself, wanted to eke out some more training or knowledge of how vegetation develops. I recall going into the botany of the region and there was one little plant known by the generic name of Thlaspia. The specific name was taken from the name of a botanist and begins with "f." I can't think of it at the moment. It sounds like "ferend." Anyway, I observed the plant at the station, and then decided that as long as I had to climb the mountain once a week anyway, I would keep a record of the blooming of this plant at different elevations over this altitudinal range. But that was the following spring, so I'm a little ahead of my story.

When I arrived in Flagstaff, I found Pearson very happy to have some help. Apparently my predecessor had been away several months before I was assigned. My predecessor was Clarence Korstian who later became a research station director himself, and still later, Dean of Forestry at Duke University.

The work at the station was largely working up data for the few years past of measurements of sample plots. Of course, we had a few sample plots to measure ourselves, but they were behind in working up the data, solely because of inadequate help, and I could see that my entire winter would be spent in the office working up this data.

Pearson was a very helpful man; he recognized the fact that his assistants were dropping into something brand new and needed help. Whenever we were out on trips by auto or afoot or on horseback, he never missed a chance to point out something which had some significance in learning the silviculture or the silvics or the botany of the region.

We lived in very nice little cottages. They were pretty thin-walled and not too windtight but they were heated by hot water from the greenhouse. Having had some experience in pipe-fitting, I was able to change the piping in my own house so that the radiators were in better corners for heat distribution. I also had a chance to do some pipe-fitting for water lines and insulation and electric light systems and so on, and was very happy to be able to put into use some of my early training in engineering.

I had to share the cottage with another assistant, Lenthall Wyman, who later became a professor of forestry at North Carolina State University. We were together most of the winter. Unfortunately, in about February or March, he was transferred and thereafter, I had to make the field trips alone, although we were ordered never to go out alone on the snow.

Incidentally--I'm a little ahead there--when the winter approached,

Fritz: Pearson had received authority to make a study of climatic conditions at various elevations. We started at an elevation of about five thousand feet, somewhere on the desert or in the area of juniper and pinion pine, and gradually worked up to about 10,500 feet. I had to build the stations at 8,500 and 10,500. The others had already been built. And it was my job then for the time during the winter and my entire stay at the station to visit these weather stations once every week to change the sheets on the recording machines, to take note of the maximum temperatures and so on, to refill the evaporation pans and whatnot.

It was a very interesting assignment and very illuminating. When Pearson wrote his final report on that study, I felt quite happy over the fact that he mentioned me as well as the other assistants for the help we gave him. It was a pretty good demonstration of personnel management: Pearson gave everybody credit whenever he received help, no matter how slight it was. It was quite in contrast to an article I had written for the Timberman magazine on the round panoramic lookout map idea which I brought to Idaho from New Hampshire. When the article actually appeared in the Timberman magazine--being a good soldier, I submitted it through the Regional Office--my name was cut off and the name of the Regional Forester was put on, by some subordinate, no doubt.

Maunder: Who was the Regional Forester there?

Fritz: That was F. A. Silcox, a very fine man. Also a Yale forester. He was a very fine man indeed. He later quit the Forest Service for some years. He had a sort of a sociological streak and he worked for the typographers' union in New York City, and then later, being a friend of Rex Tugwell during the New Deal days, he was returned to the Forest Service as Chief Forester. If I think of it, I'll make some comments about him a little later, which I think will cast some light on the New Deal days.

Work at Flagstaff, as I said, was interesting and also enjoyable. During Christmas week, the snows came. Of course, it was quite cold. At six o'clock in the morning sometimes in the winter, the temperature dropped below zero, and the crust on the snow was so thick that we could walk on it without snowshoes until about ten o'clock. The temperature rise from six o'clock to about ten o'clock was really phenomenal. I don't remember the exact figures but while at six o'clock in the morning, water would freeze very quickly in pans, by about ten o'clock we could sit out on the snow in our shirt sleeves.

It was an ideal climate. During the day in the winter, it was not only bearable but pleasant, while in the summertime, the temperature rarely rose above eighty-five degrees, and it was never humid. It was an ideal climate. And having been reported to have had a touch of tuberculosis as a young man, I felt that if the TB should ever return, I would make the Flagstaff area my permanent home, but that contingency never developed.

Fritz: We spent the winter in the office working up the data. Ordinarily I would have gotten pretty tired and fed up working up somebody else's data, but the summation of every column gave enough information which for comparative purposes was illuminating; and Pearson was on hand a big part of the time, until some time in January anyway, to help me interpret the data.

Of course, we had other duties around the Station. Somebody had to go out about five o'clock and turn off all the water from the elevated water tanks so they didn't freeze overnight, and we had to build a fire in the tankhouse so the tank itself didn't freeze up. We had other duties like that and of course, Pearson had a cow, a personal cow, which he had to milk.

That leads me to say something about the management of experiment stations in those days. Altogether too much time of the technical personnel had to be devoted to typing letters and ordinary maintenance work. I recall doing a lot of mechanical work myself around the grounds, pipe-fitting, carpentry work, and so on. Eventually, Pearson got a clerk who wasn't very good but nevertheless, he was a clerk and he kept the accounts. In fact, Pearson always had a clerk, I believe, to take care of the accounts. But we young fellows still had a little to do.

Maunder: Was this just merely a matter of lack of budget?

Fritz: That's right. In other words, inadequate personnel.

Maunder: In other words, they were trying to get the technical personnel to double in brass and so cut down the overhead?

Fritz: Yes. We didn't even watch the clock. We worked as long as we could keep our eyes open sometimes to get the job done. On that Station, we had a pump pumping water from a well to the tankhouse, and that had to be operated. Pearson looked after that himself until some time later when he was able for the first time to get a range helper who was a sort of maintenance and operations man around the Station.

We also had a greenhouse, and the heating of the greenhouse was always a problem. And starting fires in the tankhouse, and various jobs of that kind, took a lot of time. But they were probably a good thing too because it took the curse off of sitting at the desk for too many hours at a run just poring over figures.

When this ranger helper arrived, he turned out to be a man by the name of Porcher. I think his first name was Frank. He was a native of South Carolina, apparently from an old, old family, and he was a very bad TB case. His wife had been a nurse and married him to look after him. They were very much attached to one another.

He was transferred to the Experiment Station from somewhere in California. We did not know that he was tubercular until he tried

Fritz: to do some of the work. He tried valiantly but he couldn't make it. From my office window, I would sometimes see him walk up a slope from the pump house to the upper level gasping for air, and when Pearson and I found out that he was tubercular, we were pretty sore at the smart cookie in California who transferred this man, knowing what kind of work he was to do.

Maunder: Didn't they have physical examinations for personnel?

Fritz: Well, this man was already in the Forest Service, and possibly if he had tuberculosis when he was employed, it wasn't detected.

Maunder: Didn't they have periodic re-examinations?

Fritz: Not that I remember.

Maunder: What provisions were made for hospitalizing men in the Forest Service?

Fritz: None whatever. Later on, I had to do Porcher's work and my own.

Pearson had been ordered to a detail in Washington, D.C., and was to be away about three months--it turned out to be nearly four months--and he left me in charge. There wasn't much responsibility attached to it, except to continue the work we had started, the computations, and looking after the Station.

I had one of those experiences like a lot of young men must have had in the early days in the Forest Service when we had to double in brass. The cow, of course, introduced some problems. Being a city-bred boy, I didn't know which end of the cow gave the milk, and I had assiduously stayed away from the milking job when we moved to the country. Porcher, the ranger, had to do the milking at the Station, and for doing it he got some of the milk. (I don't remember whether Mrs. Pearson remained at the Station at this time or moved to Flagstaff with their two children. She was the daughter of a local judge and a very fine lady.)

When I arrived at the Station, the clerk, who was not too bright anyway, came rushing out and said in broken English, "My God, Fritz, the cow has just had a calf. What'll I do?" And I said, "Where is the cow?" He said, "I got her in the stable." "Where is the calf?" "The calf is in the stall next to the cow."

"Where did the cow have the calf?" He said, "Way down in the meadow. She didn't come in at the regular time, so I looked around and when I got down to the field, I found she had a calf. So I drove her and the calf in."

Of course, when Pearson left for Washington, he had told me that the cow was to have a calf on a certain day in April, but he expected to be back. Actually, his detail in Washington was extended and he didn't get back until late in April. So there was I with a sick cow and a young calf on my hands, and I'd never had that kind of

Fritz: an experience before. But I knew that the cow was a mammal and that a calf would therefore suckle from its own bag. I found out the clerk knew less about it than I did--he had separated the calf from the cow and put the calf in another stall with a bale of hay. I asked him what the hay was for, and he said, "Well, the calf has to eat, doesn't it?"

[Laughter]

I thought, "Hell's bells, I didn't eat meat when I was born, and I had to be fed on a bottle, so the calf must be in the same boat." So I put the calf with the mother, and although the cow was a big animal and had very large teats, she kicked that calf clear out of the stable because her teats had been very badly chapped. This was in the cold winter and April was still cold. (April 15th, we had thirty inches of snow, and on Decoration Day, I planted trees in a light snowstorm.)

I brought the cow out of the barn where I could get at her and started to work to find out how I could get some milk out of her. Her udder was tight as a drum, and I thought, "That can't be right." The cow was as hot as a firecracker all over and breathing heavily, so I thought she might be sick. She wouldn't let the calf anywhere near, so I started to try to milk her. Knowing nothing about it, she promptly heaved me out of the stable too with a quick push.

I thought, "Well, she's probably in pain. The teats are pretty badly chapped," so I got some lard and rubbed it over her teats, and after a little while they were quite soft and then she didn't kick up so much when I touched her. But to get some milk out was a different story.

Finally, I figured out there must be valves inside just like there would be in any pump system, so I figured out where the valves ought to be and pretty soon I had a stream of milk going and pretty well filled a pail. Then I let the calf go in with the cow and the mother accepted the calf.

There's a little part of humor to that. When Pearson got back, he had quite a laugh over this city boy who had this midwifery thrust upon him, but I asked him, "How is the cow? Do you think she'll pull through?" And he said, "You did everything right except that I wanted the calf weaned early."

I said, "How in the devil do you do that?" He showed me how one puts his finger in the pail and crooks the finger and lets part of it stick out so that the calf grabs the finger and thinks it's a teat and gradually he gets in the habit of drinking out of a pail. Well, that's something else I learned. Anyway, that was just one of the examples of some of the details that one had to work out for himself in those days, especially at the Stations.

Maunder: Was this tubercular case allowed to go on milking the cow? He surely knew what his trouble was, didn't he?

Fritz: He certainly did. He told us himself.

Maunder: Wasn't that running a great risk, exposing the rest of the people on the Station?

Fritz: Yes, it was, but we didn't pay so much attention to those things in those days. In fact, we didn't know so much about them as we do now. But it was very unfair on the part of whoever it was in the Forest Service to transfer the man to anything but very light duty. It was very well known what the work would be.

It gave me my first indication of what I still think of as hypocrisy on the part of people who claim to be interested in the country and also in other people. It's true of the churches; it's true of the universities; it's true of business; it's true of public service. But it hit me rather hard because by going to the Forestry School at New Haven, I at least for a while had taken up a little different viewpoint on work.

Maunder: You were imbued with a high degree of idealism?

Fritz: Yes, and I got to feeling that maybe only industry is selfish, a thing apart from other people, and that the business people have no interest in the country at all. I acquired that after I started studying forestry; certainly, I didn't have it as an engineer. It was some few years after that that I learned my mistake.

There were several instances that came to my attention at Fort Valley that made me feel that the Forest Service is not the altruistic organization which I had thought it was.

Maunder: What were some of these other experiences?

Fritz: It was like anywhere else, dog-eat-dog and each one for himself. When the summer came, we had a succession of visitors from Washington who came out on so-called inspection trips, and I can't figure out to this day what good they accomplished, but they carried something away for themselves and left very little. Raphael Zon was one of the visitors. Sam Dana was another. Sam Dana, however, was a serious man, and we really got quite a bit out of the discussions we had with him.

Maunder: He made some real contribution to the life and experience of the Station by his visit?

Fritz: Yes, he did. Zon made no contribution. He was critical all the time.

Then, of course, there was H. H. Chapman. He was at that time on leave from the Yale Forest School and was the assistant district

Fritz: forester in charge of silviculture. He was out visiting the Station, and having only recently graduated from the school myself, we had some long conversations. Chapman revealed some facets of himself which I had only suspected before. During the entire time he was at the Station, I would say he contributed nothing whatsoever to the progress of the work, but he kept up a running comment about how things were going wrong in the Regional Office and how he was going to correct them.

We took him up to the weather station on the San Francisco Mountains, and while we were there he wanted to go clear to the top, so I escorted him clear to the peak. We sat up there under the lee of the peak overlooking the Painted Desert, and he continued his criticism of how the Forest Service is run and how he is trying to cure it, and possibly by his frankness he led me into saying some things that I possibly shouldn't have said about the way a ranger had been transferred who was useless to us.

I also discussed another instance which I haven't mentioned before. It was thought when I was transferred to Fort Valley that I would be promoted to a forest examiner from the rating of forest assistant and given, I believe, a two-or three-hundred dollar raise. The amount of money I got in those days didn't make much difference to me because I had enough to live on and was not married and figured that everything that I was doing for the first four or five years would be for experience anyway, so I wasn't put out by it.

But when Chapman came, he showed me a letter which had been received from the Washington Office in which the statement appeared, "If Fritz does not make too much complaint about not being promoted to forest examiner, don't let him have it," or words to that effect. That was an improper thing for Chapman to do, and it made me pretty sore that the Forest Service should have such an attitude toward its own employees when publicly it was preaching such high ideals in public service.

Mauder: Who had signed this letter, your superior there at Flagstaff?

Fritz: No. Without my knowing it, Pearson was trying to get me the promotion and so was someone at the Regional Office in Albuquerque, but in Washington, it was vetoed.

Mauder: Was Chapman breaching discipline by showing you this letter?

Fritz: I didn't think it was proper. Although I was glad to see it, I thought it was an improper thing for a man in Chapman's position to do.

Mauder: Why do you suppose he showed you this, to induce you to make statements?

Fritz: No, I don't think so. Chapman has always been--even more so in

- Fritz: later years--one who loved to have something to criticize somebody else on. He would criticize his own grandmother if she were alive. And he certainly enjoyed criticizing people in his own office, on his own staff at the Yale Forest School. He was very unfair in his criticism, and I think oftentimes criticized without knowing all the facts.
- Maunder: How do you account for the fact that he rose to positions of importance which depended in part on personal popularity in elections and things of that sort?
- Fritz: He had a lot of drive, a lot of energy, and he forced himself into a lot of situations. He could easily work up any problem into an issue in no time, and I think a lot of men, in the Forest Service at least, were afraid of him while the others thought that he was just a character to be enjoyed. I had a very unfortunate experience with him later on, several in fact, in the 1930's and thereafter, which made me break with him--that is, on a friendly basis.
- Maunder: What were these?
- Fritz: If you want them at all, I'll come to them later.
- Maunder: All right, although they might hold together better at this stage of the interview than in a purely chronological account.
- Fritz: Chronologically they would come later, but I don't want to mention that unless you think it would be of interest.

IV WORLD WAR I AIR SERVICE

Fritz: While I was at Fort Valley, the United States entered the First World War. I think it was April 6, 1917. It was when Pearson was away in Washington and had left me in charge.

The day after war was declared, or two days later, it was my unpleasant duty to take the ranger and his wife to Flagstaff and put them on the train; his illness had become so that he couldn't work. His wife was quite incensed over the treatment he had gotten by being transferred to a Station where he had heavy work to perform whereas he should have had light duty, and she took it out on the Station personnel. On the way to the station at Flagstaff, nine miles, I had to submit to a running comment as to what a bad deal her husband got, but I had to keep my mouth shut more or less because it was none of my business and I wasn't responsible for anything there anyway. In fact, I had tried to make his job lighter by doing some of the work for him.

While in Flagstaff on that trip, I called on John D. Guthrie who was supervisor of the Coconino National Forest, having heard that he was making up a company of foresters to go into service to get out lumber and wood for the armed forces in France. So I told Guthrie that I would be glad to join his outfit if and when it was officially set up.

Another man on that forest who was on Guthrie's staff was E. T. F. Wohlenberg, who later became quite a figure. He was to be given a lieutenantcy, I believe, and all the officer assignments had already been doled out, so I was made a sergeant.

When I got back to the Station, I was thinking about it, and I thought how foolish to get into a unit which is going to fight the war with an axe and a saw, when my idea of fighting a war was with something that had a little more kick to it. So I telephoned Guthrie and told him I was going to withdraw my agreement with him to go into his outfit--it wasn't an enlistment anyway--and that I was going to try to get into the artillery.

Mauder: What did you finally do in regard to World War I?

Fritz: I put in an application right away for military training camp. The Arizona and New Mexico boys were to have been sent to the Presidio in San Francisco. According to the newspapers, something happened that left the boys from Arizona and New Mexico completely out of the first camp through some error, I believe; but we all received word that we would be given the first chance at the second officers' training camp which was to be held at Fort Leon Springs in Texas, and I made that all right.

When I arrived, I found in the artillery with me was Stanley Wilson,

Fritz: one of my Yale classmates. We were in the same battery or adjoining batteries throughout the training camp, and I came out of that with a first lieutenantcy with the artillery. I was given two weeks' leave with the rest of the graduates and went to Baltimore. I telegraphed my fiancée in Coeur d'Alene to meet me in Baltimore, and we were married there.

Mauder: What was your fiancée's name?

Fritz: She was Esther Phillips. She was one of the clerks in the office in the Forest Service in Coeur d'Alene. Her brother, by the way, is Roy Phillips, one of the heroes in the 1910 fires. He had an experience similar to Pulaski's, and later he became supervisor of several different forests. He's now retired and living in Phoenix, Arizona.

Mauder: Was your unit sent overseas after you got married?

Fritz: While I was in Baltimore on leave, as I said, I got married and promptly went back to San Antonio to take up duties as a newly commissioned officer, but on arrival, I found that my name was posted with about five hundred others who were transferred to the newly organized air service--the Air Arm of the Signal Corps, as it was called in those days. I didn't like it at all, but we were told that it meant an early shipment to France, and that took off some of the curse because we learned that the others would be in the States possibly for six months more, training troops.

The artillerymen were all given commands of squadrons because the artillery outranked the infantry. So when I reported at Kelly Field, I found my squadron--which was then called the 118th, and later became known as the 639th--and I found myself with ten lieutenants and one captain medical officer and 150 recently recruited soldiers, all of them volunteers.

After a few days, we had been prepared for overseas shipment and went by train from Kelly Field to Garden City, New York. This was in late December. I think it was around New Year's week. It was frightfully cold, and even on the streets of New Orleans, there was ice. When we left Kelly Field, we were in a violent sandstorm and I think I took some of the Texas sand all the way to France with me in my overcoat.

To give the men exercise, I took them off the train at New Orleans and marched them through some of the downtown streets and discovered there was ice on the streets from the cold. All the way up to Garden City, we were bothered by cold and our pullman cars were frozen up solid. Toilet facilities were inoperative. Some of the men came down with mumps, and some had worse illnesses and were taken off the train here and there, and at Garden City I lost possibly a total of twenty-five. They were replaced with men who had been drafted.

Maunder: Did your forestry training ever find any use during the war?

Fritz: While I was in France, I did very little to keep abreast of forestry and very rarely even called on French foresters. I think that was an evidence that I felt I was through with forestry. I was getting more and more interested in airplanes, an interest which dated to the day I saw the Wright brothers attempt to make their flight, at Fort Myer in Virginia, to impress the Army sufficiently to purchase one of their planes.

After the war, I felt that, being rather bad off as to nerves, I should take the university job and hold it for a few years, thinking that I could recover more rapidly on that kind of a job than in the more rigorous work of an engineer, so I accepted the university bid in the School of Forestry.

Maunder: Emanuel, you say you had a bad case of nerves. Was that a result of your war experience?

Fritz: Yes, entirely so. I was never in combat, although the neighboring airfields had been bombed several times, and our own field was under observation regularly, but I believe I had too many different duties. The Colonel, C. C. Benedict, a West Pointer, was a very fine man. Our station was the field from which pilots and observers were sent direct to the front.

I had command of one of seven squadrons, all airplane mechanics, a total of 1000 or 1200 men. The Colonel asked me to serve also as assistant Post Adjutant, Maintenance Officer and Commander of the Headquarters Detachment of 120, plus or minus, pilots and observers. This latter job was a tough one. The fliers were all young and full of beans and vinegar and eager to see action. They commandeered cars and motorcycles and occasionally took off on a "training" flight, only to make a "forced landing" at a friendly field of French or English squadrons. I inquired why I was selected. The answer was: "I need somebody to say NO when a car or cycle was requested." It was hard to say NO to young fellows who couldn't guess how many days of life were left to them.

At the same time, I put in an application to have my own squadron changed from a Post engineering squadron for the maintenance of airplanes to a combat squadron. Although the request was approved all the way along the line, through General Pershing's office and to Washington, when it got into the hands of the Secretary of War after many weeks, the end of the war was apparently so close that the application was denied. I thought it was rather unfortunate because the squadron developed into an excellent crew of airplane mechanics. It was probably that experience with the planes that made me more firmly convinced I should go back to engineering.

Maunder: What were you doing? Were you servicing planes coming back off front-line service?

Fritz: Well, the first field was near Toul, in the Department of Meuse. At that field there was nothing but a farm, and my squadron had to start with picks and shovels to prepare a field. From that field, when it was completed, were made the first American flights over the lines--photographic missions and artillery reglage. (We used a lot of French terms in our work at that time.)

We were moved to a bombing field for a very short time, and it was from that field that the famous 96th Squadron took off and never came back, every plane landing in Germany with its bombs in the racks. They ran out of gas against a head wind. The very next day, a German pilot flew low over our field. Whenever a German did that, we knew that he had a message to deliver. When the boys picked up the message, tied to a very small parachute, it read something like this: We thank you for the very fine brand new Breguets (daylight French bombers) and we anticipate great pleasure in associating with your fine young flyers and observers, but what in hell will we do with the Major? In those days there was a lot of chivalry between the pilots of opposing forces, and many times when a pilot ran out of ammunition, he'd signal to the German, or vice versa, that he couldn't fight any more, and the enemy'd wave his hand and they'd both go back to their fields.

I was never a flyer but I flew many times with the engineer officer, which I felt was a necessity since my men were helping to service the planes and keep them flying. One of the saddest duties of my job of being in charge of the headquarters detachment was to bury the pilots and observers when they were killed--not in combat, but in a training accident.

This was the third field of which I'm speaking now, which was a Second Corps Aeronautical School. We finally built up to about 1200 men and 125 planes. At this field, the observers got their final training in photography missions and some gunnery and aerial combat, and also in artillery control. We had no two-way radio then; all the signaling was done from the air to the ground with some kind of crude radio, but from the ground back to the air, there was nothing. The pilots had to fly by signals from the ground--usually strips of muslin laid on the ground.

Maunder: Were you associated in this experience with any of the great American flyers?

Fritz: Indirectly. The 94th and 95th Squadrons, which were pursuit squadrons, were at an adjoining field. In these squadrons were such pilots as Major Raoul Lufberry, the famous ace, and Eddie Rickenbacker, and a young man by the name of Donald Campbell, who, I learned later, when I came to the University of California, was the son of the man who, in 1923, became President of the University of California. There was also Leonard Hammond, who was an ace. He was the son of A. B. Hammond, the principal owner and president of the Hammond Lumber Company. I became closely associated with Leonard Hammond

Fritz: in California on forestry matters until his untimely death from leukemia in the early 1940's.

Maunder: You were on sick leave, were you, from your squadron when you came back to this country?

Fritz: No, I was never on sick leave. I was ordered on sick leave, and to some kind of a rehabilitation outfit at Nice in southern France. But I didn't want to leave my squadron because it might have been ordered back to the States almost any time. Because I was with them from the start and we were a close-knit unit, I wanted to be sure their records were in good shape, so I declined that.

But the nerves got worse, and when I finally got back to the States in May or early June and had my men discharged and it was then the turn of the officers to be discharged, I was ordered then to the post hospital for observation and eventual transfer to Cooperstown, where the Air Force had a recuperation hospital. I learned that many of the patients there were what we called "gold brickers," who wanted to be on the government payroll a little longer. I decided it wouldn't be any good for me, and I could recover more quickly on a job as a teacher. So I asked for release from that and was promptly given my discharge and permitted to leave.

Although during the war, I had become more firmly convinced that for my own good I should return to engineering, nevertheless, I had a very soft spot for forestry. It happened that while I was on a hospital bed in January, 1919, I received a letter from the University of California and in the same mail one from Mr. G. A. Pearson, for whom I worked in Arizona and who was the Director of the Fort Valley Forest Experiment Station. Both letters offered me jobs paying exactly the same amount, but I had determined that if I did go back into forestry, I would not return to federal service. As a result, I accepted the bid from the University of California. (In fact, the University had asked me to come there to teach sawmilling and wood technology back in 1916, but because of the imminence of war, I had decided to hold off and asked them to forget about my teaching.)

Well, the army story doesn't have much to do with all this. I might say that before I went into the Army, I had sent in my Forest Service resignation to the Regional Office in Albuquerque. I think it was even before war was declared. And they asked me to reconsider, but I had gotten fed up--not with the work, but with the personnel practices of the Forest Service.

In those days everybody in the Regional Offices and also in the Washington Office was not much older than the men in the field, and in my opinion, ninety percent of them were jumped to responsible jobs before they were really ready. They took a very bureaucratic attitude too early in life.

Fritz: Some of these men were in top offices until their retirement and never got out of that bureaucratic attitude. In fact, they got worse.

After war was declared, I submitted my resignation again, and this time I had the much better excuse that I wanted into the military service, and I received a very cordial letter of congratulations and so on from the Regional Forester, who was F. C. W. Pooler.

V PINCHOT AND FEDERAL REGULATION

Maunder: Now, Emanuel, I'd like to ask you a question regarding World War I and the period immediately thereafter. Did the war have any influences on the character of forestry employment--on industry's attitude toward employing foresters?

Fritz: If it had any effect, I think it was very small except for one viewpoint, and that is the fact that so many lumbermen and foresters were thrown together in that huge regiment known as the 20th Engineers (Forest). That regiment had, I believe, 25,000 men. It was the largest regiment the country ever set up.

The men were scattered all over France, and their job was to cut down trees and manufacture them into crossties and trench timbers, lumber for cantonments and so on. Some of those men who were foresters joined private companies after their discharge, and some of the loggers and lumbermen went back to their companies with some understanding of what forestry is all about. So from that point of view it had some effect.

Beyond that, I should say that foresters had to make their own way, they had to create jobs. Some forestry graduates, of course, had a bent for private employ even while they were in school and took employment at anything that was available--sometimes engineering work, sometimes logging.

However, I'm glad to say that many of them retained their forestry ideas and principles as to what could be done in the woods at very little, if any, expense, and they very gradually worked themselves into very prominent positions where they could actually do something. Outstanding among those was Swift Berry. He was in the Forest Service for many years but resigned in the mid-Twenties to go with the Michigan-California Lumber Company. He gradually worked up to the managership of that company and, I believe, a vice-president. When he was retired, he shortly thereafter became a California state senator.

Then there was Richard Colgan. He joined the Diamond Match Company. When a man in those days quit forestry, whether it was with the federal service, the state or a university, to go with a private company, he was looked upon as having left the fold and to have gone over to the enemy. That was even said of Colonel Greeley when he quit the chief forestership to become secretary-manager of the West Coast Lumbermen's Association in 1928.

Maunder: Were more jobs in private industry made available to professional foresters after the war?

Fritz: There were always jobs in the lumber industry for foresters--not to

Fritz: practice forestry, but to do some of the work that was necessary in the lumber industry. It was unfortunate that more foresters didn't make the changeover like Dick Colgan and Swift Berry, because they sold their ideas to their principals, and, in turn, they gradually got the logging personnel sold on a different method of logging.

In California, for example, I remember that Swift Berry and Dick Colgan were looked down on for a while because they quit what the others called "the profession of forestry," and yet these men did so much in their companies that they became top men and were able to change their companies' attitude completely from liquidation to operation designed to achieve permanence.

Maunder: Going back to this World War I period and the period right after it, this was a time in which Pinchot was no longer affiliated directly with the Forest Service. Yet, as you say, he was having quite a considerable influence. How was he doing this and what channels was he using to exert this influence?

Fritz: Pinchot was influential until the time of his death. Pinchot, as I believe I stated earlier, had a magnetic personality and a great deal of energy. He had wealth, and he could indulge in activities which were denied a man without that kind of money. It brought him, as you may remember, the governorship of Pennsylvania for two terms, and he spearheaded several studies and was a frequent speaker. I recall distinctly one talk he made in 1940. If you're interested in that, I'll make some comments on it.

He gave that talk before the Society of American Foresters at their annual banquet in Washington in 1940. Pinchot had a great many friends and close adherents in the Forest Service--men like Earle Clapp, Raphael Zon, Ray Marsh, Chris Granger, and Dana Parkinson. They were all fine men, up to a point; as to their philosophies, they believed in force, and they couldn't see that anyone else could have any knowledge of the subject but themselves, and they were going to force themselves and their philosophies on others.

As you know now, that didn't work out. In the case of Earle Clapp, he even tried to force his philosophy on the schools. He tried to get the schools to adopt the Forest Service approach and practically be under the control of the federal Forest Service. He was badly defeated on that by the school men themselves because school men want and should have absolute independence of any outside influence, whether it's public or private, as long as they are constructive.

Maunder: How did Clapp go about this? How were his efforts rebuffed?

Fritz: When Earle Clapp was acting Chief Forester, he wrote a letter to all regional foresters and heads of experiment stations, requesting them to influence the forestry schools to slant their forestry teaching in favor of federal regulation (the U.S.F.S. policy). The

- Fritz: ever-watchful H. H. Chapman got hold of a copy through his private underground. Copies were mailed broadcast among foresters. It created a furor. It was socialism reduced to a dictatorship and gradually died out.
- Maunder: What was Pinchot's vehicle for exerting this influence? Was it purely this little group of his loyal supporters still remaining in the Forest Service, or was it the Society of American Foresters or any other conservation group he was a member of?
- Fritz: Pinchot was chairman of the first committee, as I recall it, in 1919 to start the ball rolling toward a regulatory law.
- Maunder: Chairman of a committee of what group?
- Fritz: I don't recall the name. The Journal of Forestry contains the story in one of its early 1920 numbers. Pinchot's name was magic among foresters and anathema among lumbermen. We must say that Pinchot's motives and those of his cohorts were good. Their method of approach, I think, was entirely wrong.
- I used to look at it something like this: If you were a salesman trying to sell a new product to a new prospect, you certainly would not go into his office and call the man a name right away and antagonize him. You would be friendly and you would try to tell him that the product you were selling would be helpful to him, that the cost would be recovered plus some extra return, that he could do his job better, more cheaply, and he would survive better in the competitive field.
- But foresters didn't do that. They put on the gloves and they went right at it, and that, of course, developed great opposition among the timberland owners and the operators, from which the profession of forestry is still suffering.
- Maunder: This committee which you spoke of which Pinchot headed up right after World War I--that was a committee of what group?
- Fritz: Principally foresters. I believe it was all foresters, from my recollection. I was interested in it only in an incidental way.
- Maunder: Was it a self-appointed group, or was it a group duly appointed by an established agency or association?
- Fritz: It was a Society of American Foresters committee. In fact, I believe it was wholly a committee of the Society of American Foresters, and in turn they got Congress to have a study made. It was one of the earliest studies of that kind and was followed later by the Copeland Report.*

*U.S. Department of Agriculture: A National Plan For American Forestry ("Copeland Report"), 2 vols., S. Doc. 12, 73rd Congress, 1st Session, 1933.

Fritz: The last one was The Timber Resources Review, which purported to be merely a statistical study of the present situation as to lumbering, timber and forestry. But the data was generally interpreted by the Forest Service to suit its own desires, and I'm very sorry to say that I believe this is the case today with the so-called Timber Resources Review Report.

Maunder: Is this a condition, in your estimation, that has always been present in the resources reviews and reports?

Fritz: In general, yes, at least up to the present (1958). There are new men in the Forest Service, considerably younger men than my age class, some of whom have adopted the tactics of the old-timers. I've got to say something about those old-timers. They were men of excellent character, excellent ideas, and they were sacrificing something. They could have done better in other fields but they elected to crusade in behalf of the better management of timberlands.

However, they were almost wholly ignorant of history and economics. If they had only sat down to ask themselves why the situations were such as they were, they would have been better able to make recommendations.

Now, I feel that Pinchot and his people did a great job while he was Chief in contacting several timber owners and making management plans. They are all pre-1910, as I recall, and are now museum pieces. Not one ever amounted to anything or was adopted, but nevertheless they were good for their time. The times were just not ripe for the application of such plans.

However, I believe the lumber industry could have done a great deal at no cost whatsoever if it had not been antagonized. There were a few, of course, like the Hardtner in Louisiana who absorbed some of it and went off on their own--at first without any support or sympathy from the foresters. When a lumberman in those days said that he was going to do something in his woods, he was promptly laughed at and held suspect. If he kept quiet and after five or ten years, showed that he was actually doing something in the woods, he was acclaimed.

Maunder: Did the war years carry with them certain regulatory provisions for cutting practices to provide raw materials needed in the war?

Fritz: There was no regulatory law passed before or after World War I, but there were many efforts. The first one was started by Gifford Pinchot and his followers, before the war was hardly cold. I recall that many foresters lined up with him.

A report was prepared--I've forgotten the name of it but I'll fill it in later when I go over the text--which castigated the lumber industry and made some wild statements about an impending timber

Fritz: famine.* It scared a lot of lumber people, of course, and made some others feel that maybe they were missing a bet by not buying more standing timber to ward off for themselves a famine of logs for their sawmills. Those men got badly burned. Even before the war, you'll remember, Pinchot spoke frequently about an impending timber famine. This stimulated some lumber people to go out and invest in standing timber with the expectation that timber was going to be very scarce. Some of them had to hold that timber for thirty or forty years and pay taxes on it all that time with no return on their money. Some of them had to sell for what they paid for it. A few others did very well by holding on.

Unfortunately, it created a very bad impression of foresters among lumbermen. I think the forestry profession is still suffering from that, and I'm very much afraid that the publicity and the propaganda that has gone out as an interpretation of the Forest Service Timber Resources Review released this year (1958) might return some of that antipathy on the part of lumberman towards foresters as being unreliable forecasters.

* U.S. Department of Agriculture: Timber Resources for America's Future, Forest Resource Report No. 14 (Washington, D.C.: U.S. Government Printing Office, January 1958.)

VI TEACHING AT UNIVERSITY OF CALIFORNIA IN THE TWENTIES

Courses

- Fry: When you decided to come to the University of California, there were two men on the faculty that you knew before, Donald Bruce and David T. Mason. Did they influence you to come?
- Fritz: Yes, I knew both while I was in the Forest Service in Missoula, Montana. In fact, Mason was my boss there and earlier was the one who encouraged me to come West to help him on a study of the lumber industry. (I had declined two jobs offered me by the U.S.F.S. when Mason wrote me stating that one is permitted only three offers. My New Hampshire job was near its end, so I accepted.) The report on that study was not published until after World War I. It was a valuable experience for one who later was to teach lumber manufacturing.

To gather information for the Mason report, I had to travel to the sawmills of the Inland Empire, spending a week or more at each. I visited the offices of a lot of pine companies in Idaho and eastern Oregon, and two in eastern Washington. After all the condemnation of lumber people I had read and heard while a student, it came as a pleasant surprise to find the Inland Empire managers and assistants such cordial and cooperative men.

One day the manager of a large company, A. W. Laird, passed my desk and asked how I was getting along and if I was getting the cooperation I needed from his staff. After I told him it could not be better, he put his hand on my shoulder and said, "We like to help the Forest Service field men from Missoula and give them all the data we have for use in their studies, but we are never sure of the fairness of the officials in Washington."

Bruce, Joseph Kittredge, Steve Malvern, and I were in the same office, all of us assistants to Mason in that study. All came to California. But I have wandered from your question.

Yes, Mason recommended me to Walter Mulford to teach wood technology and lumber manufacturing. After my assignment with Mason in Missoula ended, June 30, 1915, I was transferred to the Coeur d'Alene National Forest in northern Idaho. Shortly thereafter, Mason and Bruce resigned from the U.S.F.S. and came to Berkeley to help Mulford organize the Division of Forestry of the College of Agriculture, as it was then known. Thirteen months later I was transferred to Arizona.

In the summer of 1917, I was invited by Mulford to call on him for an interview. I went to Berkeley from Arizona and while there, Mason

Fritz: invited me to his home for dinner where I met Ansel Hall and Knowles Ryerson, both of them seniors in forestry. I was interested but told Mulford I was planning soon to enter Officers' Training Camp and would not be available until after the war. Mulford renewed his offer in January, 1919, and I accepted.

Fry: The lumber industry was pretty much behind the Mason report, you think?

Fritz: Yes indeed. They would appear and participate in discussions.

Fry: In support of it?

Fritz: Yes. They thought it a good thing and they offered help in any way we asked.

Maunder: And then you went to California?

Fritz: Yes. Returning from France and after a short visit with my relatives in Baltimore, I went back West by train to take up my duties at the University of California. My wife had spent the war period in Washington as a secretary to one of the Ordnance Department Colonels. After the Armistice she went to Florida to stay with her folks. When I returned to the States from France, in May, 1919, she came to Garden City, Long Island, New York (Mitchel Field) to meet me. I had to remain to muster out my squadron and then in June, I was discharged.

My wife accompanied me to Baltimore and then to California. En route we stopped at Flagstaff, Arizona, where I spent a day with my pre-war boss, the great G. A. Pearson, director of the Fort Valley Forest Experiment Station.

Incidentally, while I was hospitalized in France for an appendectomy, I received letters from both Mulford and Pearson, each offering a job and at identical salaries, \$2,000. My choice was easy. I did not like federal employ and was really not suited for it by temperament, being an ingrained private enterpriser. But I looked upon the California job as temporary, perhaps three or four years, or until I could get my nerve system under control again. Although I loved forestry, my training was mostly (and better for) engineering, and I had a yen to return to it. But I am glad I stayed at the University and in forestry.

Maunder: Emanuel, when you made the transition from work in the federal service to work in the field of teaching at the University of California after World War I, how did your friends in the Forest Service feel about your decision? Was there any comment about it?

Fritz: I don't think there was any feeling against it. Rather I think that most foresters felt it was a good idea for field foresters to go into teaching. I had resigned from the U.S.F.S. before I was

Fritz: offered the University of California professorship. It was the policy of the Forest Service at that time to rather welcome a man leaving his own service to go even into private employ because they felt it "spread the gospel" of forestry.

In my own case, I was early disillusioned as to the necessity for crusading, and I felt the indirect methods were entirely wrong. I made a very definite break in 1924 with that particular group of foresters who tried to advance forestry by threats of socialistic legislation and by name-calling.

Maunder: And that was in 1919?

Fritz: Yes, 1919. My duty at the University of California was to begin on July 1. Since it was the vacation period and no students were in prospect until August, I didn't arrive until the middle of the month. Almost immediately I made a field trip at the suggestion of Professor Walter Mulford, who was head of the School at the time, to acquaint myself with the pine and redwood regions of the state. (The teaching began in mid-August at that time.)

Maunder: Were the courses that you taught that first year, courses that were already well established in the curriculum of the Forest School or were they new courses?

Fritz: They were standard courses for foresters. One was on lumber manufacturing (officially titled "Forest Utilization"). The other course was "Wood Technology." They had already been set up, but the School was new. It was organized in 1914 and had less than a dozen students at that time. The professor who had started the courses, Merritt Pratt, was more of a field forester than a sawmill man or a wood technologist, so I practically had to start from scratch. Pratt resigned to become State Forester of California.

Incidentally, I gave those two courses continuously for the entire thirty-five years I was on the faculty, constantly changing and improving them. Both gave me a chance to employ my mechanical engineering training in Baltimore and at Cornell. My title was assistant professor of forestry. However, I never taught forestry as a course except to pinch-hit for others occasionally. So although I had quit engineering for forestry, I was tossed right back into it.

Both were technical courses. Wood technology included wood anatomy, i.e., how wood is made up of cells, how the cells are arranged, how the cell pattern can help one to identify the wood and get an indication of some of its characteristics. The course included also the properties of wood, physical, mechanical and chemical, all related to the cell structure. It was a very interesting course and I enjoyed very much giving it. (For almost ten years it was required of criminology majors because wood is often involved in a crime. This made me a member of the criminology faculty also.)

Fritz: As a matter of fact, I first got interested in forestry through my "do-it-yourself" work as a kid working with wood. I had an excellent training in shop work for a period of four or five years. Also, I had collected about one hundred specimens of wood.

Fry: In Baltimore?

Fritz: Yes. The Baltimore Polytechnic Institute; very highly regarded by eastern engineering colleges. Dr. J. B. Conant, formerly president of Harvard and a postwar ambassador, who made a study of high schools for, I believe, a foundation or the federal government, stated to me while he was visiting in Berkeley that the B. P. I. was one of the best high schools in the country.

The title of my other course was a misnomer because when I took it over, I discovered that the description in the University's catalog of courses was: "the manufacture of lumber, the utilization of wood, grazing." Being a city-bred boy, I knew nothing about grazing except that cattle and sheep ate grass. Some western forests are, of course, utilized by grazing men on a very large scale. The Forest Service, after 1905, had a tough time with the grazing people over the use of Forest Service land. That's pretty well resolved now. John Muir was one of the first to condemn the practice of heavy grazing in the woods. He referred to the sheep as locusts.

Fry: I suspect a number of you on the faculty had to more or less put your textbooks together as you went. Did you find this true?

Fritz: Yes, Professors Record, Hawley, Chapman and Bryant did that. Bryant did such a good job on his sawmilling book that there was not a man in the country, including myself, who could have done it any better. I had considered at one time, in the 1940's, preparing a book on sawmilling and seasoning and "remanufacturing," as it is called. I made a fairly good start at it, but I was not interested in writing books just to impress the University administration.

I still have, I think, the best collection of material on the manufacturing processes in the files at the University of California up to 1954 when I retired. This material is now in Bancroft Library. Bryant's book served my purpose very well, but I kept my lectures up to date as improvements in lumber manufacturing were made. In fact, after World War II, I gave serious thought to a book to update Bryant's. Glad I didn't--further changes came so fast, no book would have been up-to-date at publication time.

Very few of our forestry students were interested in sawmilling. Those that were so minded have done very well. Many foresters still regard sawmilling as a thing foreign to them.

Fry: Forestry students of the first few decades were more interested in

Fry: the out-of-doors? They were primarily there for silviculture?

Fritz: Not entirely, but it was a strong motivation. I was as keen for the outdoors as the others, but after one has entered a forestry school he learns about the several branches of forestry. Some become wood technologists, some loggers, but most stay in some branch of forest management. I think if you should look into the backgrounds of the foresters of the first thirty years, you would find a high percentage of city-bred boys who had the good fortune to visit a forest or big park and became outdoor men as a result.

In my own case, reared in a large city, I think that the 600-acre Druid Hill Park in Baltimore and the woody environs of the Cornell campus had an influence on my decision later to quit engineering for some outdoor pursuit. Perhaps the clincher was the removal of the Fritz family to the country in 1907. (Father hated the city.) But the engineering had its influence too. It makes one practicalize his ideals. My courses at the University of California were more engineering than forestry.

If there is no logging in the forest, there is no need for forestry and no need for a sawmill. The owner of a sawmill that buys its logs from others has no need for a forester--but he may hire a forestry school graduate who has become interested in wood technology or the engineering aspects of lumbering.

Fry: Was the technology of lumbering largely overlooked then, in the total curriculum?

Fritz: Not at all. In some schools, more importance might be attached to silviculture and, nowadays, economics. In others, logging and milling were given considerable prominence. Our forestry schools are patterned after the European system where utilization is the principal objective and plays a big part.

In the West, the University of Washington and Oregon State College emphasized especially the logging phase. That was proper because even though logging is an engineering activity, it does affect the forest. But once a log is made and brought to the sawmill, its conversion is mechanical engineering. The logger is the key man, in my opinion. He can make or break the forester's plan for continuous production. Therefore, he should be not only an engineer but have a good understanding of forestry and be sympathetic toward its objectives and methods.

Sawmilling is not alone in requiring engineering applications. Wood technology requires it too for mechanical properties and seasoning. The latter calls for a good course in heating and ventilating, but at the same time, the anatomy of wood and the behavior of its cells must be thoroughly understood to make seasoning successful. The anatomy of wood can be regarded as applied botany.

Fry: Did you have any textbooks on such things?

Fritz: There was one by Professor S. J. Record of Yale University on wood technology. It was a very simple book. It was based in large part on work done in Europe. I had taken his course at Yale. No one knew much more about wood than one found in botany books. But Record and Professor Harry Brown at Syracuse added a lot of new information.

He told me once that I was his best student. If I was the best student, it was only because I enjoyed working with wood and because of my previous experiences with it. I had no biology courses in high school or at college, so had to go to summer school to study botany so that I could enter Yale. Until then, I did not know that wood was an aggregation of cells!

I had a collection of wood samples before I went to Forestry School, somewhere near a hundred, and when I learned more about wood from Sam Record, I discovered that I had mislabeled a lot of mine. I had misinterpreted descriptions of the woods in the books available to me at the time. One was Romeyn Hough's fine book on trees, and another was old Bulletin 10, by F. Roth, titled Wood. Other books were pretty sketchy. They must have been written by carpenters. [Laughter]

Fry: It appears that your Forest Utilization course was a field which was not yet well defined.

Fritz: It was well defined but very little text material was available until Professor Ralph C. Bryant, of Yale University's School of Forestry, wrote two books. One was on logging, the other was on sawmilling. He was not an engineer. He was the first forestry graduate in the U.S. (Cornell University), and therefore the first in the U.S. to receive a degree in forestry.

I was four years older than most of the students in my class, and being a Cornell graduate myself, Bryant and I became very good friends. In fact, Bryant and Record were friends until their deaths. I owe much to them for their help. Later Nelson C. Brown of Syracuse wrote a book on lumbering, and Harry P. Brown, also of Syracuse, wrote one on wood technology, a classic. Harry was quite a scholar. Incidentally, Harry Brown was one of my three professors in botany at Cornell summer school in 1911. All three were excellent teachers. I found botany very exciting.

Fry: Were your engineering studies at Cornell of any help to you at Yale?

Fritz: Yes. It was of great help both in wood technology when we studied products, and in Professor Bryant's courses, especially when our class went to Mississippi for the spring semester of 1914, where we studied logging, then sawmilling at the company's great mill some thirty or forty miles south at Bogalusa, Louisiana. The Great

Fritz: Southern Lumber Company had the biggest sawmill in the world at that time, 1,000,000 board feet per day. We were there for two weeks, at the close of which we had to write a full report on the sawmill, kilns and appurtenant departments. To me, it was very simple because sawmilling is a very simple engineering process. But some of my classmates had an awful time. Several could not figure out what made that carriage go back and forth. Could it be the man riding it?

I think I wrote something like 110 pages longhand for my report. It was illustrated with diagrams, flow charts, and equipment outlines, as I recall it. It was probably the biggest report that Bryant had gotten up to that time, and I was quite proud of it. Later on when I came to the University of California to teach, I used the report as a guide. Then Bryant asked me to donate it to the Forest School Library at Yale. I did so, and recently learned it is still there. (Incidentally, Professor Record wrote a book on the mechanical properties of wood while I was his student. He credited me in the preface for helping him--just another instance of my Cornell engineering being of help.)

Fry: I was wondering if you delved any into timber economics in your University course.

Fritz: Somewhat. Mason had organized a course which was called "The Lumber Industry." It was not so much technical as economic. It started with the history of the industry and continued through the full story. He was not at the University very long and I took over that course when he left. It drew students from the College of Commerce, some of whom were sons of lumbermen.

Then in 1927, while I was away on sabbatical and leave, and without any consultation with me, it was cancelled because somebody in the University administration felt that we had two courses that were more or less alike. Well, they were so only in small part; the course attracted an entirely different type of student. There was also a campuswide demand for cutting down the number of courses, apparently fearful of unnecessary proliferation. I was sorry to learn it had been dropped. I enjoyed giving it. It was my largest class, with most of the students interested in business administration. It was also a course which would have made an excellent book, separate from my proposed sawmilling book.

I was pleased that many of the students went into the lumber business and rose to managementships or part owners. This course was also an opportunity to sow some seeds in behalf of forestry and management for permanence.

Fry: Do you feel that the University of California had enough emphasis on forest economics at that time?

Fritz: Very little emphasis. In fact, who was competent to teach it?

Fritz: Mason had more experience in it than anyone else because of the study he had made in Idaho for the Forest Service. Some of it rubbed off on me.

Fry: You mean it was difficult to get someone to teach this because the field was not well enough developed then?

Fritz: Of course, you could hire a professor of economics, but economics is such an intangible thing that anyone could do it. An economist is pretty much like a philosopher--no one can contest with him. Each has his own ideas. It is not like an exact science where two and two always make four.

Fry: I was wondering if the difficulty was that forest economists were not available at that time, or if the field itself was not really built up as a field of study.

Fritz: At Cornell, I used some advance credit time on economics courses, including corporation finance. At Yale we had a course in forest economics. We used the book written by the German forester B. E. Fernow, and titled Forest Economics. The Germans practiced forestry not because they were emotionally concerned about the forest, but because it was a business and an economic necessity.

My mother, when I became interested in forestry, began to tell me about forestry in Germany. Her father was in the forestry service of the then Kingdom of Württemberg. Forestry, as she explained it, was not only the growing of trees but also their utilization. Incidentally, ancestry had no influence on my getting into forestry.

Fry: Fernow's Forest Economics was not really applicable to American forestry, was it?

Fritz: No. Our conditions were entirely different. But the principles of economics are the same the world around, i.e., you can't get blood out of a turnip. If there is no market for wood, there is no lumbering; then you can't practice commercial forestry and there's no need for it.

Even in the parks, the Germans and Americans use foresters for whatever they have learned about tree characteristics and forest management. Even park forests need some management. The theory of letting nature take her course in a large park is all wrong. People generate problems. The more people, the greater the number and complexity of the problems.

The market place sparks lumbering. Lumbering requires forestry for its permanence. The better the market, the more intensive forest management can be.

Fry: So you were primarily engaged in teaching the wood technology courses and some economics?

Fritz: During the Second World War, I was asked to give the forest protection course, which was really fire protection, and I taught that until the end of the war and thereafter continued with the sawmilling and the wood technology.

Maunder: What can you tell us about the early days of your teaching experience?

Fritz: It wasn't my first experience at teaching. I had four years of it in the Engineering Department of the Baltimore Polytechnic Institute, and at the same time I taught mechanical drawing for two or three years at night in the Maryland Institute. I came to the University of California with experience in teaching, and I really did like it, although when I left the Polytechnic Institute in Baltimore I felt that teachers are very much inclined to get into a rut. It was for that reason that I thought I would stay at the University of California only a few years and then go back into practical work, most likely engineering.

As time went on, however, I liked it so well, always had such a fine group of students, developed a great admiration for the University of California, and delighted in being with foresters in an engineering capacity. There was the closest relationship with young men (I was young myself at the time, only about thirty-three when I started). The first students, being ex-soldiers, were in their early or mid-twenties, so we got along famously. I also liked the state and liked the possibilities that the state offered, so instead of quitting after a few years, I stayed on and on.

One time in 1937, my wife said, "I don't think you're ever going back to engineering so I'm going out and look for a better home." We had a nice enough home at the time, but we felt we should have something better for the two girls. Fortunately, she found what we both felt was a very nice home with a large garden and we bought it.

Maunder: When was that?

Fritz: November, 1937. It's the house we live in today.

Maunder: That's when prices on houses were a good deal lower than they are today.

Fritz: That's right, and it was a good thing because professors didn't have much chance to save much. We've put in a considerable sum of money to make improvements and more than doubled the cost, to say nothing of furniture, drapes, rugs, and so on.

Maunder: In teaching your subjects, to what extent did you take your students out into the field to show them the actual conditions of sawmilling?

Fritz: The University of California, situated in Berkeley, is obviously at some distance from the forests; so at its very start, before I came,

Fritz: the school set up a three-months' summer field course, attendance to which was required and, incidentally, without credit. It was one of the requirements for graduation and obtaining the degree of Bachelor of Science in forestry. At that time, three of the professors would take turns. Each one had one month. My month was generally the third, and I taught the field work, principally timber cruising, logging, and milling. I took the students out on visits to nearby sawmills and logging operations.

Summer camp teaching was very satisfying and it was a wonderful way to learn to know the students, what they were capable of, their drawbacks, their oddities, and their capacities. As a result, the faculty members were able to place the graduates when an opportunity presented itself in categories to which they were best fitted.

One particularly interesting summer project was the "mill-scale study." Each student had a post in the mill, actually in pairs. At a signal one of each pair would move to another post. In this way the students got a very good idea of what happens to a log in the mill.

I'm very glad to say that those early men got into very good jobs, that is, those who stayed with forestry. A few of them went into other lines of work. During a few summers, I had also a few days of the silviculture, about one week, but other than this, I did not teach any forestry courses.

Maunder: Who among your students stand out most vividly as being outstanding men?

Fritz: Well, one of the earliest was Tom Oliver. He was the son of a lumberman and shortly after his graduation became assistant manager of the Hobart Mills, and later full manager. When that company came to an end, he became manager of the very large Fruit Growers Supply Company sawmill at Susanville, California. Until his retirement, he was the manager of a large sawmill at Medford, Oregon.

Then there was Lawrence C. Merriam, the present Regional Director of the National Park Service in San Francisco. There was Herm Miller, who became a very well-known logging engineer, first with the Pacific Lumber Company in California, and then with Crown Zellerbach in Oregon and Washington. In the same class was John C. Sammi, who is presently a professor of forestry at New York State College of Forestry in Syracuse.

The contact with university students was most pleasant, and after my retirement in 1954 it was this close association with young men that I missed most, and still miss. Naturally, in any group of students there are some students who stand out and are easily picked as "winners" in the future; there are others who will merely be good workers, and others who never should have gone to a university.

Fritz: I was early impressed with the way Nature takes care of the distribution of men as to their capabilities, much like the distribution of trees in a forest. For example, there can be only one president of any one company, only one president of the United States, only one governor of a state, and although they change at intervals, the number who can rise to such distinguished positions is quite small. But there's a much larger field for the directive work, the technical work, the management work, and so on. Then there's a third group that will always be doing work at a desk or doing field work as an employee who has very little chance to rise. Their jobs are no less essential than that of the higher officials.

It reminds me of an editorial I read as a young man in one of the Baltimore papers in which the author stated that a man must learn what his capabilities and limitations are, and that he would be very unhappy if he felt he should have gone higher in competition with his colleagues. He should recognize his limitations and be the best and happiest in the category to which he was fitted.

Fry: Did you do any work through forest extension on lumbering?

Fritz: No, not through the Extension Division. I might have suggested it several times but it didn't work out. Almost all of my private redwood forest management work was of the nature of extension, but not officially.

Fry: I think I noticed a few letters in your files, letters routed your way asking for specific bits of information that someone in a lumber company would want regarding either wood product uses or lumbering technology.

Fritz: Oh yes, I had a lot of letters like that, maybe some hundreds, not only from lumber companies but also individuals who had a wood problem.

Fry: You seem to have had a lot of letters to answer all the time in giving advice like this.

Fritz: They were very interesting letters and I answered every one of them. Some led to friendships that opened the doors to much help and information of use in my classes. A teacher sitting at a desk doesn't have any lumber to handle, he doesn't sell any, he doesn't buy much. So he knows that when a man writes a letter, he has a problem and you begin to think it over. It's a problem that you have probably never thought of before. Of course, when I was new and green here, I had a lot to learn, even though I had been in sawmills a great deal before I came here to teach. I started to say, that looking back over my consulting work, if I had been interested in making a lot of money, I should have employed my consulting work in the sawmill because in my opinion, the lumber industry at that time needed mechanical engineers far more than it needed foresters.

Maunder: At that particular time.

Fritz: Yes. That isn't true now.

Maunder: The mechanical people have more than caught up now. It's the land managers that you need now.

Fritz: It is land managers we need now, but we still need general engineers because of electrification and extensive automation. It won't be very long before we have the helicopter doing the log transportation. It would be a great aid for better forestry. That's just my opinion. I've been in communication with the Hiller people for some time, but this company was sold to Fairchild. Hiller had on the drawing boards a helicopter capable of lifting a twenty-ton load. I don't know what Fairchild's interest in a large helicopter is.

Maunder: Harry D. Tiemann has certainly made a contribution to the technology of forestry. He must be ninety years old now.

Fritz: Let me tell you something about Tiemann. Tiemann could do things in wood technology that very few foresters could do, because very few foresters have had complete courses in physics and mathematics and certainly practically nothing in theoretical mechanics. Tiemann came into the Yale Forestry School as an M.E., a mechanical engineer, and with a knowledge of steam, heating and ventilating, good physics and good mechanics and so on, a natural for those days. He was at Madison Laboratory, you know.

Before 1910, Tiemann had the same trouble at that time in talking to people manufacturing lumber or using lumber that those of my age class had in trying to promote the introduction of forestry. And Tiemann deserves a great deal of credit for breaking the ice because he convinced lumbermen that they could do their seasoning more perfectly, faster, more cheaply by studying the physical laws that affect the seasoning of lumber.

Tiemann did the basic work, and I do hope you'll get him on your records because I think he never got full credit for his work. The great Forest Products Laboratory at Madison, Wisconsin, has carried forward Tiemann's work in lumbering seasoning as well as many other developments in which wood is involved--design of wood structure, the chemistry of wood, its physical and mechanical properties, wood preservation, and so on. It was easier to interest wood industries in its work than it was for foresters to interest them in forest management. It was of more immediate and practical value to them.

Faculty

Fry: What did you think of the University faculty outside the School of Forestry when you came here?

Fritz: I made many friends in other departments. There was a large coterie of distinguished professors. It was stimulating to converse with

Fritz: those with whom I came in contact. There were very few "stuffed shirts," but there were a few Communists. One in the English department used to visit lumber towns and stir up trouble, right after World War II. He was probably the one who called the redwood area the "green hell of the redwoods." If he ever had a meal at a western logging camp, he never ate so well at home.

There also were some cliques. One would meet at lunch around a large circular table in the Faculty Club to discuss campus politics, a subject that never interested me.

Shortly after my arrival, I called on the Dean of the College of Engineering, thinking that since we were both Cornellians and engineers, I could enlist his help to attract some engineer students to my classes. I was taken aback when he started giving me a lecture on conservation. (In those days, forestry was regarded as a synonym for conservation.) Pointing to his waste basket, he in effect said, "If you foresters are really interested in conservation, you could start saving trees by reducing the waste paper load."

I learned from him that there must have been a hassle over setting up a forestry school. Apparently some felt that the engineering department could give all the courses needed. I got the idea that our little forestry school started off under a cloud.

Walter Mulford, then head of the Division of Forestry, told me about the Academic Senate and that I was automatically a member. He volunteered to take me to several of its meetings and acquaint me with some of the issues. Well, I went and listened to the debates. Apparently, there was a schism in the Senate on the matter of a president to succeed the retired great Benjamin Ide Wheeler, and other matters that I have forgotten. The debates seemed childish to me, small stuff and not in accord with what one might expect from a body of mature professors. The proceedings at the first and subsequent meetings left me with a bad taste.

After that, I attended very few Senate meetings. I was not interested in internal politics. But perhaps one should expect some violent disagreements in such a large body of professors, especially among those who had no contact with the outside world.

Maunder: But the academic senate in any institution involves strong debate just as any deliberative body does. Sometimes this debate can get rather acrimonious and seem perhaps even petty in some cases. But that's part and parcel of democratic organization, isn't it?

Fritz: That might be, but some of the men spoke like children instead of grown-ups.

Maunder: Has this always been true of all of the Senate meetings you've been to on this campus?

Fritz: Some of them are just ordinary meetings about routine matters.

- Maunder: But surely you wouldn't judge the Academic Senate on one visit, would you?
- Fritz: It's pretty well known over the campus and it was also published in the newspapers, and Senate proceedings.
- Fry: This was what year, Professor Fritz?
- Fritz: 1919.
- Fry: Oh yes, this was the year that began what some refer to as the "Faculty Revolution." Yes. This was a very tumultuous year.
- Maunder: Over what?
- Fry: Over the presidency, and also over the relationship of the faculty to the Regents. That was a pretty brutal initiation for you, probably, Professor Fritz.
- Maunder: So you were never very active in the Academic Senate from that point on?
- Fritz: No.
- Maunder: Were your colleagues in forestry of a like mind, would you say?
- Fritz: I don't think they went to the Senate meetings very much until much later when some additions were made to the forestry faculty.
- Fry: Yes, you sure can't ignore the faculty Senate, because it has at least two very powerful committees that could make or break anybody.
- Fritz: I would rather wait for my promotions than to get them in that way.
- Fry: Is there any other way you can characterize the forestry faculty, rather than its lack of relationship to the Senate?
- Fritz: Well, the other part of that was that in those days, there was a hassle over public regulations. Federal regulations of lumbering were being pushed by a group headed by Pinchot. And this school, I think to a man, didn't agree wholly with Pinchot about regulation: If you want regulation, Pinchot's was a heck of a way to go about it. And there were quite a number of foresters in the Forest Service also who did not agree with Pinchot. We felt things like this should be done on a cooperative basis and that was Bill Greeley's big point. That's what made Greeley great but lost him the friendship of Pinchot.
- Maunder: Emanuel, when did you become full professor?
- Fritz: I was made an associate professor in 1922, after I was here three years, and then I was made full professor in 1950. So I was on the

Fritz: faculty for twenty-eight or twenty-nine years as an associate professor, and for twenty-two of those I got no increase in rank or salary. Now you shouldn't wonder why I was doing consulting work on the outside: I got \$325 a month (minus ten percent during the Depression days. The University employees were the only state officials or employees that took a Depression cut in pay.)

One day, casually, I asked President Sproul, "Why don't I get a promotion?" And he said, "You were never recommended by the head of your division."

I heard, when I was in Washington in 1938 as a consultant in the Interior Department for three months, that a good friend of mine in California, without my permission (unless it was a facetious one), undertook to have some recognition conferred on me here at the University. I don't recall what it was. Word of that must have gotten to Mulford because I got a letter from him telling me that if he didn't hear from me to the contrary, he would assume that I am not coming back and that I would take a job in the Interior Department. (I actually was offered the number two spot.)

Well, that sort of floored me. That was assuming I wouldn't tell him that I'm going to resign if I intend to. I'd like to find a letter that I wrote to him about that. It must be in my files in Bancroft. That was not very nice of him.

I had many other opportunities. I had three different deanships offered to me. I turned them down without talking with Mulford about it.

Fry: Why didn't you let anybody know? I thought that half of the beauty of getting offers is letting your present superiors know that you are held in high esteem on other campuses.

Fritz: I'll tell you. You mentioned Lovejoy yesterday. I was offered the deanship at Michigan State, and as a matter of fact, they worked awful hard on me. They were angry that I did not accept. While in East Lansing, I called on P. J. Lovejoy. I knew him well and just wanted to say Hello to him. He asked, "What are you doing here?" And I said, "To talk to the president of the University and to the dean of the College of Agriculture, and to look over the school at their invitation. They want me to come here as dean."

And he said, "Are you going to accept?" I said, "I'm not going to accept until I can talk it over with my family."

He laughed and said, "Oh, you're going to do some academic high-jacking when you get back." I answered, "Not at all. I have never licked anybody's boots for favors in my life, and I'm not going to start now."

Fritz: In fact, on the train going back to Berkeley, I thought it over, decided against it, and telegraphed my refusal. While in Michigan, I also called on Sam Dana, dean of the Forestry School at Ann Arbor. We conversed about the M.S.U. offer and at one point he said, "I hope you don't accept. Michigan forestry is not big enough to have two aggressive and competing deans." I had much respect for Sam. Perhaps his remark had a bearing on my negative decision.

Mauder: What were the other schools that gave you offers? You say there were three.

Fritz: Idaho and Syracuse. At Syracuse, it was at the time Nelson Brown thought he was going to get the deanship (I was his speaker at the big annual dinner they have). He was the acting dean and thought sure he was going to get it. I had some other information but I couldn't tell him. He drove me down to the train. It was a midnight train to Albany where I was to interview Graves, the head of the State Department of Education.

Brown didn't know exactly why I was going there, but on the way down to the train he tapped me on the knee and said, "Fritz, I'm going to be dean of this school, and when I'm dean I want you to come here as the head of the Department of Utilization." I had been offered that position once before, back in 1922 after I was at the University of California only two or three years, and I turned it down then without telling anybody about it, although Mulford knew about it. (He told me about it.)

So I felt awfully bad about it because Nelson Brown was a good friend and a nice friendly chap. It was rather embarrassing to be his principal speaker there that night.

Mauder: Who was the man appointed then?

Fritz: Sam Spring. I was at Cornell at the time as an exchange professor, and I knew a little about what was going on and that I was one of those who was being considered. But I let Dr. Graves know at the start of our interview that I was not interested and I gave him my reasons. He had given me a long spiel about the new building named for Trustee Marshall, Bob Marshall's father, and that it was only the beginning of New York State's largess to Syracuse. The Onondaga County delegation was very powerful and ambitious for Syracuse. It was this delegation that murdered the second forestry school at Cornell in about 1932, after a fresh start in 1911.

Mauder: The Mulford papers are at Bancroft Library, aren't they?

Fry: They are probably there in the University Archives section.

Fritz: Well, you'll find an awful thick file on Fritz in there. I'm sure he kept a lot of notes on me. He would never come out clean and straightforward and discuss things with me, so I practically ignored him. Naturally, I wanted to know where I stood but things would

- Fritz: leak out once in a while, and I gathered that he was piling up a lot of evidence against me.
- Maunder: Mulford was?
- Fritz: He was certainly wishing that I would resign. He made that clear. Now, let me see. Once I had talked with him about the fact that the school has no forest and we should have one because the forest is the forester's laboratory, and none of us will know as much as we ought to know to be effective teachers of forestry unless we have a forest where we can cut our eyeteeth in management.
- His reply was, first of all, that it would be too heavy a drain on our finances, without his even having gone into it. He could have gotten the finances at that time. And second, if we wanted to manage a piece of land like that we might make a mistake which would be a black spot on the forestry profession. That was the clincher. From that time on, I thought the man was either nuts or he had no guts. I think the latter was more true. The President of the University of California told me once--I shouldn't repeat this--told me that, I don't remember the exact words--
- Fry: That was Sproul?
- Fritz: Sproul, yes--that, well, "Mulford doesn't have a whole lot of courage, does he?" Something like that.
- Maunder: Emanuel, what was the tenure situation here at Cal when you came to the school?
- Fritz: I came here as an assistant professor, and I had the usual three-year probationary period.
- Maunder: And when did you establish tenure?
- Fritz: At the end of three years. Tenure comes automatically when one is made an associate professor.
- Maunder: So you were protected to a considerable extent by that tenure, were you not, in the disagreements you had within the department? You were actually beyond the--
- Fritz: Reach? They could reach me all right. They tried to. The best way to reach a man is to deny him any promotions.
- Maunder: In other words, you feel that there was a systematic effort made to discourage you.
- Fritz: I'm sure of it. I once asked Mulford, "Is there any future for me here at the School of Forestry?" And he said, "No." Now, you couldn't be any more definite than that.

Maunder: Had you no support from your colleagues?

Fritz: We were a very friendly group. They knew nothing about it, and I wouldn't take it up with them. That would be putting them in a bind and wouldn't be fair to them.

Fry: And yet you did stay, and you did have offers of better positions elsewhere, and you apparently were considering staying in Washington, D.C., in the Thirties when you went back, according to a letter in your files.

Fritz: I had hardly arrived back in California in 1933 from Washington when--let me see, it comes clear now--Lee Muck wanted me to stay in Washington as assistant director of forestry.

Fry: In the Department of Interior?

Fritz: Yes. And I declined. If I had advised Mulford about it, he probably would have encouraged me to accept; I don't remember all about that. There is some correspondence in my files on it. About two years later, the offer was repeated, but this time to be director of forestry, when Muck was moved up to be assistant to the secretary, Harold Ickes.

Fry: And you still said No.

Maunder: What was the overriding consideration for your refusing these other job offers?

Fritz: First of all, even though I liked Washington (I still think it's a wonderful place to rear an American family)--I had the wonderful opportunity as a boy to spend my summers in Washington with an aunt--I liked Berkeley and the University much better.

Fry: And you had a lot of relatives right around there too.

Fritz: Yes, I was born in Baltimore, only forty miles away. Once I walked to Washington on a bet as to the time it would take--ten and a half hours.

Fry: Wouldn't it have been good for your family then? Or what were your reasons?

Fritz: Because of both children. I liked the University of California, I fell in love with teaching, I liked the kind of students we got, and I was getting so much interest and support from the sawmill people for my lumbering course and wood technology, that I thought, "I can't afford to lose all that."

About that time also I was getting deeper and deeper into redwood forestry, a field that I thought I was completely divorced from when I came to the University of California in 1919. And as for

Fritz: the returns, the salary, we were living on it. We had some additional income plus the bits I could pick up in consulting work. That didn't pay very much, it never did. But it was profitable in two ways: It gave me a little extra money and also it gave me a more complete and clearer insight into what makes the lumber industry click and why they were so hesitant in adopting better forestry practices.

Fry: You had this continuous feed-in and feed-back with industry.

German vs. American Forestry in the Early 1900's

Maunder: You've mentioned several men in the course of this interview who have been in a sense pioneers in their field and have led industry and forestry into taking steps that needed to be taken. Mason was one, Tiemann is another, and you've commented a little bit on the character and the personality of these men. I'm sure you've seen others similar to them over the course of your career who have made similar contributions in other areas of leadership in forestry, the early foresters.

Fritz: I don't want to take your time to go over that now.

Maunder: No, but what characteristics do all of these men seem to have had in common?

Fritz: They had an intense love of the outdoors. They were incensed over the way the Public Domain was being administered. The Forest Service was set up in 1905. It was the time of Theodore Roosevelt and Gifford Pinchot, Ida Tarbell and others who were giving big industry a bad time.

I was an engineering student at the time. Having considerable spare time, I read many, perhaps all, of their speeches and articles in the magazines. For the public speaking class, I prepared a speech on conservation, based on T. R.'s and G. P.'s writings (I still have the pencilled copy). I was on G. P.'s side but at the same time could not see how every ill could be corrected as quickly as these energetic people seemed to think was necessary. I noted early the antagonism they aroused among forest land owners and operators. Hindsight tells me some of these fine people were motivated not only by bearing down on the need for better forest practices but also by creating for themselves the images of saviours.

Among the more selfless in the days before 1900 were Dr. J. T. Rothrock of Pennsylvania, Dr. Samuel B. Green of Minnesota, and Dr. C. E. Bessey of Nebraska. These three were botanists, interestingly enough.

Pinchot was the principal publicist. He had wealth, charisma and

Fritz: energy, and he revelled in publicity. Then there were the three Germans.

Maunder: Who were they?

Fritz: C. A. Schenck, B. E. Fernow, and F. Roth. Schenck and Fernow were forestry trained. I don't recall if Roth had formal forestry training but, like many Germans reared in or near a forest, he had ingrained knowledge of the forester's art. These three Germans had a profound influence on American forestry. (That was true also of French farmers who had a little woodlot. They knew the species of trees in terms of value and how to manage them. I noted that while soldiering in France in 1917-1919.)

Pinchot, of course, studied forestry in France in the 1890's. But this, it seems to me, served him the better to handle the political end of forestry promotion than to manage forests.

After we began to train foresters in the U.S. (1898 et seq.), the three German foresters' influence increased. Except for these three, none of the forestry teachers knew much about forest management other than what they read in European books, much of which did not fit American forest or economic conditions. They were all German.

To the three one should add Carl Schurz for his management of the Interior Department. (And incidently, Elwood, you have done some writing on Schenck.) If Pinchot and his young foresters had given Schenck, Fernow and Roth more support, American forestry on private lands could be much further along than it is right now. Just think that over, and if you want to ask a question--

Fry: Yes. Why?

Fritz: I am reminded of something my mother told me when she learned I would go back to college to study forestry. Her father was a "Jaeger" in the Black Forest, a sort of guard with hunting privileges and in charge of a small forest unit. She described his nursery, the planting and harvesting. The forest was handled like a crop to be reared and harvested. Sentiment was secondary.

Maunder: I think that what you're getting at is that Fernow, Roth, and Schenck were more realistic than the American first echelon of trained foresters. There was a difference. The first Europeans in America were more pragmatic in their approach to forestry, whereas the American group, led by Pinchot and his early cohorts, were more crusaders, weren't they?

Fritz: Crusaders and idealists and full of missionary zeal. I do not use these terms in a derogatory sense. They were fine men and did a great job.

Maunder: There was a difference between the pragmatic approach and the

Maunder: idealistic approach. Is that what you have in mind?

Fritz: Yes. In Germany, forestry developed from immediate needs after centuries of warfare and exploitation. Forestry in Europe was a long time growing up. In America we still had an abundance of primeval forests.

Pinchot and others of that time had an idea to sell but no customers. They had difficulty even getting their foot in the door to talk about their "product," if you want to call it that. The product would be the practice of forestry. And regrettably they followed methods that I don't think were particularly kosher. They antagonized people. It's exactly the same situation you have in California right now with the Sierra Club antagonizing not only the owners but a growing portion of the public, the local people.

The objective was worthy but the approach to its realization was unwise, heavy-handed and close to socialism. The latter, socialism, grew stronger into the 1930's and up to about 1950. Public ownership was not in accord with our spirit of American private enterprise, mistaken as it sometimes was and is.

Maunder: But it seems to me that we're talking about not only two very different peoples, but we're talking about two very different cultural situations in which these two very different groups of people had to operate. The European forester came out of a situation in which the land, for the most part, had been owned by the aristocracy, the landed gentry, for hundreds of years.

Fritz: Yes.

Maunder: Barons, so to speak, had employed "Förstmeisters" to manage their lands for what could be cut from them in the way of timber, what would be gathered in the way of fuel, what would be done with them in the way of using them as hunting preserves, fishing grounds, and so on. And they had Förstmeisters to do this; they were employed people. And these Förstmeisters were like lots of other people in the European situation: they handed their craft on from son to son.

That was a totally different situation from the one here in this country. We didn't have the same condition at all, and our foresters moved into a situation that was totally different from what their forebears had come from in Europe, our German mentors being "Daddy Roth" at Michigan and Fernow at Cornell, later at McGill (at Toronto) and Schenck down in Biltmore. So you've got to take into consideration the cultural differences.

Fritz: That's the reason I said that the German foresters who came over here had several centuries of forestry background, while our foresters had to start from scratch.

Mauder: They started from scratch to sell an idea. The other breed didn't have to sell anybody, did they? They had themselves been brought in and assigned work and they were perpetuated like a bureaucracy over the years to maintain and carry out their professional duties, whereas in this country a profession had to be created out of whole cloth and it had to sell its basic ideas to a country that was not at all sympathetic probably to any of these ideas in the beginning. And Pinchot and his group therefore had a different job.

Fritz: The Germans and other Europeans had already established forestry and had developed management methods that are in vogue today, such as clear cutting and selective cutting. We didn't start them. We only applied them to an entirely different forest, different as to species and types. Our job was to convert virgin forests to manageable forests. We had to learn from trial and error.

I have been described several times, when being introduced as a speaker, as the inventor of the selective cutting system in the redwoods. That isn't correct. It was already established. In my early days in California, I called it selective logging, later I felt selective cutting was more correct. Selective logging could be understood to mean selective picking up (yarding) of logs already made. I merely determined that the virgin redwood forest lends itself to selective cutting. That was in early 1923 when I made a study of second growth and found several trees on the plot that had survived earlier logging fires and responded with remarkable acceleration in growth rate.

Fry: In other words, the American foresters didn't have the economic background for American forestry that the Germans had for European forestry?

Fritz: Nor the experience of actual practice. And, as for the philosophy of forestry, I think that basically they were more recreation-minded than pragmatic in the sense that forestry should go with lumbering. Yet the cry for forestry was to prevent a "timber famine." We had no idea which system of management was best for our virgin forests. We had to learn, and our economic situation did not permit close utilization.

Mauder: That wasn't true in the early days, was it, Emanuel?

Fritz: Pinchot did a great deal to have articles written on waste utilization--what you can do with the waste or how to make less; how to arrive at closer utilization, which was in its infancy. There was one drawback. The American foresters had had no chance whatever in those days of managing a forest.

You take, for example, Walter Mulford. He was about the second or third man to get a degree in forestry in this country. Now of course he had Fernow as a teacher. He also had Philip Roth as a teacher. He was lucky in that respect. He got his forestry from men who had had practical experience.

Fritz: But when Mulford was out of school, what could he, what could Pinchot, what could the others do without a piece of land to manage? Pinchot, through his family connections, was hired to advise George Vanderbilt on handling his Biltmore forest. In a few years, he handed the job over to Schenck. Just why, was never clear to me.

Cornell, the first forestry school, had Fernow as the head and Fernow reasoned: "The laboratory in that building over there is the chemical laboratory, and that's the physical laboratory. My laboratory is out in the woods so I've got to build me a laboratory. And to build a laboratory, all you do is buy a piece of land with some trees on it."

So he was going to manage that forest land. He made a good start, but he antagonized the wealthy people in that area owning great acreages. They were less interested in practicing forestry than in the preservation of their hunting and game reserves. They protested this German forester coming over and logging a slope clear. (Well, I think the local people were unnecessarily infuriated over it, because it would grow up again and be better than it was before in a sense. Of course, the scrubby forest is the best for hunting anyhow.) So the local people turned against him and, being very powerful in Albany, they cut off Cornell's forestry appropriation. That killed the Cornell forestry school.

Fry: You are saying that the lack of experience in forest management was something that the American foresters had to deal with right from the first, that this was one big thing that they had to contend with which Europeans didn't?

Fritz: Don't let me play down the American men, the early Americans in forestry, because they were an unusual lot. In those days, trying to sell forestry was like trying to sell birth control today or some new religion.

But we couldn't follow European foresters totally because they were already working on managed forests, and we had no managed forests on this side. Our first job was not to manage the forest so much as to convert or transform a virgin miscellaneous lot of species and sizes and qualities of trees (on the same acres sometimes and certainly on the same forty acres) into manageable forest.

You can't manage a forest unless you have a lot of money and want to do it for the pleasure, like a man who has a horse farm just for the fun of it, with the losses tax deductible. Management implies, of course, the building of protection roads, the cutting of trees that are inferior, and utilizing the mature crop. Nowadays it calls for also recreation and watershed control. In other words, to develop a crop with not as many trees per acre, but with fewer and far better trees.

Fritz: When I look back on it, especially when I think of that party for my eightieth birthday, I sat there wondering what in the devil have I ever accomplished that deserves all this, because so many times what I tried to do was a complete failure. And many of the things I suggested be tried out never were. They will some day, but maybe it was put up in the wrong way or the market wasn't ready for it or I wasn't ready for it. Maybe I wasn't a good enough salesman, I wasn't smooth enough.

Fry: What do you think were the major mistakes made by forestry in general in the early days in America, now that we have the advantage of hindsight?

Fritz: Well, I'm talking from personal experience over the last fifty years. I think I would have, if I could have afforded it myself or gotten somebody else to apply it, a large tract of timber which was to be harvested, and I would have made that an example or a trial, a pilot plant of what the problems are in managing it.

I think I can say something that will epitomize this in just a few words. When I came here in 1919, of course, my mind was all set on wood technology and sawmilling and not on forestry. But then when I got out in the woods and roamed around and found some of this magnificent second growth, already sixty-five years old or more, I thought, "This is what the school should own."

So we went back to Mulford and suggested that we ought to have a school forest, and I don't recall what he said to that particular statement, but later on after we told him of a second-growth tract and what it would cost, what we could learn from it, his answer was very definite: No, we should not own a piece of forest land and try to manage it because we might make a mistake, and that would give forestry a black eye.

If we had such a tract now, we of the forestry faculty could have acquired in the forty years some second-growth management facts that are badly needed right now when such young stands are being cut on a large scale. Also we would have served timber owners much earlier as competent advisors. More important, we would have learned early how dependent the forester is on markets. We foresters represented ourselves as knowing how a forest should be managed! Yet we still do research work and hold seminars to find out what can be done and how much it will cost.

Maunder: But you take the Harvard forest for example. Here was a school of forestry which did have a tract of land, and they had the vision of the future of how to manage that land. Now you go back there and talk to Hugh Routh who has been with it from the very beginning, and he'll point out to you: Well, we had the wrong vision. Our whole plan was based on false notions. What we do, we do in terms of what we understand about the market and the needs of our own times. We cannot foretell what the conditions are going to be

Maunder: forty, fifty, sixty years from now when the crop we're managing comes to maturity.

Fritz: He is right. But Harvard learned that poor soil does not permit what one can do on better soil. Harvard certainly knows that every cultural activity costs money and that this cost cannot be returned for some years. For example: I have been asked often why I don't recommend thinning some of our dense redwood young growth. My answer always was: Yes, the forest should be thinned but if you can't get the cost back from what is thinned (cut) out, you are setting up an intolerable financial burden for the future.

Of course, we should have had experimental thinnings here and there to learn what good the thinnings would accomplish, how much it would cost, and what can be done with resulting debris. Some of our young redwood stands are up to 110 years old. They came up without help. Had intensive management been possible, these stands should have been thinned several times and at unknown intervals.

Thinning is an economic problem. There are good signs that it will be solved when the number of new pulp mills require more chips than mill and woods leftovers can supply. Or the small logs derived from thinnings may some day suit the needs of small mill men for lumber if they are suitably equipped.

A School of Forestry at Stanford?

Maunder: Were you ever accused of trying to start a competitive school of forestry at Stanford?

Fritz: I don't know that I was ever so accused. No one in his right mind would go out and try to get a school started somewhere else in competition with his own school. The suspicion would come into his mind right away that Fritz wants to be dean of it. The deanship of any school is the last thing I would ever want. In my opinion, a deanship is pretty much of a very well paid clerkship, and I hate to see some men take a deanship because of the prestige that goes with it. I feel their usefulness in their own specialty has been lost. You already know that I turned down several deanship offers from other schools.

Now as to your question: There was indeed an effort made to start a forestry school at Stanford.

Fry: There was?

Fritz: Yes. John Hemphill, who was the general manager of the large Sugar Pine Lumber Company at Fresno, came to me once and asked--he either came to me or he spoke to me when we met somewhere. I used to visit

Fritz: his mill a great deal. It was a great mill but cost too much. He might have written me about it, in which case my letter file should contain copies of the correspondence. That was way back in about 1925 or '26 that he was sounding me out as to the need for another forestry school in California. Now as you know, in the early 1920's there was a Pinchot battle for public regulation of lumbering. The Capper report resulted from it.

Perhaps Hemphill thought that his idea would be a counter against the Capper findings and a counter offensive against other forestry schools, siding with Pinchot. Actually the schools were cool toward Pinchot on federal regulation.

Fry: Do you think then that he thought that U.C. was too oriented toward Capper-type forestry?

Fritz: No. This school was not in favor of the Capper thing at all.

Fry: But you felt that he thought this way?

Fritz: That he might have thought this way, yes. Hemphill was a graduate of Stanford University and had been secretary to President David Starr Jordan. Apparently the two of them were still on very good terms (I'm sure Jordan was still there). And if he had ever taken that to Jordan, that would have killed it right away because Jordan must have known about that gentleman's agreement between U.C. and Stanford.

Now, I personally felt this way about it: At that time there was no need for another school in California. Second, that if there were a need for another school, Stanford would be an ideal place because the students would be able to practically walk to a forest for their field work, whereas U.C. students have to go a couple of hundred miles before they can even see a good forest. We are at a great disadvantage in that respect but more than make up for it by having a ten-week summer camp.

Nothing ever came of the Hemphill idea. First of all, it was none of my business, and I would have had to go to Professor Mulford and tell him that this thing was brewing. Maybe I did--I don't remember.

Fry: Did you talk to anybody in the College of Agriculture here?

Fritz: I don't think so. I had no personal interest in it.

Fry: Oh I see. But did you encourage Hemphill to check with the president of Stanford on this?

Fritz: I don't know. That's too far back and I wasn't interested in getting involved in it anyway. I now frequently have dinner with a Stanford group at Bohemian Club. They are all very good friends

Fritz: and we talk about the University of California Forestry School (you know there's a lot of kidding between the two universities), all very friendly. They will make some comment, like, the forestry school should have been at Stanford, or something like that. "You fellows haven't any forests over there and we have," and I would have to agree.

I personally think it would have been a far better thing if the school had been placed at Stanford rather than in Berkeley, because of the proximity of a forest over there. And incidentally, Stanford University owned a lot of timber, second growth, the kind of timber that American foresters of our time should have been working in long ago to have everything all ready with data by the time the second growth was really merchantable and needed when the old growth was nearly gone. That time is now here and we haven't got that information.

Herbert Hoover's brother--what was his name, Theodore?--owned a lot of forest land on the peninsula not very far from Palo Alto. One day Professor Mulford told us in a faculty meeting that they had been given the chance of accepting that property. It was to be a gift to the University of California Forestry School. None of us knew anything about it. At least, I didn't, and I'm sure none of the others did. Later, Mulford told us that he had been offered this property and that he had declined it.

Fry: Do you know why?

Fritz: Because it would be too much of a drain on our finances.

Fry: To keep it up, you mean?

Fritz: To carry on the research work and to maintain and administer it.

Maunder: Wouldn't it have provided some income that would have taken care of that?

Fritz: Eventually, yes. That was a heartbreaker. That must have been around in the late 1920's or early 1930's when that offer was made. I wish you could find Mulford's papers, the official papers, about that. I have never seen them. Incidentally, during the depression when the federal government set up work camps--C.C.C. and W.P.A.--Mulford apparently finally succumbed to approving a school forest. He approached the lumber industry for a gift of cutover land. That's the forest the school got and what is now called Blodgett Forest.

Now that you brought up the Stanford subject, I should add that about ten years ago, during a conversation with a lumber industry man, a Stanford engineering graduate, he asked if it would be a good idea if he should promote a lumber manufacturing professorship at Palo Alto. I encouraged him. With so much lumbering in the West, at least one university engineering school should give more than the usual

Fritz: three-unit course given by forestry schools to sawmilling operations. Most forestry schools pay adequate attention to logging, but sawmilling is really a purely engineering undertaking.

VII THE REDWOODS

Second Growth Investigation

Maunder: Can you give us a little background on your first interest in the redwoods?

Fritz: Everyone is interested in the redwoods. If he has never seen them, he wants some day to see them; once he has seen them, he wants to see them again. Because of my sawmill course, I had to go through the redwood country to visit the mills; that was my job. I wasn't there to study the woods, or even to work out the forestry. That started after 1923. I would visit a sawmill and if there was any time left, I'd go out to the woods just to look around to see where the logs came from.

It was a time when preservationists were becoming active in saving the best groves. The Save-the-Redwoods League had already been organized and had preserved several fine groves. There was so much old-growth redwood then that there appeared no difficulty in getting owners to sell. But it was a very hard job prying money loose from people and agencies that had it.

I was very fortunate early in 1920 when Mr. Edward James, representing Sage Land and Improvement Company of Albany, New York, and his son and a surveyor were going up to the redwoods by automobile on timber business and invited me to go along. I had been to the redwoods once before by railroad in 1915, but never before by automobile.

Mr. James later became a member of the State Board of Forestry. He was a very interesting and helpful man. He lived in Santa Rosa, looked after the Sage properties, buying and selling timber. En route, he told me much about the redwoods and what goes on, and introduced me to a number of people so that I got a running start there. The road was dusty, narrow and crooked, but very scenic. Mr. James had data on most of the fine groves along the highway. We stopped at many of them, visited split-products operations, and a shingle mill.

In 1921, during the regionwide reforestation efforts, the companies had decided to reforest their cutover lands. The University, under Professor Woodbridge Metcalf, helped out with methods of planting, collecting seed, and rearing seedlings. I had nothing to do with it. It was out of my line at the time. However, it was important to know what kind of lumber the young growth would produce. The only way to find out was to cut some of the second growth and run it through the mill. This second growth was already sixty or sixty-five years old. In 1922, Woody Metcalf and I had come across some fine second growth on Big River, owned by the Union Lumber Company.

Fritz: In 1923, David T. Mason, at the time the advisor of the redwood owners, arranged for the cutting of a small area on Union's land. It turned out to be only seven-tenths of an acre. I was in charge of the study so I saw the product from the stump to and through the mill. The company furnished the fallers, and I brought a forestry assistant. As the trees were all felled and bucked, we would scramble over their trunks and stumps to get a lot of data for what we call "stem analysis." It was the first one made by the School, and the data has been very useful ever since.

The logs were milled in the Mendocino Lumber Company mill at Mendocino (subsidiary of Union Lumber Company). The biggest log was only twenty-four inches at the small end, the smallest, about eight inches. The sawmill carriage had very low head blocks for handling large logs. Some of my logs were so small that they had to be held against the knees with a cant hook. It took two or three days to mill the logs. The lumber was piled in the yard for seasoning. One truck load was taken to the Union Lumber Company plant at Fort Bragg for kiln drying.

It was an extremely interesting and revealing experience. I wrote a report but it was published only in local newspapers. In the University forestry files, it is designated Project 688. The quality of the lumber was disappointing. That from top logs was better than that from butt logs because the knots were sound. As to figure and color, it resembled the coarsest grain in old growth. Far more important (at least in my opinion) was the discovery that three of the 130 trees cut on the 0.7 acre plot were relics of the original forest cut in 1858. These three trees were then under twenty-four inches in diameter on the stump. These three escaped death in the slash fires. Without the competition of the trees that were cut, these three experienced an accelerated growth rate. I think the largest of the three was about forty inches or more in diameter. Their lumber was coarse-grained but mostly free of knots. The report draws special attention to these three trees because they indicated that redwood forests should be cut on a selective basis. The machinery then used in logging made such cutting impractical at the time.

The owner of the lumber company was C. R. Johnson, the grandfather of the present president, C. Russell Johnson. He was a very fine man and to him I owe a great deal for his sympathetic help. He was a real leader and a gentleman.

Maunder: What year was this?

Fritz: 1923. His logging bosses, all old-timers, thought the study was all a lot of foolishness. They declared that it was impossible to grow redwoods from seed, that they always came from sprouts, though the evidence was right there in front of them that redwood does come from seeds as well as sprouts. Also they said the lumber would be no good, that it would fall apart when it was dry, all of which was proved fallacious. We were too far ahead of our time, I think, and

Fritz: I was asked not to publish the report because it might interfere with the planting program. That was a big mistake on my part.

Anyway, as a result of that experiment, I returned a few weeks later to relocate a stand across the river which was of the same age and which Woody Metcalf and I saw and measured in 1922. In 1923 I made a permanent study plot of it. It has become known as the Wonder Plot. In 1958, its trees were one hundred years old.

Maunder: Did Dave Mason sell certain redwood companies on supporting research that he was generally overseeing, and then bring you and Metcalf into it as "subcontractors" to do certain things?

Fritz: Metcalf and I were the first of our faculty to see this fine young growth in 1922 and told Mason about it. It was my idea that Mason's planting program should be preceded by learning what kind of lumber young trees would make. But Mason got the company to make a cutting possible. He was not on the plot while I worked on it. It was my project.

At the University, we were allowed one semester for teaching and one semester for research, and in addition, since 1934, I had the summer off also. (I was on academic status.) But at that particular time, 1923, I was on an eleven-month basis.

It was clearly the honest opinion of the redwood owners and operators, and especially the local people, that young growth redwood would not produce good lumber. In order to get good lumber, it was felt, you have to raise a tree to be a thousand years old. It was a common expression: "It takes a thousand years to mature a redwood." That, of course, was altogether fallacious.

The labor of felling, bucking and yarding was all done under the direction of the Union Lumber Company's logging boss, Ed Boyle, one of the great logging characters of the redwood industry. But when it came to how high the stump should be, how long the log should be, that was my job.

Maunder: When did you do this work?

Fritz: In the spring semester of 1923. I started the job in early March, collecting the data on the logs. Yarding the logs to the railroad track and thence to the mill took another week. Then the sawmill work began I think in early April. This is my recollection. It's all in a report in the University forestry library files.

Fry: And I believe you said a copy is over in the School of Agriculture?

Fritz: Yes, and I have one copy. The Union Lumber Company has a copy.

Maunder: Did the Union Lumber Company pay you or the University anything for this work?

Fritz: No. There was no question of payment. None was expected and they offered none. The Union Lumber Company provided the land, the trees and the labor. Some of their own foresters would come out and help us sometimes. It was a fine example of cooperation between the company and the University.

Maunder: Did you do all of the data collecting?

Fritz: All of the data was collected by myself and my assistant.

Maunder: Who was your assistant?

Fritz: That was Leonard Kellogg. He's now a recently retired professor of forestry at Iowa State College, very able and very conscientious and a meticulously accurate worker.

The report incidentally showed that the redwood lumber produced by a sixty-five year old tree, grown under natural conditions without any help of man and with no form of forestry management, was very knotty, very coarse grained. This was to be expected from the size of the trees and their age, and the high percentage of sap wood. Sap wood ranged up to three inches wide, which is no wider than it is in an old growth tree at the maximum, but on small logs like ours, a three-inch ring of sap wood is a big percentage.

Maunder: Well, would you say that the results that came from your research supported or refuted your contentions about the value of second growth redwood as a good commercial species?

Fritz: Without any intention to brag about, before we put an axe into the trees, I deduced that the lumber would be coarse and very knotty. It was very obvious. The branches or stubs of these 65-year-old trees were sticking out all the way down to the ground. Dead branch stubs make for rotten knots, but in other U.S. regions, such common grade lumber was accepted when the old growth gave out. So why should not the same hold true for second growth redwood when the old growth has given out, as it must some day. However, by leaving undersize trees standing after logging, they would produce clear grades in considerable volume. The wider growth rings of the accelerated growth portion of each log would serve many of the uses that are now met by the finer grained of the old growth.

When the lumber people looked at the boards we sawed, they were disappointed over its grade. It was difficult to sell them the idea of not making comparisons between old growth and young growth lumber but to project an image fifty years hence when their old growth was used up and lumber would be still in demand. I never expected to see that situation myself but here it is, and we are already dipping into the young forests for logs in significant volume and having no difficulty getting a very good price for it.

The selective cutting program, if it had been started earlier and



Emanuel Fritz in second-growth redwood on Smith Place, Mitchell Heights, above Ryan Slough, near Eureka. Photograph by Harold Olson, August 24, 1950.

Fritz: followed by a firm policy in the front office, each operator interested in permanence would now have not only young trees on each cutover acre but a handsome volume of upper grade lumber yield from the residual trees scattered throughout the property. One operator is already in such good shape after thirty years of selective cutting as to be able to continue lumbering in perpetuity and at his present rate. This is the Union Lumber Company. The other large operators are in position to cut continuously but at a reduced rate until the young growth has caught up.

I am reminded of what one of the engineering professors used to tell us: "Never sell an idea short." In other words, it may be untimely, it may be way ahead of its time, but all it needs is some additional work, some change of the economic situation or, as in the case of the gas turbine, until a metal is perfected to withstand the terrific corrosive effect of the jet stream and the high heat.

Maunder: In other words, the redwood market of the future, just as in the case of the gas turbine engine, is going to be determined to a great extent by technological change and new inventions and a more favorable economic situation.

Fritz: Technological and economic. I have no feeling whatever that wood will ever go off the market, and I can give you the reasons why in a very few words. Redwood, as an example, is no different than any other wood. Some of your finest black walnut nowadays comes from farm-raised trees, coarse grained--but the market buys it. It pays several times more for it right now than it paid for the beautiful stuff of the old days, the virgin stuff.

The market doesn't need upper grades for every item or for every product. It can get along with the lower grades. So we are now actually flooding the market with upper grades and getting a lower price than their quality should command.

Fry: So what you discovered was that it's true that the grade of lumber was much lower in the younger trees, but that it could still be utilized by industry. Did you distribute these results to industry or did Dave Mason?

Fritz: Yes. It was distributed in a typewritten sheet, and it was published in the local newspapers.

Fry: Did you get any feedback on this?

Fritz: Some. Each man who got a copy, especially those who got a copy of the full typed report, stated that it was "very interesting." But the reaction was uniform, and I should say unanimous, that it will be a long time before we can market that kind of lumber. That left me with the only real argument: that it takes a long time to mature a merchantable tree and in order to have even this knotty

Fritz: second growth, forty or fifty years hence, you had better start growing it now. Well, that, I think, sank in. I used to use forty years as the time some mills could see the end of what they then owned. It wasn't very long after that that they began to leave a lot of seed trees and take an entirely different attitude toward fires. That was in the late 1930's when selective cutting was undertaken. Thanks also to tractors which made it possible.

It's forty years ago that I guessed forty years, so there was just a difference of ten years in there.

Fry: Forty years for the old growth to last?

Fritz: Yes, providing they were logging it at the same rate. I missed the boat by a wide margin because first of all the war came on, and the poorest grade of lumber was plenty satisfactory for many customers.

And small mills are a part of the picture. A lot of that second growth was owned by local families or nonresidents, generally by inheritance, who had no interest whatever in lumber. But they were pleased to get something back from their land. A number of these small-owner second growth properties were logged clean. When the war ended, the market collapsed but revived a few years later when the housing and industrial markets boomed.

And the other part was that I didn't give enough credit to the ingenuity of engineers and to the possible changes in economic conditions in those factors which would permit the lumber manufacturer to utilize his old trees much more closely. It was called close utilization.

In the early days of forestry, when I was still a student and even before, there were many articles written about the waste in the woods and at the mills. Lumbermen were excoriated as wasteful timber barons. And we heard such terms as "reduce waste," and "utilize more closely." It was absolutely impossible in those days because you and I and everybody else would have spurned some of the lumber that comes out of an old growth, thousand-year-old tree. It is not all peaches and cream. Some of it is as bad as a soft tomato, and for the same reasons.

Fry: What were they referring to when they wanted you to "utilize it more closely" then?

Fritz: Not long ago in one of the evening park lectures with tourists gathered around the fire, the nature guide had given them a talk, and somebody in the audience asked, "Why doesn't somebody pass a law against all these waste burners up there?" (This was in the redwood country, by the way.) And the naturalist said, "Well, they're very wasteful people. They waste a lot of lumber."

Fritz: Another question was raised, "Well, why don't they make something out of it?" He said, "They're not interested." Just like that. That man knew nothing about the situation.

The whole fact is that lumbermen are business men, and if they could have made a nickel from every dollar they would have to invest in utilizing that waste, they would have done so because that nickel was not really a nickel made but was really about twenty cents made because it cost them money to dispose of that refuse. Also the fire insurance was affected by what kind of a fire they had for burning up this refuse.

You and I wouldn't buy the small stuff anyway. Some of the stuff that they threw into the burner was short and narrow. Builders, when they ordered a load of lumber, wanted boards sixteen feet long because it divided evenly into the common sizes used in building. But now the mills will save a piece only one foot long and two inches wide. Those pieces are then rebuilt into wide boards that can be made a mile long if there is room to handle them. From the standpoint of wood technology, I would say that those boards are superior in utility to a one-piece board: they are less likely to warp and they are less likely to split. The glue joint is stronger than the wood itself.

The reasons for the change were the improved economic situation, the development of better adhesives, and better machines. Lumber prices were better too. The user gave up some of his objection to knots, coarse grain or other factors that once caused sales resistance. Even a large portion of the bark is used. (Ironically, conservationists who once labelled lumbermen as wastrels now call them so greedy that even scraps are sold!)

Fry: What kind of utilization was in the minds of the people back in the Twenties when they called for "closer utilization"?

Fritz: They had no idea. But it was politics to play up waste. Very few consumers know what the manufacturer's problems are. Nobody knew much about it. Foresters talked about it a lot, but didn't think it through. In the days when the spread between the price of a perfect board and a knotty one was small, the buyer often selected the better board even though one of lower grade and price would have served the purpose.

Of course, the saws could be made thinner, but no steel had been developed to carry the great strains. A large part of our lumber is made by small sawmills, operated on small capital and unable to afford the price of band head saws. Their inserted-tooth circular head rigs make about fifteen percent more sawdust than a band mill.

Mauder: Even today would you say that this is a factor?

Fritz: Why, sure. Might be a good thing to penalize an operator buying

Fritz: federal timber and sawing into boards on circular head rigs.

Maunder: In other words, by saving on the kerf, there would be a tremendous saving on forests?

Fritz: Not only the kerf, but in a lot of these small circular sawmills, the man who is operating the saw is like a truck driver who owns his own truck. He doesn't even spend Saturdays and Sundays to repair his truck if he can get a load to haul on these days. He cuts corners and takes chances. So the small sawmill man can't stop unless his equipment breaks down.

The situation was especially bad during World War II. I drove my car very slowly behind many a truck of lumber. The boards were often badly manufactured--one edge thinner than the other, some overly thick, some offset because the top saw was not well aligned with the lower saw.

Maunder: Well, what about the standards? They were just not applicable at that time, is that right?

Fritz: The standards were good, but let's look at it this way. That small man's lumber does not go directly out into the trade. (A large part of it does now that is in the form of two-by-fours and two-by-eights. That's practically the only part that's a production line product.) They got by because their lumber went to dealers who had a planing mill and kilns even, for surfacing and seasoning. Many boards sawn for one inch rough would not dry or plane out to the market thickness standard.

Fry: What did Professor Krueger think about the results of your work on second growth? Did he help write this up?

Fritz: No. He wasn't on the staff at that time. He was actually in the logging business at the time. Later at the University of California he taught logging.

Fry: Oh yes, this was when he was working for Pacific, I guess.

Fritz: Pacific Lumber Company and later, Korbel. He was the only one on the staff who had any practical experience in forestry and logging.

Fry: Did he pick up these results and try to work with them and influence his own company?

Fritz: He was a logging engineer. When the reforestation was undertaken, he was put in charge of it. His own company, The Pacific Lumber Company, had him plant up some of their cutover lands with the seedlings raised in the nurseries that Mason had set up. Later he went back into logging but this time at Northern Redwood Company at Korbel.

Fry: Did this lead to anything else in your further research?

- Fritz: I never did very much research. You can call that research if you wish, but I wouldn't call it that. It's just going out and getting some data. It isn't research in the sense as used on the campus. I never regarded myself as a scientist or as a researcher. I think I was more of an experimenter.
- Fry: Did your investigation on the Union Lumber Company's lands have any significance in getting you interested in redwoods?
- Fritz: Yes. In fact, I had no business out in the woods then. I was not expected to go into the woods unless I wanted to see where the logs came from. My teaching job made visits to sawmills, and the yards, and the factories desirable. I knew nearly every sawmill in the state and the principals, pine and redwood. But at that time, I had no desire, no intention, no thought of ever making redwood any kind of a specialty.
- It is true that I spent more time on redwood, but I spent a great deal of time on the other woods also, because as a wood technologist, I had to know them all. It was very useful information and good experience for a teacher expected to be knowledgeable about wood, its manufacture and uses.
- Fry: Your real work in redwoods didn't begin until the Thirties, is that right?
- Fritz: I didn't begin seriously until about 1934. But I had gotten interested in the redwood forest. There were very few foresters there at the time, most of them hired through Mason by the companies primarily to conduct the nurseries and to set up the plantations. You can probably get a record of that rather large and extensive program of reforestation from Mason or from Metcalf.
- Maunder: Do you credit Dave with starting the redwood people to thinking seriously about forestry?
- Fritz: The redwood people were behind the eight ball. In the discussions between industry and others, particularly Mason, they probably thought they had to do something about it to meet the save-the-redwoods campaign. Dave also helped in making the campaign for parks. I think the League retained him for a study.
- Maunder: Was this before or after Dave left the faculty? He went into practice for himself in about 1921.
- Fritz: Yes. He had been a professor here from 1915 to 1917, then he was in military service, after which he was with the federal government in Washington with the Bureau of Internal Revenue. He organized the timber end of the Bureau.
- Maunder: He came back to Cal briefly in '20 and left in the spring of '21. I could be a year off in my dates.

Fritz: He decided to quit teaching. I think he had pretty much the same experience here that I had in those early years. He could, as well as I, maybe even better, see that lumbering is the tail of the dog in forestry; and he was a sort of a practical fellow and had spent a lot of time studying the lumber industry on an original project in the Inland Empire in northern Idaho and the adjoining parts of Montana and Oregon and Washington. I was one of his assistants at the time, as I told you.

Maunder: What I was getting at was, to what extent do you think he can be credited with arousing the industry to doing something about its land management problems?

Fritz: The campaign to save the redwoods served as a good pry to gain interest. He did a great deal to promote reforestation. There wasn't much else that could have been done. The machinery that was in vogue at the time was very powerful and very fast, and the way had to be cleared from the stump to the landing, leaving the land bare.

Maunder: This was the day of highly destructive logging.

Fritz: It was called destructive, but it was actually about the best you could do under the circumstances. The old ox teams couldn't supply the logs as fast as the market needed the lumber. One man developed a donkey engine suited to logging, another man tried out wire rope, another man tried out this and that, so that it was a natural evolution.

And Mason came in at a time when the donkey engines were made even larger and more powerful, and he tried to get them to save some strips along ridges to serve as seed trees. It was a logical thing for a forester to think of, but (and this isn't generally understood by the public) in those days when even a forester would make a suggestion, he had to realize and be aware that he was talking to people to whom forestry was merely a cuss word, and to whom a forester was a persona non grata, a trouble maker. So a man had to put up his arguments to the industry with considerable cleverness, and I would say also a tentativeness. It took a smooth talker to put it over.

It is not generally known that the redwood operators were early conscious of the need for reforestation. In the early 1900's, they planted eucalyptus. That tree was getting a great deal of public notice because of land promoters. Some of those plantations still stand. One company--Caspar--planted California laurel and California (false) nutmeg. The Union Company thought the hardwoods should be encouraged and made quite a study of possible products. Famed botanist, Willis L. Jepson, also did some of the early missionary work.

Projects With the U.S. Forest Service

Maunder: Emanuel, I was reviewing a file of your correspondence this morning which deals primarily with your relations with T. D. Woodbury and others in San Francisco in the Regional Office of the U.S. Forest Service there; and this file shows to what extent in principally 1937 and '38 research was going forward in the Forest Service in the redwood region. The file shows your part in all this and your close association and contact with Woodbury and others.

The papers show that a lot of goodwill existed between you and Woodbury, but they also show that there was a good deal of feeling of hostility between you and Director Ed Kotok, here on the campus in the California Forest and Range Experiment Station. Indeed, it appears that you preferred at this time to do your work in cooperation with the forest people in San Francisco rather than with the people in the Experiment Station here in the building.

Fritz: Does that concern setting up a project?

Maunder: In the redwoods--a selective logging experiment.

Fritz: Selective cutting. Yes, I remember that.

Maunder: And slash burning, that sort of thing.

Fritz: Yes. That got me into a lot of trouble with the lumber people.

Maunder: Well, in your note attached to this file, which is evidently a later appraisal of it that you have made in recent years, you say this: "This file records a good cross section of (1) the difficulties in getting industry to become aware of its responsibilities; (2) genuine interest on the part of the principals of the larger companies in forestry practices, (3) the ill will on the part of the socialistic fringe of the U.S. Forest Service and those who are hell-bent for federal regulation, and (4) constant harassment of the industry and of its forestry consultant to handicap progress of forestry, to keep the industry looking bad before the public."

Fritz: What date is that?

Maunder: Your note is not dated.

Fritz: This must have been in the Forties.

Maunder: That's your handwriting in the Forties period, is that right?

Fritz: Yes.

Maunder: Well, it's quite obvious here in this exchange of correspondence that you had a number of projects going in close cooperation with

Maunder: men in top management in the industry, in particular Leonard Hammond of the Hammond Lumber Company and Mr. C. R. Johnson of the Union Lumber Company.

Now at one point in the correspondence here, Woodbury writes a letter to you on May 24, 1937, in which he states that the Regional Office is ". . . eager to give some helpful service in the redwood region," that he is willing to insert this project, the private forestry project on Hammond lands, into the program of the Regional Office. They would be compiling logging and milling data, and he says in his reply to you here, that previous studies have been made in this same general area of subject matter for the Amador Timber Company and the California Door Company, and that a logging engineer by the name of John Berry had been involved in this.

Fritz: That was the brother of Swift Berry.

Maunder: And that Berry, in attending a logging conference, had met you and had asked you to get interested parties at the logging conference together, so that they could talk about this project. Do you remember that particular matter?

Fritz: That particular detail I don't remember, but I remember the thing in its broad scale. What is it you wanted to know?

Maunder: Well, I just wanted to know a little bit about your relationship with Woodbury and your appraisal of the man and the job that he did. I want to ask you one or two questions in regard to it. You were urging that the job be handled through the Regional Office of the Forest Service rather than the California Forest and Range Station, which had already done surveys of a similar nature and had all of the data that had to do with this. Now was this a deliberate effort on your part to avoid doing the work through Ed Kotok because of your feelings of antagonism?

Fritz: No. Kotok wouldn't be doing it anyway.

Maunder: Well, it would be somebody under Kotok. I realize it wouldn't be Kotok.

Fritz: It was an economic study, wasn't it, rather than a mechanical study? It was a study that Mr. Burnett of Hammond Lumber Company asked me about one day, and Woodbury was the one man I could deal with in the Forest Service Office. He was the Assistant Regional Forester in charge of silviculture or management. He had a very able man over there, Charles Tebbe, who had made such a study in Siskiyou County. It was a county study, and I was trying to get them to make one in the Humboldt redwoods and to assign Tebbe to it.

One way to get the Forest Service to undertake a project which you would think would help speed up interest in forestry was to let it

Fritz: be known that you were going to make such a study under the aegis of the University. They'd be over right away. Woodbury once wrote to me: I suggest you don't go into this because we have it on our program.

I had almost forgotten about this project. Mr. Burnett, vice president of Hammond Lumber Company, asked me if we could undertake a countrywide economic study of the forest resource situation. I doubt that Burnett knew of the Siskiyou study by Tebbe. I believe it was original with him. He was interested in such matters.

I could not handle the study and the school did not have the funds to support it. But I either wrote or talked to Woodbury that we have been requested to consider making such a study. It was then that Woodbury asked me to lay off, because he had the same thing in mind. Naturally, I encouraged him to undertake it. Although I kept after him, nothing ever came of it.

You said earlier the project concerned selective cutting. You confused me by bringing in the Hammond Company project. There was indeed another project on the lands of the Dolbeer and Carson Lumber Company, on Elk River. It came about this way: After the passage of the National Recovery Act under which, in Article X, the lumber industry agreed to leave its cutover lands in a productive condition, the industry was to be its own policeman. I was asked to be advisor to the redwood people in effectuating practices which would implement the purpose of Article X.

Maunder: Here's a letter from you to Woodbury, dated May 15, 1937. "Dear Woodbury, inasmuch as the Hammond Redwood Company plans to begin logging its Eel River tract sometime early this fall"--(That would be fall, 1937)--"and inasmuch as also the president, Mr. L. C. Hammond, is very much interested in making this a sort of proving ground for selective logging, I think it offers an unusual opportunity for some cooperative work between your office of Public and Private Cooperation and the Company. In fact, I think it is such a good opportunity that you cannot afford to pass it up.

"At any rate if you are interested please let me know so that I can take it up with the Company. Captain Elam is at present making a topographic map on which the final logging plan will be based. Please let me know about this as soon as possible because logging plans will have to be prepared before very long. I think this is a job for your office rather than the Experiment Station."

Fritz: Now that you read that letter, it all comes back to me. As soon as you mentioned that tract--it was a five thousand acre tract, wasn't it? This was not connected with the county study I just described to you.

Maunder: I don't know. It doesn't say.

Fry: On Eel River, near Camp Grant.

Fritz: That was a different project. I had worked on a tract adjoining the Hammond tract and belonging to the Pacific Lumber Company. Knowing that general area, I thought it to be an ideal area to get selective cutting data. Incidentally, that tract was the one I thought the Forest Service should have bought in the days when it wanted a redwood national forest. It was only five thousand acres, and it would have been under operation in 1937. They would have gotten necessary data right away, data we badly needed, then and since.

Maunder: Why didn't they?

Fritz: That's a good question. When the Save-the-Redwoods League learned that the U.S.F.S. was examining a tax delinquent tract in Del Norte County, Newton Drury called a meeting. We were talking about it over here in Berkeley: Newton Drury, S. B. Show, T. D. Woodbury, E. I. Kotok, and maybe several others. The Forest Service had ignored the Save-the-Redwoods League. We felt the U.S.F.S. should have learned what the League had in mind to acquire for parks. The acquisition program of the League could have been seriously affected by the Forest Service's purchase plans.

The meeting was held on the ground floor of the Bank of America Building in Berkeley, and I remember recommending to Show and Woodbury, "Why don't you try to buy that five thousand acre piece of Hammond's and make that a part of your national forest; because if you really want to do what you say you want to do, which is to get the data to help the lumber industry to do a better job in logging, there's your opportunity."

Fry: Was this in a meeting with Newton Drury of the Save-the-Redwoods League?

Fritz: Yes. They said, "We can do better if we go to Del Norte County. We can get far more acres for less money." So I said, "How is that going to help you in getting information to help forestry in the industry? By the time that Del Norte (Ward Estate) property can be opened for logging, the end of the old growth will be so close that the figures won't have any meaning."

That's what actually happened. It was twenty years before they actually started to log that land and then in a very small way. Nothing has come from the studies of actual use to the redwood industry in logging old growth that it did not already know.

Fry: I don't understand why it takes longer to log it in Del Norte than in Humboldt County.

Fritz: There was no economical transport up there then. It was considered more or less inaccessible. It was eighty miles from the railroad.

Fritz: To that you had to add the trucking of the logs over a road not designed for heavy truck traffic.

Fry: What did Drury think about this suggestion, if he wanted this for a park? Weren't you on the Council of the Save-the-Redwoods League at that time?

Fritz: Yes, I have been a Council member since 1934. It wasn't a question of a national forest versus a state park at the time. Drury had to know what the Forest Service wanted to buy or what it was examining for a future national forest, because then the League would know whether it should stay away or whether it would protest it as a possible purchase by the League for a state park.

The U.S.F.S. finally bought that land at about twenty-five cents per thousand board feet, dirt cheap. It was an excellent "buy" for the U.S.F.S. It has been selling it for fifteen dollars or more. The sales had nothing to do with research. That same timber, at present, if it were near Scotia, would bring about fifty dollars. That's where distance makes the big value.

It was a classic instance of the Forest Service talking through both sides of its mouth. It was not so much, as I said, an interest in getting data to help companies to do a better job. It was really to satisfy an old desire to have a redwood national forest. To satisfy this ambition, the U.S.F.S. missed a great opportunity to institute a prospectively very useful research project. That project, when finally set up, came too late.

By establishing its redwood national forest in Del Norte County, its research results would be applicable only in that county and northern Humboldt County. The redwoods are quite different as to site factors in middle Humboldt and southward. A forest stretched in a thin strip for five hundred miles of latitude in California is certain to vary greatly. Furthermore, most of the lumbering is southward. It was only during the World War II years that lumbering became important in Del Norte.

Mauder: Let's get back to the study projects.

Fritz: Yes, let's do that, because we are confusing several projects. More and more comes back to me as we talk.

There was another one for which E.T.F. Wohlenberg deserves credit for involving the U.S.F.S. My part was only that of a catalyst. Wohlenberg had been for many years the timber man of the Internal Revenue Service and was now, about 1940, returning to the Forest Service. Just previously, Roy Wagner of the U.S.F.S. San Francisco Office had completed several great studies in the pine region on a thorough analysis of timber stands, their make-up, the effect of tree size on costs, and so forth. I felt we badly needed such a study in the redwood country. Wohlenberg was highly respected among foresters and lumbermen. He undertook to discuss the Wagner studies

Fritz: with redwood operators and found the Pacific Lumber Company responsive. I had recommended to this company that it should have the study made. Roy Wagner was detailed to take it on. Wohlenberg, at the same time, interested the I.R.S. in the taxation aspects. The end sought was an encouragement of selective cutting.

Fry: Who in that company did you deal with and find most helpful there?

Fritz: The president and the manager. The president was A. S. Murphy, and E. E. Yoder was the manager and, of course, far more important because he was the logging boss--Gordon Manary. Wohlenberg discussed it with me before the Company was approached. Wohly was an old friend from our Arizona days.

Fry: Do you remember whether the Pacific study was initiated primarily by the company, or by the Forest Service, or by you?

Fritz: It was suggested to the Forest Service by Wohlenberg and myself. Most likely, Wohlenberg knew of the Wagner reports and thought the redwood industry should have one too. The study made by Wagner on the Pacific Lumber Company lands was a wonderful job, very thoroughly and nicely organized. He got a lot of valuable data for organizing selective cutting based on woods data.

But then, in 1941, we got into the war [Second World War], and we needed a whole lot more lumber than industry was manufacturing for France and Britain. Unfortunately for forestry and for the selective cutting system, the Company's cutting program had to be tuned to the war effort. The area on which the selective cutting system was to be installed had to be logged by the company's slackline system of clear cutting to get out logs more quickly, rather than doing it with tractors.

Maunder: But it raises hob with the land.

Fritz: Yes. The land was later seeded, but I don't think it caught very well. We had a period of very dry years.

Fry: Where was this?

Fritz: It was on Jordan Creek, a tributary of the South Fork of the Eel River. After the war, the Company gave up the slackline for good and went wholly to tractors and selective cutting. The Wagner data came into use. It was not lost because of the war.

Maunder: Was there an inclination on the part of the Forest Service to be more interested in pine area research than in redwood research at this time?

Fritz: The Forest Service had 150 million plus acres of timber to administer, only a pittance of it in redwood. So naturally their research was concentrated on their own lands. Whatever they learned

Fritz: there could then be extrapolated to private lands. Now they didn't get into redwood forestry for some years. I think it was in the Thirties when they got started in the redwoods to do some work. Show had written a bulletin in the 1920's but that was taken largely from the work of others. They didn't do much field work on it. Some blanks were filled in by Duncan Dunning of the Experiment Station.

Fry: This was a bulletin concerning what?

Fritz: "Minimum requirements for logging in the redwood region," I think, that was the title.

Maunder: Well, the reason I brought this up was that in your correspondence in 1937 with Woodbury, you mentioned the fact that you'd been talking with him about the matter of the industry taking up practices of good forestry in the redwoods. And you say that he was coming to you, but that his work facilities were rather limited, and that the pine region demands took up a major part of the Forest Service's time, and you understood that. But at the same time, you thought it was hardly good policy or even good salesmanship for putting over the forestry idea, to be overly critical of the redwood region until you can find the time to get the necessary data for an effective sales talk.

You go on: "I think you can afford to leave it alone until you can present something really convincing, otherwise nothing but antagonism is aroused. If and when your organization or any other group has developed sound proof that what we want is good business, and if the industry should then show a deaf ear just to be contrary, I'll help you to be critical. I don't think it will be necessary though. I haven't found one operator yet who will turn down a good business proposition."

In other words, you're pointing out the opportunities that exist for leading the redwood industry, and you're suggesting to the Forest Service in this letter that perhaps they do need to do more studies that will have meaning to the redwood people.

Fritz: You've read a great deal there that refreshes my memory. This was in?

Maunder: March 5, 1937.

Fritz: We are still confusing the projects. You mentioned one for Hammond, one for Pacific Lumber Company and one for Dolbeer & Carson. I think you had the latter in mind. As I said, it was understandable that the U.S.F.S. would concentrate its research in the pine region. Their men were trained in that region, and they had responsibility there to the taxpayers because they were managing the taxpayers' public property.

Now, the fact that they were not doing any research in the redwoods

Fritz: was probably the result of a combination of things. First of all, they didn't have the funds to go into the redwoods for research work; second, the redwood people didn't invite it or there wasn't a demand for it. There wasn't a demand in that sense, but there was a real need for it.

Maunder: And you were pointing out the need.

Fritz: Yes. I don't recall how that happened to come up, but Woodbury and I had corresponded on several occasions about research in the redwoods. It was brought about by Article X of the NRA Code. The Forest Service men let it be known that they wanted to help.

I was sold on the idea of practicing selective cutting because of my experience with several trees in the 1920's, and many more thereafter, and by observing and boring a lot of trees that were left by the early day loggers. I felt that we needed some more data to help anybody, and especially myself, to back me up or back up my argument that selective cutting should be given a fair trial.

I had one project in mind. Kotok came into this picture because he was head of the Experiment Station. Now I don't know if this particular project is concerned in that letter that you read extracts from, but in this project it was my idea that the Forest Service should find an area of modest size which would be logged very promptly on which they could get all kinds of needed data: the size of the trees, volume, quality, cost of logging, cost of milling, and so on, and the grades that came out of it, tree by tree, the "green chain cost" of the lumber. I had made studies myself like that before and had even trained the students in making such studies at summer camp, but we had no facilities for an extensive study like that.

So they set up a project with "Doc" Brundage in charge. He was a very competent man, on Kotok's staff, and a very independent thinker. He had made studies like this in the pine country, and I would like to have had Brundage make such a study in the redwoods so that I, or others, in talking to the lumber people about the feasibility of the selective cutting system, would have some figures to back me up. And of course, the industry itself would have been glad to have that data.

Well, they made the study. I got into some trouble over it.

Maunder: Why?

Fritz: The study was made on the Dolbeer and Carson Lumber Company lands on a seventy-acre piece. I had previously taken the Company's logging superintendent about it to get his approval. I would go up there by night train and get there Saturday mornings. (In those days, 1930's, they all worked on Saturdays.) I wanted to see how things were going.

Fritz: One day I was called to one side by the superintendent and was asked in terms like this, "What in the world did you get us into here?" I said, "What's wrong?"

He said, "This is supposed to be a study of selective cutting and so on, but it turns out to be a program of indoctrinating our crews in socialism, public ownership."

"How is that possible? They're supposed to be out there getting this data on trees and so on."

"I suppose they're getting that. But they had to stay at our camp at night, and they would visit with the loggers and discuss socialism versus private ownership of natural resources."

Maunder: Who was leading these discussions?

Fry: Were these forestry students who were working out there?

Fritz: No, they were all employees of the federal Forest Experiment Station and the Regional Forestry Office in San Francisco. So I made some inquiries. I was astounded. The superintendent, Clarence La Boyteaux, then told me there were more than twenty men on this job. I couldn't figure out where they could use twenty.

It turned out that some of these men were "observers." The Forest Service was eager to get into the redwoods. Here was an opportunity to get a start for the proposed redwood national forest. Mr. La Boyteaux was furious about the political work of these men after working hours.

Fry: Well, what finally happened?

Fritz: Brundage did a very good job and prepared a report on his findings. He was not involved in the politics. His mathematics were good but the economics were missing. It meant that only six-foot trees were profitable. The rest should be left standing. Now, six-foot trees are in the minority. There wouldn't have been enough six-foot and over to make the operation pay. It is dangerous business to apply statistical methods to biological data. Economics had to be considered too.

Maunder: What about H. L. Person, a silviculturist? You must have had a great deal to do with Person.

Fritz: Oh yes. I think he was responsible for the trouble in the Dolbeer and Carson camp.

Maunder: Oh, you mean he was the one who was preaching socialism?

Fritz: Yes.

Fry: He was the superintendent.

- Fritz: He was the general in charge of the research, as I remember it, but Brundage was in charge of the field work.
- Maunder: Well, what can you tell us about H. L. Person besides that? He did a lot of data gathering, did he not, on selective logging in the redwood region? Wasn't he the man who was going to do the work on the Hammond Eel River tract in 1937 or '38?
- Fritz: I don't remember that. Person would not have made that one. That was an economics study; Person was in silviculture. Person did make a study on accelerated growth of redwood following selective cutting. I think that was published as an article.
- Maunder: Well, I can't help but come away from an examination of this correspondence file with an idea that there was a developing of good feeling between you and members of the Forest Service over research projects in the redwood region in the late Thirties. It wasn't all negative. You had rather good relations with this man, Woodbury, in the U.S.F.S. administrative office in San Francisco.
- Fritz: Well, that may be correct, but it had no relation with Woodbury, as to his observers on the Dolbeer and Carson study area. Of course, I took it up with Woodbury. I doubt that he knew what his men were doing evenings. Anyway, the observers were recalled. That left only the Experiment Station men out there to do the job.
- Fry: Who brought them back?
- Fritz: The Forest Service and the Experiment Station. They left only the necessary men out there, not the sightseers and the "observers." Woodbury and I were always good friends. I trusted him.
- Maunder: You say, Emanuel, in this letter that I'm particularly bearing down on in this interview, that you and Woodbury are essentially seeking to get forestry practiced in the redwoods but that you see the problem in different terms. And you go on in your letter specifically: "And please get over the idea that I am not in favor of pushing redwood forestry or that I try to gloss over the shortcomings of the industry. We are trying to get the same objective but my methods are entirely different than yours. Time alone will tell which is right."
- Fritz: As I said, Woodbury and I were always on friendly terms and we discussed things back and forth. When I was hospitalized one time, he was the only Forest Service man to call on me.
- Maunder: When were you hospitalized?
- Fritz: It was in '38. Broken leg.
- Maunder: Did you maintain friendly relations with him for a long time after he retired?

Fritz: Yes.

Maunder: Is he still living?

Fritz: He's still living. I heard recently he's not in the best of health. I tried my best to get him to write something about his early days, but I think when he retired he became a loner.

Fry: Bitter?

Fritz: Bitter, maybe. And shucks, I had more reason to be bitter than he. Bitterness will ruin a man if it isn't controlled.

Maunder: Do you know where he lives in retirement?

Fritz: East Oakland. I think you'd have a hard time getting anything out of him though.

Fry: What's he bitter about?

Fritz: Oh, perhaps his own experiences in the Forest Service.

Maunder: What were these that made him bitter, do you know?

Fritz: Well, one of them was that he and a lot of his friends thought he should have been the Regional Forester instead of S. B. Show. It would have been a far better choice considering the way things turned out, although Woodbury himself was pretty hard on his own men. This is all right. There's no reason why a man shouldn't be hard on his own men if he is also fair. Woodbury was always on the level with me. I was told once that he defended my course of action in endeavoring to get forestry into the redwoods.

Industry Cooperation and Forestry Attempts

The Union Lumber Company

Maunder: Which among the redwood companies would you say were more cooperative in the first stages of forestry practice in that region? —

Fritz: Easily the Union Lumber Company. It helped me by opening its operations to me as early as 1921 or 1922. In time, all the principal operators gave me an ear and cooperation.

Maunder: Why do you single them out first?

Fritz: First of all, the president of the company, Charles R. Johnson, was a man of much broader view than the presidents of the other companies in the 1920's. He felt that it wasn't right to log redwood the way

Fritz: he was logging, but that it was the only way he could log it and come out ahead. Every timber company was in debt to the banks and bondholders. It was a terrible sword of Damocles over their heads.

When I needed help to carry on a sawmill study, C. R. Johnson gave it. He was all for it. Long before that, C. R. Johnson spent thirty-five or forty-five thousand dollars--a lot of money in those days--to make a study of the hardwoods that they encounter when they log redwood to see what can be done with them as a crop. But economics were not favorable.

Fry: This was a study on utilization of hardwoods?

Fritz: Very much so. Hardwoods mixed with the redwood in many areas. He also wanted to do something about his cutover lands. He wanted to get them to grow up again.

Fry: This was after you came when he tried to do something about cut-over lands?

Fritz: He had that idea long before I came. I merely helped it along, but I didn't generate the idea in his mind. You see, in the early days of redwood lumbering, the coastal area was cut off from the rest of the state. You couldn't get up there except by boat or very poor roads.

Union Lumber Company and Humboldt County mills were accessible only by boat. It wasn't until 1914 and 1915 that they got a through railroad, the Northwestern Pacific, owned jointly by the Santa Fe and Southern Pacific railroads. Prior to the extension of N.W.P.R.R. north from Willits, the Union Lumber Company had its own railroad from Fort Bragg to Willits.

It was very difficult to get meat in there, for example. So they thought they ought to raise their own meat, but where to raise it? It was logical to raise it on cutover land. As soon as the forest was cut, they would burn all the trash and then seed the land to grass, mostly orchard grass. It would yield good forage for about three years. Each year the cutover land area was added to, so there was always a fresh area to reseed and run stock on. The grass was thinned out by invading brush and trees.

Later on, the economic situation was different. There were railroads, and the lumbermen gradually gave up running of cattle on their own lands or leasing that use to others. The lumber people were actually in the cattle business, as well as lumbering.

In the early 1910's, Mr. Johnson heard about the eucalyptus boom and thought, "Well, let's try it out," and they planted quite an area to eucalyptus. And some of the other redwood companies did the same. Some of those stands of eucalyptus are still there.

Fritz: They're very valuable to the forester because they give him an idea of what this particular species of eucalyptus could endure as to cold and frost and winds and whatnot and what kind of wood they make.

Fry: Were they planting this for commercial

Fritz: For lumber, hopefully. The West is rich in conifers, but very poor in good hardwoods.

Fry: Did he have a specific idea about utilization at the time?

Fritz: He must have. The world needs hardwoods as well as soft woods. Redwoods are regarded as soft wood. The principal claim made for eucalyptus was its rapid growth, as against what was believed to be the slow growth of redwood.

Fry: But eucalyptus didn't work out, did it?

Fritz: It didn't work out because you couldn't grow it in competition with the very fine hickory and oak and ash and others from the eastern U.S. Worse, eucalyptus is very hard and heavy and difficult to season and work. In 1923, the owners turned to reforestation with redwood and Douglas fir. That program came to a sudden end when the Depression started.

Fry: Why did this end with the Depression? Just a general lack of funds you mean?

Fritz: The mills were shut down; business was dead.

Fry: There were no silvicultural problems involved?

Fritz: Some. We haven't got some important answers to all of them yet. Also, local people were cool to reforestation. Some hired for planting did very poor jobs. Fires destroyed some plantations.

Mr. Johnson was a broad-minded man. He took a chance on a lot of things, both mechanical in the mill and also out in the woods, even on equipment. He was one of the first men to try out a tractor in the middle 1920's.

Fry: And I guess he had a swing at selective cutting in redwood?

Fritz: That came afterward. Mr. Mason, of course, was interested in selective logging, and his activity in it I think got a boost from the report I wrote in 1923, about that cutting experiment on Big River in which there were several trees left by the early loggers which showed what they will do when they are left standing for seed trees and further growth.

Fry: Who was in Mr. Johnson's Company who helped him with all these things?

Fry: Did he have some bright young forester? This was before there were any foresters at all, wasn't it?

Fritz: No, there were no foresters at all. But several of his officials, like Bob Swales, Walter Collins, and Ross, were interested. In 1921 or 1922, he began to hire some foresters to carry on the reforestation program. They built up a very large nursery, probably one of the largest in the state. They went into it very seriously and conscientiously.

Fry: For your own part in this, were you a consultant for the Union Lumber Company later on, from 1934 on?

Fritz: I had nothing to do with the planting program. I did no consulting work until about 1934, that is, private work for compensation. Don't forget, I was teaching wood technology and lumbering, not forestry.

The University gets calls every day from taxpayers for advice on many things. When wood was involved, the inquiries would filter into my mail tray. For example: "Can the University send a man to see why I have dry rot in my house?" I would go and determine if it is rot or termites and advise the owner on what to do. I crawled under dozens of houses, into attics, over wooden bridges, and so forth. I felt it was my job to learn from actual contact with problems.

The lumber people too, once they lost their fear of professors, would ask for advice on their lumber drying problems, dry kilns, wood properties, wood preservation, and so forth. I regarded it as Extension work. It was very valuable to my teaching. From 1919 to 1934, I never requested or received compensation for such advice. I profited, however, in that I was building up practical experience to use in my courses.

Consulting in the Redwoods

Maunder: Emanuel, you say that for a long time, over twenty-five years, you worked without a promotion here and at the same pay, and that you were obliged in order to meet your expenses to go outside and do consulting work. Where did this develop? Where did you find your first clients? Who were they?

Fritz: Yes, I could not live the way I wanted to live on my salary. Being placed on academic status in 1934, I felt free to charge for my services when they were for people in business who sought help for business purposes.

Well, somebody would telephone to the University and would ask for some advice about a timber sale contract, a builder would want advice regarding lumber, a lawyer would ask for advice and maybe court appearances in cases concerning wood use. I had picked up a lot of experience on the practical side, and I'd give a caller an answer over the telephone. And he would say, "Well, can't you come out?"

Fritz: I'd say, "Well, I'll have to do that weekends." But it got to be a burden. I spent more time under people's houses than I did in the office. I would tell them, "From the way you describe it, it's this and that and that. It can't be anything else, and this is what I would recommend that you do." "No, I insist that you come out."

My first fee came when one day a man wanted to know if a piling contractor was supplying the right species to go under a very large and very heavy building. He wanted to know if Oregon pine is as good as Douglas fir. Naturally, I said not only as good, but they are one and the same thing.

"Well," he said, "I won't accept that over the telephone. I want you to go out in the woods and examine the trees from which these pilings are made. Can you do it?" I told him I'd have to do it on my own time. He said, "That's all right. We'll expect you to do it on a professional basis."

That's the way it all started, and then of course, when Article X came out, it was different altogether; then it began to grow from there. From the consequent experience, I feel that every professor should be permitted to do outside work to help sharpen his teaching.

Maunder: From that time on in the Thirties, you had a lot more consulting work?

Fritz: Not at all "a lot." I want to have this on the record. Never did my outside work interfere with my teaching. My redwood work never paid any more than a modest retainer. I regarded most of it as Extension work. Concurrently I made a number of independent Impromptu studies on redwood tree and forest details to fill in the gaps in the general knowledge for application in the selective cutting program, as well as a better understanding of the structure of the wood itself.

There is always the danger that outside work will cause suspicion of overdoing it. I can say frankly that my private work was minimal. My teaching never suffered. Rather, it was benefited. Most of what others would call consulting work was actually what I should have been doing anyway as a teacher to improve my experience.

I could have made consulting a major job and it would have been profitable, but it would have meant resigning from U.C. And I wouldn't resign for anything in the world. I liked the job, I liked the people and they trusted me, I liked the state and I had my roots too deeply in the effort to put forestry into the woods where it belongs rather than in preachment.

Maunder: I don't want to get into a long discussion. There are just a few other things I want to clear up here. One is that you were doing

Maunder: consulting work in this period, in the middle Thirties. Was this a time when you began to be involved in redwood consultancy, or was your consultancy in another area?

Fritz: It started in cases where my wood technology and acquaintance with lumber was required. I wasn't really ever a consultant to the Redwood Association. More correctly, I was their advisor but on their records I was a consultant.

Maunder: I mean the redwood companies.

Fritz: For several redwood companies I prepared reports on what needs to be done to put the operations on a perpetual basis. This was done on a professional basis.

Maunder: What is the essential difference between an advisor and a consultant?

Fritz: Not a great deal. An advisor is not necessarily paid much. The consultant does work on a professional basis. He makes field studies, prepares a report, and takes some professional risks. When I came to the University of California, we were expected to do a certain amount of Extension work and each year we were asked how much work we did in teaching, how much in research, how much in Extension services.

Maunder: None of which was for pay--It was all part of your job?

Fritz: Yes. The job I did on Big River on the Union Lumber Company's land in 1923, of which you asked me earlier, was all for the University. The same was true of the Humboldt study. When I took on the advisory work for the Redwood Association, I would have to go into the woods, naturally, and talk to a lot of people, and I was gaining a real knowledge of redwoods. I had to bootleg a lot of experimental work which I should have done as a University man, and did, but C.R.A. paid the expenses. It was all to get some data to make selective cutting workable. The selective cutting program should have been under the University in its entirety.

Maunder: Weren't you ever put to work on special assignment by David Mason when he had an office in San Francisco and he was doing a lot of work with the redwood companies?

Fritz: For pay? I should say not.

Maunder: He didn't?

Fritz: No.

Maunder: I wondered, because he was one of the early consultants who had an income from the redwood industry.

Fritz: Mason was the type of man who wouldn't pay if he didn't have to. He was more of an exploiter.

Maunder: On some of the studies that were made in the redwoods?

Fritz: That project on Big River--he explained it to Mulford as his. That's one reason it was never published. It was discouraging that Mulford should listen to an outsider rather than to one of his own faculty members. Mason was not a member of the U.C. staff then.

And then another time in 1928, I carried on a study on old growth redwood as to what becomes of the wood in a redwood tree after it's cut on a lumbering operation. It involved about 1250 trees. That was a job. That's the most--I'm not bragging--but that was the most complete job that was ever done on getting information on any redwood trees. It has been used by the U.S. Forest Experiment Station on several occasions since. They made use of my data on a cull study but never gave credit to the University or to me.

You wonder sometimes why I have been critical of the Forest Service. If anybody deserved criticism, it was that bureau. They are altogether different now.

Maunder: Well, you were commenting here a minute ago about Dave Mason's use of people. Can you cite any instances where this imposed on you personally in doing things for him that . . . ?

Fritz: I'd rather not go into this further. He wasn't fair with me, but I will mention one matter that was revealing as to where I stood. It soured me on formal research.

Maunder: In some research study?

Fritz: I was engaged on a large project in 1928 to learn what becomes of the contents of a felled forest. It is important to have an answer because, obviously, the conversion of a tree into lumber is attended by considerable waste; for a tree is tapered, contains sapwood and bark, is often irregular in cross section, and, in the case of old-growth stands, frequently very defective. Once the volume of this unavoidable waste is known, one can determine how much money one dare spend on studies aimed at its utilization.

Well, the project was well under way when Walter Mulford, the head of our department, came to my office one day and suggested that I restrict my project because D. T. Mason had taken on a similar study on the same property as a consultant.

I refused, because my project was entirely different except that the data could be used for such studies as selective cutting. My assistants and I were not inconvenienced much but we did learn the difference between selective logging and selective cutting. I worked on the theory that once a tree is felled it should be used as closely as market conditions justified.

- Mauder: Let me make a generalization here and see how you react to it. It sometimes almost seems as if there's a lot of diplomatic exchange between protagonists in this struggle--on the one hand the lumbermen, on the other hand the Forest Service--in which they go through a lot of artful dancing back and forth, loving each other at close range, but whenever they get amongst themselves in their own council they are savagely attacking one another. When the foresters are in their own bailiwick, they are calling the lumbermen ravagers of the woods and devils incarnate. When the lumbermen are assembled in their council, they are damning the Forest Service from hell to breakfast. Now this repeats itself over and over again, it seems to me.
- Fritz: You are very discerning. It used to be that way, but times have changed. There is more mutual understanding and better cooperation.
- Mauder: There's always a lot of nice friendly talk back and forth among you guys on opposite sides of the fence, but frankly one comes away from the whole examination thinking that for all the friendly exchange and talk, you really hate each other's guts. And you really don't trust each other any farther than you can throw a bull elephant by the tail.
- Now that's my impression of it. And excuse me, you future historians, for enclosing this personal view into an oral history interview, but frankly this is just something I feel I've got to get off my chest.
- Fritz: Well, I would say that you have a very penetrating mind. I'm very glad that I can say that I'm on neither side. I'm not a member of the Forest Service, and I'm not a member of the lumber industry. In my position I can be independent. But I will say that the Forest Service was trying to do on its own lands what I was trying to get private owners to do on their land. So there couldn't be any opposition there. But whenever the Forest Service would try to do something which I would interpret as an attempt to spread its control beyond its own forests, I felt I should make my feelings known.
- Mauder: And in the redwoods you really felt that there was lots and lots of evidence that this was what the Forest Service was trying to do?
- Fritz: And they had a wonderful chance right after World War II closed.
- Mauder: What was that?
- Fritz: When Helen Gahagan Douglas, at that time a congresswoman, introduced a bill to purchase the entire redwood region for \$500 million to set up a great Franklin Delano Roosevelt National Park and a great Franklin Delano Roosevelt National Forest.
- Mauder: Was this all to be accomplished within one grand purchase for over \$500 million?

Fritz: They couldn't touch it for \$500 million, but they didn't know that.

Maunder: Well, why do you say the Forest Service lost a grand opportunity at that point after the war?

Fritz: To prove it was really sincere about its trying to help the industry rather than to get control of it.

Maunder: I see. What was the Forest Service's position on the Douglas Bill?

Fritz: Well, wouldn't you be for it if you were among the top brass in the Forest Service? Here's a chance to get a big chunk of forest land and have a new national forest. And the Park Service would be happy to get a new park. Each asked for too much to win.

Maunder: I don't know whether I would or not. Who was the Chief Forester at that time?

Fritz: Lyle Watts, wasn't it?

In spite of the fact that I'm very much in favor of parks, and would have favored a national park and a national forest if they had gone about it in a statesmanlike manner rather than just go out there and practically blackjack the owners and blackmail them before the public, that isn't the way to do things.

Fry: What was done here in California when the Douglas bill came up?

Fritz: There was opposition.

Fry: And you were probably a part of it. [Laughter]

Fritz: Well, in the sense that I injected myself into it; but I was never asked to take a part by anybody, including the redwood people. The redwood people are an interesting lot. They are highly individualistic, and even though I was their advisor on forestry matters, they could have come to me because I was on a retainer basis. They didn't regard me as a salaried employee; I was a "subcontractor," you might say. They never asked me to take an active part in the controversy. I acted solely on my own.

My sole interest was to see that the redwood lands were so managed as to put the industry and its dependents on a firm and perpetual basis. The cut-out-and-get-out policy was ending. Why throw a monkey wrench into the works?

Maunder: They never sent you to Washington, for example, to lobby against this legislation?

Fritz: No. They never asked me to lobby in Washington or Sacramento.

Maunder: You did, I recall, come out with strong statements on it in the

- Maunder: American Forest Magazine, and I'm not sure but I think you wrote something for the Journal of Forestry on it.
- Fritz: I don't remember, but I could have done it. I get very much concerned when I think of some of the things that are being done in this country even right now under the present administration. A first-generation American of north European extraction is more jealous of and more eager to preserve the American system of fair play and of private enterprise than Mayflower descendents.
- Maunder: Well, cite a few things that relate specifically to what we've been talking about. What things are not kosher in the current redwood national park controversy?
- Fritz: Supposing you wanted to buy a piece of property and you know who the owner is. You would deal with the owner first, wouldn't you, even though you had to deal through an attorney?
- Maunder: Right.
- Fritz: You wouldn't go out and spread the gospel in the newspapers that you had a better way of handling that land than its owner, call him greedy and too profit conscious, destructive, and so on, or say that he's ruining the land and you should be supported in taking it over.
- Maunder: If you're asking me what I would do, I've never contemplated buying anything except a house. I've never heard of anybody using the tactic you're talking about to buy a house.
- Fry: Haven't you been called in as consultant on this redwood national park question for the Save-the-Redwoods League? *
- Fritz: The Save-the-Redwoods League rarely comes to me for any advice either on technical or other matters. On my own I would bring up some matters sometimes.
- Fry: They used to come to you, according to your correspondence files.
- Fritz: Not on matters affecting decisions except in a most general way. In my early days I would make suggestions about, for example, a museum, or helping get selective cutting established or at least recognized. It was desirable that the fine state parks be supplemented by well-managed adjacent commercial operations. They could have accomplished more I think if they had had a man on their board who could have advised them on those matters.
- Fry: Well, I was trying to establish what your connection is with the proposed redwood national park, just for the record.
- Fritz: Merely as a very interested onlooker. You asked me a definite question. I was asked by the Redwood Association if I would write

* Emanuel Fritz, "Recommendations for Accelerating the Acquisition of Redwood Lands for State Parks," presented to Save-the-Redwoods League Council. 23 October 1952. See Appendix A, pp. 300-301.

- Fritz: magazine and press articles about the redwood parks, but I declined. I was not interested in manufacturing public images. One thing was sure. I felt the management of the Sierra Club was less interested in preserving redwoods than in creating a reputation of saviors. The Club resorted to false statements and slanted propaganda. I never got the whole story from either side as to who initiated all this, or why the propaganda for a park had to be so offensive. I tried to get it just yesterday at lunch and I failed miserably. My belief is that the Sierra Club started it without consulting the League or the owners, perhaps for the impact of surprise.
- Maunder: Tried to get the story from whom?
- Fritz: Sometimes I went to a park man and sometimes I would go to an industry man. Being retired, I have no official source of information.
- Fry: I think this is a question that has been wandering around ever since 1919.
- Fritz: Well, you are given that impression, but it's like starting in a business and selling out, and then going across the street and starting another business some years later, the same kind of a business. When the park issue was dropped out in the early 1920's, it dropped out cold. And when it was up again in the 1940's with the same tactics, the park lost again.
- Maunder: Who is "they"? The Sierra Club?
- Fritz: Yes, the Sierra Club, the National Park Service, and their supporters. From my view, the League was ignored, yet the League was the wheel horse since 1918 and accumulated all the best groves. I don't recall that the Sierra Club had much to do with it in the 1910's or 1940's. If so, it was not an active part.
- Conservation agencies, as you probably have learned, are no better, no stronger, and no more honest than their executive heads. Some conservationist executives have mainly a job interest in conservation, or a determination to be another John Muir. Some have developed to a fine art the agitation of the public with the "scare hell out of them" tactic.
- Maunder: Do you think the executives in these organizations are becoming more expert in accomplishing just that?
- Fritz: They generally have good stated objectives but the methods of some are questionable. You have only to study the publicity on the redwood park issue.
- Before we close this, let me add that there will be a redwood national park but it will be in the wrong place. It will not be as good timber or as accessible as the existing redwood state parks. The League, under Drury, has already acquired the best stands. The Sierra Club, without checking with anyone, arrogantly included three

Fritz: of the best state parks in the area it demanded for a national park. Without them, the national park is without a flag. I hope the state of California will not give up the two the latest bill includes. These parks belong to California; the taxpayers paid one half of the cost, private donors gave the other half. Our state park people have done an excellent job administering them. The National Park Service can do no better.

The Tree Farm Movement

Maunder: Emanuel, how did legislation in the early Forties affect the lumber industry?

Fritz: Near the end of World War II, we had some legislation called the Sustained Yield Forest Management Act.

Maunder: Yes, in 1944.

Fritz: It was to establish cooperative sustained yield management units between the private timber owners and the Forest Service with its own timber. Only one unit has been set up, that of Simpson Timber Company, a ninety-nine year contract.

Maunder: Why only one since then? Wasn't this a good idea?

Fritz: It was a grand idea, but just then the situation changed. The lumber industry was carrying the ball for the first time. In 1941, it had set up a tree farm system. That program had two reasons behind it. One is generally spoken of as growing new forests. Second, companies wanted to practice forestry on their lands for effectuating their hope of continuity of production. They couldn't do it as long as the public was so careless with fire and didn't give a damn as long as it was the other fellow's property that they burned down. And they needed more old growth to carry them over to the time their young forest was to be merchantable.

Maunder: Wasn't industry threatened again by federal cutting regulation, and this was a reaction to prevent that legislation?

Fritz: And in some way to soften the controversy over regulation.

Maunder: I've had the impression, in reading the background of this story, that a very considerable amount of the impetus for the creation of the tree farm program stemmed from what industry saw as a rising tide of new effort to get regulatory legislation passed; and they felt they had to do something to demonstrate dramatically before public opinion that they were capable of managing their own affairs.

Fritz: Well, that probably had something to do with it, but I don't think it was the main reason. And I wouldn't blame them for it.



Canyon Acres Tree Farm Dedication, April 17, 1954. Tree farmer E.D. Freeman, left, points out his acreage to Professor Emanuel Fritz, Consulting Forester, California Redwood Association.



Professor Emanuel Fritz at Union Lumber Company
tree farm dedication, May, 1951.

Fritz: The tree farm system from the very start was jeered at by Forest Service men. Several came into my office at different times and said, "What do you know about this tree farm system?"

"I don't know; it just started. What do you think about it?"

"Oh, I think it's just window dressing."

Well, when you have a program like that, somebody's going to get on the band wagon and use it for window dressing, but the majority will take it seriously.

The tree farm system started on Weyerhaeuser land. That company was unquestionably sincere toward perpetual operation. This policy requires public support in preventing forest fires. The program grew from that small start. It was a public relations effort, in part to acquaint the public with forest management problems.

Mauder: There are good ones and there are bad ones.

Fritz: Just like there are good and bad farmers.

Mauder: All right. If somebody was just doing it for window dressing, couldn't he be tossed out of the system? Tree farms, after all, had to be certified as tree farms.

Fritz: Yes.

Mauder: And if they did not perform to certain standards, could they not be "de-certified"? And if this were done, it would offset the criticism, would it not?

Fritz: Some tree farms were indeed de-certified. Well, you can't do much in three years. The Sustained Yield Act was passed about 1944, and the tree farm system was started in 1941. The criticism was that this was window dressing in an effort to throw the public off its guard. I think it was very unfair. If a man promised you that he's going to do a certain thing, you better wait and see that he does it before you suspect his sincerity.

Mauder: Now let me ask you a question. To what extent did this attitude towards tree farming represent the thinking of all people within the Forest Service? Was it something that went right down through the ranks from the top to the bottom?

Fritz: No indeed. There were plenty of men in the Forest Service ranks who felt the tree farm idea is good and should be encouraged. Public men who talked conservation outside were the most careless with Uncle Sam's and the taxpayers' money. Now making a dollar go as far as possible is also conservation, and there's also the conservation of time--you only have twenty-four hours a day. If you waste some of it, you can't get it back.

- Maunder: Charles Dunwoody, with whom I had an interview just the other day in Pomona, told me that he was directly responsible for getting Ed Kotok all kinds of money for special projects, both from the state legislature and from the federal Congress. Can you tell me anything about that?
- Fritz: Well, I wasn't close to that, but knowing both Kotok and Dunwoody, I would say that if Dunwoody was capable of influence of that kind, Kotok would certainly use Dunwoody very well. I remember one case which was talked about a great deal here. I think he got something like \$25,000 for, I believe, watershed protection research in southern California. The first thing he did was to buy an automobile, which he used as a private car, since he had no car of his own. He could not do that with a federal car. He would oscillate back and forth between his office and his home for lunch when there were lunch rooms close to his office. That isn't conservation.
- Maunder: He was right here in the building, is that right?
- Fritz: Yes. It was a very bad influence on some of our students.
- Maunder: In what way?
- Fritz: Word would get around among students--mostly those he employed on a part-time basis--the way he handled his affairs.
- Maunder: Was his kind of behavior the kind that they emulated or found attractive?
- Fritz: Who?
- Maunder: The students.
- Fritz: No, the students at that time were brought up under a different philosophy.
- Maunder: I know, but would they be attracted by the kind of behavior they ?
- Fritz: No. They didn't want to work for a man like that.
- Maunder: Well, when did this clique begin to lose its influence and power in the profession?
- Fritz: Just about the time the United States got into the Second World War.
- Maunder: Why did they lose their influence?
- Fritz: They had the war to think about.
- Maunder: What happened then after the war?
- Fritz: They tried to resuscitate. But things changed very rapidly after

Fritz: the war. The tree farm program was taking hold, and we in California saw the effects of several other things very strongly. For example, the tree farm program was apparently being discussed among the people themselves--I mean the owners. And every once in a while you'd hear, up in the Douglas fir country, that such-and-such company was buying up cutover land. Why? Because they wanted to keep it growing to use when their own old growth was used up.

We saw the impact in California. A number of small operators, small logging contractors, and small mill men, had moved to north-western California, having learned that there was good timber in the Douglas fir belt, just east of the redwood belt, which therefore was considered inaccessible. They would buy a quarter section here and a quarter section there, and set up a mill and a little logging operation, and go to it. And we suddenly found ourselves with several hundred additional sawmills in the redwood belt. They were really mostly Douglas fir mills. (The Douglas fir eastward of the redwoods is a tributary to the redwood highway.) Being regarded as inaccessible, the timber was cheap. The small tracts of young growth in Oregon and Washington were no longer available to them because of the tree farms being set up there.

Maunder: Was it this trend that offset the potential for the sustained yield unit arrangement with the Forest Service that Simpson Company embarked upon?

Fritz: The Simpson people had some young stands but not enough to sustain their plant capacity. They needed old growth in sufficient volume to give the young stuff more time to become merchantable timber. In my opinion, conservation of forests is best served by large mills. They can have better machinery (that makes for less waste) and can build by-products factories, for utilizing the odds and ends that inevitably develop because of internal decay in the trees and the fact that logs are round and tapered.

It is too bad there could not have been more of the Simpson-U.S.F.S. type of sustained yield units. Our remaining old growth would have lasted longer because of the lessened waste, and there would be greater local stability.

C.R.A. Forester for the NIRA Lumber Code (Article X)

Maunder: What part did you have, if any, in the formulation of the NIRA Lumber Code? Did you sit in on any of the meetings?

Fritz: Yes, but I had no great part in it except to present my views. As you recall, the NIRA was an industry-operated scheme to install practices voluntarily. Every trade association had to have a forester at that time, and I happened to be the one asked to serve

Fritz: for the California Redwood Association. At the same time, the Forest Service asked Myron E. Krueger, my colleague here, to help them in organizing their part. What their part was to be was never quite clear to me, but Krueger and I were out several times together. However, it was largely an independent job, and a rather lonesome job too, at first.

We sat down, the Forest Service men, the University men, a few lumbermen, and myself, and we worked out the wording of Article Ten for the redwood region. It was based pretty largely on what I had learned before, and what we put into that code was this rock-bottom minimum.

Maunder: Where did all this take place?

Fritz: In the office of the Redwood Association. Rex Black was in on that too; at that time he was Executive Director of the California Forest Protective Association.

Article X was a part of the National Industrial Recovery Act of 1933, but it then had to be implemented in and by regions. The Redwood Association was part and parcel of this region and, like other regions, had to write its own rules. After they'd written the rules, they had to abide by them. That was the philosophy of the NIRA.

Well, the code was written, and even before that, I had been asked to serve as the C.R.A. advisor, or Code Forester; so I promptly went out in the field equipped with these rules. Of course, the operators all had copies of them too. I was very much encouraged and pleased that every man I talked to said, in effect, "We have agreed to do this voluntarily and we mean to carry it out, but we need your help, not only yours but that of others also. We want you to tell us what foresters think can be done or should be done, and we will then see how it can be done, and we'll try our best."

In a very few months the whole NIRA was invalidated by the U.S. Supreme Court. However, the industry decided to continue Article X, which was not in controversy, and they asked me to continue to do that same kind of work; and I can give you some examples of how that worked out.

I would visit the logging operations but not without the boss man knowing about it. Of course, later on I became better acquainted with the logging superintendents, and I had practically carte blanche to go anywhere I wanted in the woods and talk to anybody. They were very, very good that way. My respect for the people in the lumber business began to rise, rise, and rise, and I finally decided that the s.o.b.'s are not limited to this or that group, but every business and every profession has its fair share of them.

There were some that were not enthusiastic but others were one

Fritz: hundred percent and leaned over backwards. I would go out with the manager or the president, and with the logging boss, and we'd watch the logging. At that time, it was all steam engine, donkey engine, and high lead or slackline logging--very destructive. We would discuss how we could leave some seed trees.

The logging boss would say something like, "It's going to be very difficult, but we'll try it. It's going to be costly and I'm afraid the boss is going to say we can't do it." They made a real try. If you know about the slackline system, you know that when those lines were moved across the territory being logged, everything was pulled down. When they're through and the fire is run through to consume the slash, there isn't a green leaf left.

I suggested that instead of tight-lining across the area, they pull in the lines and rethread back on another radius, using straw lines, back in and out every time they had to change a tail tree. This would result in pie-shaped pieces of residual trees. They actually tried it out--it was very expensive--but it worked.

I photographed the area at the time. In ten years the new forest was too tall to photograph. This was because they left some trees standing, and that area was protected by parks on one side and uncut timber on the other. It was also protected from the ocean winds by a ridge, so the seeds blew in, germinated and started a very respectable forest. In some places it's entirely too dense.

It was decided the slackline system would be changed, but you can't change overnight. There's a lot of money involved. For example, one slackline setting has from 11,000 to 13,000 feet of wire rope, and that's expensive, and those donkey engines are expensive. They couldn't scrap them overnight and buy other equipment.

The idea was to see if we could adapt the old system to selective cutting. At present the wire system is not used except in a few cases in winter, and then for short pulls so they leave a lot of trees standing. But the high lead system is simpler than the slackline.

It happened that the Union Lumber Company had experimented with tractors--I think in 1932--and I had watched them. I was out there merely as a University professor, but it seemed to me they had a very definite application to the redwoods. Before that we all felt that the tractors weren't strong enough. That was true, so they used two tractors in tandem. It happened that the Union Lumber Company only had that machine on loan, so they went back to their steam system.

The operation depended on the logging bosses. Some wanted to do a bang-up job and others didn't care; some did a magnificent job of leaving seed trees stand, and it was quite a thing for them to do because it meant a lot of changes in their thinking and in the training of their men and their supervision, and so on.

Fortunately, in that same autumn of 1934, the Forest Service

Fritz: decided to work up a small party and go to Oregon and see how the tractors were working in the big timber up there on the coast. There was John Berry, M. M. Barnum from the Forest Service, Myron Krueger from the University, myself, and Captain A. W. Elam, who was my field man. Cap was not forestry-trained but he was very sympathetic to forestry ideas.

We watched the tractors in operation for several days, and the Forest Service group and Captain Elam and I were looking at it from several angles. We liked what we saw. I asked all of them when they came back not to express too much enthusiasm about the tractors but merely to report that they appeared to us to have possibilities and were worth trying out in the redwoods. I did that because any forcible and too definite statement is generally met with opposition, no matter who makes it.

A few weeks after that, as we suggested, some of the lumber companies sent their superintendents up to check on what we had seen and reported on, and one in particular came back and said, "Let's buy some and try them out ourselves." So they bought two--they were Chalmers tractors--and used them on flat ground on the Van Dusen River. That was the Hammond Lumber Company. Elmer Baker was the logging superintendent at the time.

I watched those tractors many, many hours and days and we were all satisfied that they do have a very definite place in the redwoods, but that they must be made more powerful and more flexible. Of course, they were trying them out on the worst kind of ground, on flat ground where they had to drag against the full weight of the log. The beautiful thing was that they could weave in around among the trees that were still standing, just like they would have to weave in among the stumps anyway, so they left standing a lot of trees under four feet in diameter, breast high.

Maunder: Whose operations were you observing up there in Oregon in the use of tractors and were they the pioneers in developing that method of logging?

Fritz: They were among the pioneers. Several of them started about the same time. We visited mostly the Crown Zellerbach operations.

Maunder: Was it Crown's Ed Stamm who gave the tractor its first test in the woods?

Fritz: Ed Stamm, Tom Jackson, Bert Torrey, and several others were very helpful. It was so interesting to go up there as practical representatives of the lumber industry. Even though we were foresters, we were received differently than if we had gone out there as University men representing the University or the Forest Service. They were very helpful and told us about some of the problems, and we reported on all that.

The outcome, as I've already said, was the purchase of two tractors

Fritz: by the Hammond Lumber Company, and their application to a piece of flat, very heavy timber on the Van Dusen River. That was in January, 1935, and from that point on, the number of tractors purchased and put to use in the redwoods multiplied very rapidly. In a very short time, there was about \$500,000 invested in tractors, and in even less additional time, a million dollars' worth. And today I don't know what it is, but you can't go anywhere in the woods now without seeing a tractor used for logging work, not only road-making but actual yarding. Nowadays, the bulldozers are used even for making a layout for heavy trees and smoothing out the ground so that the trees will fall on even ground to reduce the breakage. That in itself almost pays for the tractor.

Those were the days, as you expect, of many frustrations, but also of many, many satisfactions. Here and there was always a man to say, "Yes, we ought to do it that way," or "We've got to do it better than we are right now." Even though I worked solely with the men in the woods, from superintendents down, and did not work very closely with the men in the front office, they certainly heard about it. When I would meet them at a meeting or in their offices and would casually bring it up, they expressed satisfaction as to how things were going.

Some of them thought that it didn't hurt them to do this or that and that it was good public relations, so they would continue it; but the more progressive ones took the attitude that they'd been passing up a good bet and ought to get into it wholeheartedly and make a go of it.

That was the beginning of real selective cutting in the redwoods. The 1923 experiment on Big River, referred to earlier, proved very helpful. It supported the belief that the redwoods should be cut selectively. It has been proved that it's not only desirable silviculturally but also feasible and profitable commercially.

Some operations, of course, are better than others, but I should say with very few exceptions (the smaller outfits) the results are very, very satisfactory. They are 'way ahead of the state forest practice rules as to the appearance of the cutover land. Sometimes they incur a violation as to the number of shovels they have handy for fire fighting and as to snag removal, but in the actual silvicultural part, they're 'way ahead of the state rules.

Logging Conferences

Maunder: What part were the Pacific Logging Congresses and the regional congresses playing at this time in getting information about new technological developments disseminated through the industry?

Fritz: I'm glad you mentioned that because it's a very appropriate time

Fritz: for it. Harry W. Cole was for a short time the head of the California Redwood Association. He had been a company manager but the company was sold out to Hammond Lumber Company and left him stranded. It was the delightful and polished Harry Cole who asked me to serve as the Code Forester in the first place, and one day I told him that we could speed things up if we could get the loggers together in a conference.

Redwood loggers didn't know one another well. Each one on each operation talked a different language. Most of them were good fellows but they didn't know what it was all about. It was hard to reach them all, so why didn't we have a convocation or a meeting to which we would bring all these loggers, perhaps on a weekend? He agreed, and as a result, we held our first logging conference in the redwoods in February, 1936; and with the exception of three years during the war and because of a strike, we have had a meeting every year since then. This year we held our twentieth meeting in a period of twenty-three years.

That first meeting was merely a trial. I don't think we had more than sixty or sixty-five people present, and of that group probably no more than half were loggers. The rest were equipment men who saw there was some honey around with a lot of bosses to see at one time. There were also the inevitable federal and state men and a few professors. It was a very successful meeting.

The next year, the California Redwood Association approved holding a second one. We actually called that the Second Redwood Logging Conference--R.L.C. That went on until 1947 when, because of the heavy logging in the Douglas fir belt right alongside the redwood belt, we decided to expand and we called it the Redwood Region Logging Conference. Instead of letting the Redwood Association carry all the expense, we made it an entirely separate entity. Having been the father of it, I was made secretary-manager. I wrote the constitution and organized the thing, and I got wonderful support from men like Waldron Hyatt, Earl Birmingham, John Gray, Gordon Manary, and a lot of others.

Maunder: This sounds as if it was completely independent and separate from the Pacific Logging Congress.

Fritz: That's right. The Pacific Logging Congress is much older and covers the entire West. The P.L.C. started about 1907 or '09 to assemble loggers annually to discuss mutual problems, new equipment and methods.

It would seem the P.L.C. should handle our proposed meeting, but we felt that we had specific problems down here peculiar to the region, and that the Pacific Logging Congress was an overall congress for the entire West. Also, we felt we could do better running our own show because we were closer to the job. I know that the P.L.C. manager, Archie Whisnant, didn't like the idea and took

Fritz: me to task for setting up the redwood meeting, but later on he agreed that it was the best thing possible and he saw to it that more regional conferences were organized. As a result, we have the Willamette Valley Logging Conference, Northern Rocky Mountain Logging Conference, the Sierra-Cascade Logging Conference, the Olympic Logging Conference, and so on.

Maunder: All of which directly tie in with the Pacific Logging Congress?

Fritz: Yes. They are all absolutely separate entities, but we all agree and feel that the regional conferences (they were called conferences deliberately) should be considered to be affiliated with the Pacific Logging Congress, although there was no control by the P.L.C. and no money changed hands or anything like that. They had nothing to do with the program, but they were always very helpful with suggestions and helped when they were asked.

Maunder: Do you suppose then that the Redwood Region Logging Conference got its stimulation and original structure from the pattern which had already been set up north?

Fritz: By the Pacific Logging Congress? Yes. We thought that the Pacific Logging Congress covered too wide a difference of logging conditions. Now, with the regional conferences, the P.L.C. can concentrate on the overall more important problems.

Maunder: Yes. Don MacKenzie explained that to me last year at the P.L.C. when I made an interview with him. He said that the operators over in western Montana and Idaho had a feeling that the Pacific Logging Congress was dealing with basic problems but that the solutions weren't applicable in their own area; so they found it necessary to set up an Intermountain Logging Conference, and I think you probably had the same general experience here.

Fritz: That's correct. I think the Intermountain Logging Conference was the second one; ours was the first. Of course, we had the advice and the pattern set by the P.L.C., but our problems were more specific and limited to a region. If we had the same program as the Pacific Logging Congress, it would take a month to hold a meeting. Now, each conference takes up local subjects and problems.

At the start, the R.L.C. had a very precarious hold on life because some of these old loggers (many of them uneducated men but very competent loggers) didn't take very kindly to meetings or talking at meetings, and to this day, it's hard to get them to talk at a meeting.

Maunder: To what extent did the manufacturers of logging equipment enter into this thing enthusiastically in the beginning to stimulate it? Did they put their backs into it as far as manpower and money was concerned?

Fritz: At first, you must remember, it was sponsored by the California Redwood Association, which paid the expenses. It didn't cost very much, and I got no compensation for it over my regular retainer. I did it as a goodwill matter.

But the Redwood Association objected to giving a broadcast invitation to the equipment people. Because the redwood region was small--we had probably fifty loggers--and they would be easily outnumbered by the equipment people, we wouldn't be able to hold our meeting because the equipment people had a penchant for entertaining the loggers in their rooms and we had a hard time getting them out.

So the Association decided not to keep them out, but not to invite them either. However, we would go outside of that rule at times when we wanted a certain man to talk about a specific subject, like torque converters. That was a new thing to be added to a truck and to a tractor. We also had fire equipment men come up.

The equipment people, of course, didn't like that because it was duck soup for them to have so many loggers congregated together in one place and they could make a killing. However, the equipment people were generally of the engineer type. They had a lot of know-how and knowledge of their machines and their capacities and uses. I felt it was a loss not to have them around, but we had to abide by the Association's edict.

In 1947, when we became a separate entity, we decided to ask the equipment people to come in, and they came in wonderfully well. They volunteered many aids. For example, they volunteered to put up the entertainment. They volunteered to stop room entertainment, to concentrate their entertainment in what we called "The Sawdust Bowl." We copied that idea and term from the P.L.C. The Bowl was to organize the socializing and arm-bending. It had a beneficial effect on the banquet too; the banquets became more quiet instead of being rowdy like a few of the earlier ones were.

Maunder: This has always been a problem in meetings of lumbermen and loggers, hasn't it? [Laughter]

Fritz: And foresters too.

Maunder: It's a problem of having a good time but at the same time, serving the real purposes of the meeting.

Fritz: It was a flashback to the old days when the logger would come to town for weekends and get himself gloriously tight, but that is a matter of history now. In the Redwood Conference, we always insisted on having quiet banquet nights where we could actually hear a man talk and enjoy ourselves. Banquet entertainment was worked up from local talent, but as the Conference grew larger, the equipment people took over the entertainment and obtained professionals

Fritz: from agencies.

It was a very excellent experience. It made one acquainted with a lot of loggers, and they learned that foresters did not have horns or tails and that they're all trying to do different parts of the same job.

Maunder: Who were the men who were most instrumental, along with yourself, in getting this thing started? You've mentioned Cole.

Fritz: We had to have the backing of industry principals. I went to them and asked them how they felt about it, and they said, "Go to it. It looks like a good thing." There are very few redwood companies, but many more Douglas fir loggers. Altogether it made a lot. I believe at one time over seven hundred individuals registered.

Some of the original individual wheel horses were Earl Birmingham, Elmer Baker, Gordon Manary, Dana Gray, John Gray, Waldron Hyatt, and others.

Maunder: What was involved in the way of cost in the initial stages of the Redwood Logging Conference?

Fritz: Nothing. We got the meeting room for nothing, provided we had our banquet there. The men had to buy their own banquet tickets, but the Redwood Association paid the expense of mailing and mimeographing and typing and so on. I got actual personal expenses. Nobody got a dime in salary or fees. There were no dues.

The equipment people later put on the entertainment and sometimes they spent as much as \$6,000 or \$7,000 for one meeting, and the R.R.L.C., as it was later known, spent about an equal amount.

Beginning in 1947, the secretary-manager was put on a retainer. At first, it was very small and finally, \$300 a month. There was some work to do for the R.R.L.C. all through the year. Then, at my own request, I asked that it be cut in half, and that one-half be turned over to another man who would be my understudy and who in a short time would take over. That took place this past August first. Fred Landenberger, the man who followed me, is a capable young man and mightily interested.

Maunder: He got this as an additional income to his regular job.

Fritz: Yes, with the Redwood Association. Now, It looks bad to have the Redwood Association man doing the job for the R.R.L.C., but on the other hand, there's a gentlemen's agreement that they'll be kept absolutely separate, and the Redwood Association will not interfere with the R.R.L.C. Financially, of course, they're entirely separate.

Maunder: Now the income of the group is derived on what basis?

Fritz: From membership fees. We didn't have any membership fee for ten

Fritz: years, but in 1947, we had a five dollar individual membership and a twenty-five dollar membership for firms. There weren't enough lumber firms, of course, to support it, but the equipment people also came in on the twenty-five dollar fee and they were a great help, not only financially but in many other ways. The equipment show that they put on was really something superior. It draws laymen as well as loggers and is an education for youngsters.

Maunder: It cost them quite a good bit of money, I imagine.

Fritz: The individual distributors sometimes spent more than \$10,000 just on putting up their exhibits, quite aside from their contributions for entertainment and so on. One year, Chrysler shipped its experimental gas turbine, designed for trucks and heavy tractors, by air express.

Maunder: Of course, these things have had a tremendous impact on the rapid mechanization of the industry.

Fritz: Before this tape runs out, I'd like to tell you that all the records, up to the time I retired from the R.R.L.C., are being assembled at the present time, and they will be bound at my expense and turned over to the Bancroft Library.

Maunder: Conferences like this must be the most effective way of getting across the idea of forestry.

Fritz: The logging conferences always have a lot of forestry in them. They have a dual purpose: to improve logging and to improve the woods practices. They go together. Sometimes our whole program is what you might call forestry, and other times it's all logging, but you can't divorce the two anyway.

If you read the description of the theme on our last program, it reads: "The logger is the key man in putting forestry into practice because whatever he does on the land earmarks that land as to what it's going to look like, not next year, but fifty or a hundred years hence." And they understand that, I'm sure.

The companies that do have foresters, of course, let them meet with their local chapter of the S.A.F., and they talk about technical matters. Then, of course, they take it back to their companies and they're always in contact with their principals, so all you need is an outfit like Western Forestry.



Emanuel Fritz, former Governor Earl Warren, and Waldron Hyatt, president of the Redwood Region Logging Conference. The occasion was Warren's campaign tour for a fourth term as California's governor. Eureka, California, May 27, 1950. Photograph courtesy of The Lumberman.

VIII SOCIETY OF AMERICAN FORESTERS

Role of the Society

Maunder: When did you join the Society of American Foresters?

Fritz: I was made a full member in 1919. I joined it because I thought every professional man should join his professional society, if only to keep up with what's going on in his field.

Maunder: How well do you think the Society of American Foresters has served you over the years?

Fritz: Very well. Its Journal had to be supplemented, of course, by a lot of additional reading. The profession was still very young.

Maunder: Were you an active member from the start?

Fritz: Only since 1919. I think I was a contributor to the Journal of Forestry for the first time in 1924. I wrote an article with the man who helped me get the data; he was a student, a very able young man. I also wrote an article on nomenclature of trees about the same time.

Maunder: Who was that? Do you remember the name?

Fritz: James L. Averell. It was on a discovery that redwood growth rings often don't encircle the tree completely. We checked it in a number of ways, including even under a microscope. We called them "discontinuous rings." This article was an offshoot from my 1923 study of young growth.

Maunder: And then you wrote a paper on this which was accepted and published in 1924. In what other ways did you take part in the Society in those early days? Did you go to meetings regularly?

Fritz: Yes, when there was one here. We had a California section. In 1928, I believe, I was its secretary.

Maunder: Yes. What part did you play in organizing that California section?

Fritz: None. It was organized before I came to California. Being new, I merely listened.

Maunder: How long had the Society's chapter been in existence here before you came?

Fritz: Possibly two years, perhaps more.

Maunder: Who were the leaders of the section at the time that you came?

Fritz: There was Fritz Olmsted and Coeurt Dubois (he resigned shortly after that to join the consular service) and of course, the faculty members of the University of California. The members were very active and we had very lively meetings, but they were often related to legislation for regulation of lumbering.

At that time, Pinchot decided to go to bat for legislation providing for regulation of lumbering. G. P. was drafting bills and holding discussions in Washington. I think a bill had been introduced in Congress. But I took no active part in such matters at that time.

Maunder: Weren't there any discussions at the practical level at that time?

Fritz: Very little in the first few years; in the late Twenties, yes. There were several men like Swift Berry, Richard Colgan, and later on, Rex Black, Dwight Birch, myself, and several others who were interested in private forestry and the utilization phase of forestry. Just as a cannery man is interested in the utilization phase of farm crops, so the sawmill is the converter of tree crops. I got very well acquainted with these foresters. I should add, there were more in the northwest and southeast.

Maunder: All these men were members of the Society of American Foresters?

Fritz: Yes, all were forestry trained. Of course, through them and also through my visits to the mills, I became acquainted with the operating and management personnel at the sawmills, particularly in the pine regions. I didn't then go to the redwoods very much. I had more familiarity with the pine regions--southern pine, Inland Empire pine, and California pines.

Maunder: So you were more in contact with this group than with the foresters whose interests were more in the direction of what you might call forest policy.

Fritz: Forest policy, yes. That was the big subject and I took an early interest in it.

Maunder: Did the Journal in those years reflect that major interest?

Fritz: Yes. Policy matters got much space. Of course, there was also the great U.S. Forest Products Laboratory at Madison, Wisconsin. I visited there a number of times. Its staff had interests similar to mine--interest in developing wood technology and its application. The Madison Laboratory did more to make friends for foresters than the administrators of the national forests.

Maunder: Your interest in the S.A.F. in those first few years of your membership was a mixed one. You had rather great reservations, I take it, about the bent of most of the discussion in the group.

Fritz: Yes. I still think the polemics some of us engaged in were not what

Fritz: forestry needed most. It needed friends among forest owners. We spent too much time alienating the people we needed most. We were a sophomoric lot. I have always taken an active interest in the Society; though retired since 1954, I'm still interested in what the Society does and particularly what it does not do.

I think the Society at the present time is in a depression, a mental depression. It has been (particularly its Washington office) inclined toward preserving a status quo. Of course, if it should strike out as it did in the past, crusading without a sound basis, I would certainly become more articulate again. The Society is actually undergoing a change quietly. The Western Forestry and Conservation Association, the American Forestry Association, and the Forest Products Research Society are carrying much of the load and doing fine jobs.

The forestry profession itself is changing. There is a stronger professional attitude; it is getting to be more realistic. This will ultimately be reflected in the Journal of Forestry. So a quiet period may be a good thing. The large number of members in private employ are showing strength.

Mauder: What are these other organizations doing which in your estimation the Society should perhaps be doing? What show of leadership are they demonstrating?

Fritz: Take Western Forestry, for example. That's a short name for Western Forestry and Conservation Association, headquartered in Portland, Oregon. It has the same objectives as the Society of American Foresters but its membership is professional only in part. It is a working membership and it operates on the friendly and realistic approach, and by that approach, it has been able to get into its membership many companies and company representatives from the principals on down.

It actually was started by private owners and was one of the first to really attack the fire problem realistically in the West and be successful; and if it hadn't been organized, I think it would have been many more years before we would have gotten laws like the McSweeney-McNary and the Clarke-McNary laws.

In that organization are men like E. T. Allen, Clyde Martin, Ed Stamm, George Drake, Truman Collins, Ed Heacox, G. F. Jewitt-- foresters and timber company managers. Timberland owners pay on an acre basis. Nonowners, like myself, pay a small membership fee. Most of the private company representatives have very responsible jobs and are men of real ability who combined courage with their convictions and dealt directly with their own principals. The men that I have mentioned have been extremely successful in their particular companies, and actually put forestry into the woods where it belonged rather than at the desks in Washington or those of forestry school teachers.

Mauder: What has characterized the Society's activity as opposed to this other approach that you say has been made by other forestry organizations?

Fritz: I felt that the Society was following Pinchot too blindly. There was not sufficient understanding of the forestry and lumbering problems and of economics. Many members of the S.A.F. felt that a man in private industry, if he was in logging or milling, was not a forester. That was quite the opposite of what is true of engineering where, if a man goes into mining, or blast furnace work, or rolling mill work, or structural design, or structural fabrication, he is still an engineer; and even if he goes into selling, he's still an engineer.

I have met some of my old engineering classmates who are salesmen. Their engineering training has been not only valuable but indispensable. Too many of the early-day foresters let their love for the forest overcome their practical understanding of forestry practices. That is rather strange because the earliest foresters like Henry Graves and Gifford Pinchot were trained in Europe, in France and in Germany, and they should have learned over there that the German foresters grow trees only to be cut to make useful and needed products. It was a crop with them, while with us it was a beautiful object that only God can make.

The aesthetic has always been strong among foresters, but the realities cannot be overlooked. I must confess I was influenced by the appeal of the forest in selecting forestry for my profession, but my engineering background probably brought about a balance.

Mauder: In spite of this feeling that you say characterized the thought and direction of the Society, still you, as a man representative of forest utilization, were a candidate on at least one occasion for the presidency of the organization; and for some period of time you were also editor of the Society's Journal of American Forestry. This would seem to indicate to me that there was some recognition of your special field and interest. It wasn't a complete concentration on the other. How would you reconcile those two?

Fritz: You probably didn't know it, but at the University of California every member of the forestry faculty is a "professor of forestry"-- not a professor of lumbering, or of logging, or of silviculture or wood technology. I think that was a mistake, but to this day I'm regarded by the lumber people as a forester and preservationist and not as one who taught the engineering aspects of sawmilling, forest products, and the properties and uses of wood.

Perhaps I should have emphasized my own interest in the engineering aspects of lumbering and forestry in the early days, but I liked to feel that I was a forester plus an engineer. However, it didn't work out that way. Even at the University of California when I

Fritz: wanted to expand lumbering or wood technology, I was voted down. One time I suggested we should have a testing machine so we could test our own native woods, but we never got it. I was told, "We should not duplicate equipment already in the engineering department."

In 1925, I was working on plans for a forest products laboratory for the University, but one day was told to quit further planning because "it is not the function of the University to make money for the lumber industry!" That struck me as strange because we were in the College of Agriculture, and the College of Agriculture had a fruit products laboratory where it was trying to find out how better to can and prepare fruits, how to refrigerate them and so on. That certainly was to the benefit of the canners and refrigerators, not necessarily to make more money for them but to advance the technique of the preparation of fruit products. And certainly the forest products laboratory was a parallel except that it dealt with trees that produce wood rather than apples and other fruits.

Maunder: In other words, I believe you are saying that the profession of forestry has differed from other professions in the agricultural sciences. Has it been oriented through a long period of its development to the idea of preservation rather than to utilization?

Fritz: It would be unfair to say foresters ignored utilization. From the earliest days some of them found more appeal in utilization. The Forest Products Laboratory had foresters on its staff, and there were others who studied and wrote reports on that subject. One of the big criticisms of lumbering was its apparent and, to some extent, real wastefulness. Some of the early reports concerned "closer utilization," as a conservation measure. There was waste indeed. But much of the tree cannot be used.

If lumber prices had been higher there would be a wider spread between the prices of various grades. The buyer would be more influenced by price to buy the lower grades. At present much material must be burned to get rid of it. The reduction of waste is largely a matter of economics. Some day there will be no refuse burners at sawmills because the lower grades at lower prices serve the purpose as well as better grades. Furthermore, as more pulp and paper mills are needed and built, what is now waste will be the raw material for paper pulp.

It can be said of the forestry profession that it was largely forest preservation and management minded. The foresters who went into lumbering were badly outnumbered.

In the Redwood Region Logging Conference, which I started in 1935 or 1936, I constantly bore down on this fact: that the logger and forester must work together because, while the forester may make plans for the ultimate permanence of lumbering, the logger can make or break any forestry plans the foresters may have made and gotten

Fritz: approved by the owners.

Maunder: Was there then within the ranks of professional foresters a clear line between the two philosophies with two groups standing in opposition to one another?

Fritz: Well, as I said earlier, I think that was manifested by the attitude of public foresters towards the foresters who quit to go into private service as loggers or as mill men. Let me add that in 1928 when Colonel Greeley joined the West Coast Lumberman's Association, a very well-known Forest Service man asked me, "You've worked for that Association very recently. Does it mean that Colonel Greeley has gone over to the enemy?"

Well, I bristled, because Colonel Greeley just wasn't that kind of a man, and the Colonel would never have gone with the West Coast Association merely to be an Association secretary, but he saw an opportunity to spread the foresters' philosophy as to timber management, and I think we must agree the Colonel was very successful.

Perhaps the fact that the Forest Service is a federal bureau and, like most bureaus, thinks in terms of its own permanence and growth, its members thought of forestry in terms of federal control.

Maunder: Emanuel, what I'm driving for here at this particular juncture is simply this: somewhere in the history of the American forestry profession there came a recognition of the fact that there was more to forestry than just the idea of growing and preserving the trees. There came into recognition by a few individuals the idea that forestry should serve the function of utilization.

I wish you could help us pinpoint the origins of this trend, single out the people who gave it first expression, and let us know anything you can recall about how this discussion made its way into the Journal of Forestry and other publications so that it became a subject of debate within the forestry profession.

Fritz: Well, Elwood, I have already given you some names, but I think you should credit Colonel Greeley as the Number One man who started foresters to thinking in more pragmatic terms while at the same time converting timber owners to forest management for permanence. It never became a real debate, but here and there were some individual foresters--forestry trained men not necessarily practicing forestry, although it included both categories--who, whenever an opportunity presented itself, spoke in behalf of lumbering as a legitimate business.

For example, I think Nelson C. Brown had a considerable impact because in his contact with foresters he tried to promote the idea that logging and milling were a necessity. Then there was Kenneth J. Pearce of the University of Washington. He did his part. Then there was Oregon State College, particularly Dean George Peavy, and

Fritz: there were a couple of men like Matthews at Michigan, Grondal at Washington, Bryant at Yale, and several others; and there were men in private employ who, when they had an opportunity, presented the case. I did it at the University of California. It was a sure way of becoming unpopular with the public foresters.

Since I have mentioned some names, I must add that none of these men gave up his original professional forestry principles and acted as an apologist for the lumber industry. Someone must some day write out the impact these men had toward instituting private forestry. It wasn't easy. I have been, myself, labeled an apologist for the lumberman, perhaps because what little I have written sounds like I was covering up for what the industry was not doing.

Actually, one had to learn salesmanship, to credit a prospect for what he is doing rather than shouting from the roof tops what is not being done. I think I, for one, knew more about why forestry was slow in taking hold on private lands. When you know and honestly recognize the difficulties, you are in better shape to know what approach to take.

Maunder: Would you say then that this had its beginnings on the campuses of our colleges where there were either schools of forestry established or departments of forestry?

Fritz: I think much of the impact really came from the schools because the school men had independence and some of them elected to speak up. I think I was regarded as one of the articulate ones, which wasn't to my advantage. It made all of us suspect as being chattels of the lumber industry, which was entirely wrong.

In the many years I was a forestry advisor to the lumber industry, I was never asked to make a slanted statement in its behalf. I don't believe any of my colleagues in teaching had a different experience. The foresters in private industry had to be more circumspect because their own principals were against antagonizing public foresters, but gradually here and there, one of them would speak up.

Journal of Forestry Work

Fry: I'd like to move on to your accepting an associate editorship of the Journal of Forestry, in 1922. I think this was when Zon was editor-in-chief, is that right? And then later on Dana came, in October of 1928.

Fritz: Fernow was editor-in-chief when I became one of the associate editors. I'm quite sure it was Fernow. [Editor from 1917 to February, 1923]

- Fry: You had the experience of working under all three of them. According to the record, you were an associate editor from 1922 to 1930, then editor from October, 1930 to December, 1932.
- Fritz: Right.
- Maunder: What did associate editor mean? What did you do?
- Fritz: Each associate editor represented a special field like silviculture, protection and utilization, and was expected to look for articles in his specific field and to help edit them. Actually, Zon did very little in the way of submitting articles to his associate editors. He did it in the field of utilization with me, but he apparently had very bad luck with the others, or he did not use them. Their papers were slow coming back, and he didn't have too much to publish at that time anyway, so as soon as he got a manuscript, he ran it, with the result that some of them were not edited at all.
- Maunder: This was in the Twenties?
- Fritz: Yes. Zon followed Fernow in 1923. I wrote a few editorials for Zon and would try to get foresters to prepare articles. Zon and I did correspond on matters affecting the Journal. Serving the magazine was purely a labor of love; there was no compensation and no expense account. But I enjoyed it. I must add, in fairness to Zon's associate editors and mine, that since many of them were in public employ and were in the field a good deal of the time, they did not have much spare time to devote to the Journal.
- Maunder: Did you work then for a spell under Fernow when he was an editor?
- Fritz: Well, "worked under him," you can't say that; and you can't say I worked with him. The editor in those days, you must remember, was a volunteer editor.
- Maunder: That was true for some time thereafter too, wasn't it?
- Fritz: That was true through my editorship and partly through the next one, I think.
- Fry: Were you always in wood technology, in your capacity as associate editor?
- Fritz: Yes. Wood technology and lumbering.
- Maunder: What was the system in those days? Would the acting editor refer to each one of you, as specialists in certain fields, articles which had been submitted in those fields?
- Fritz: That was the theory. It didn't work out well.
- Maunder: How did it work out?

Fritz: Fernow was the type of man who I think wouldn't want to take the time to send an article all over the country and then wait for the man at the other end to edit it. He'd go ahead and do it himself. Sometimes articles went in there, especially under Zon, without very much editing at all.

Fry: What was Zon like as an editor?

Fritz: Zon was associate editor, then editor. He was kind of an oddity. A very able man, and a man I thought I had to watch very closely, he wasn't above arrogating credit to himself when he didn't deserve it. However, the load wasn't heavy. Very few articles in my field were submitted so I didn't have very much editing to do or commenting on whether an article should be published or not.

Maunder: In the first years of your association with the editorial staff of the Journal, what were your specific tasks?

Fritz: I tried to get articles in my own field.

Maunder: How did you go about doing that?

Fritz: People I knew.

Maunder: Writing to them?

Fritz: Writing to them or speaking to them.

Maunder: Suggesting articles that they might write?

Fritz: Yes.

Maunder: What results did you get from this effort?

Fritz: Very little.

Fry: I saw a letter from Fernow, dated April 4, 1922, to you. This was a month after you were appointed and Fernow said, "It will hardly be necessary for you to look out for articles, which so far we have secured without solicitation."

Fritz: Yes. Well, he didn't say, articles on what subject. You could get any number of articles on the philosophy of forestry. That's what most writers in those days wrote about, as much as to say, "Forestry is a fine thing; you ought to practice it on your land."

Fry: I was wondering if you could comment on the ways that these three editors handled the Journal of Forestry.

Fritz: Well, sometimes I would feel sorry for men like Zon and Fernow because, as I mentioned, sometimes the basket was awfully low in good articles. There would be articles like: Pinchot or other S.A.F.

Fritz: members would give a talk somewhere to some conservation agency and that would be an article. Or someone would write something on one of his efforts to develop interest in forestry. Somebody else would write an article on federal policy: should the government own all timber or should it be all private? It was a natural thing in the formative years.

Fry: In those years, it wasn't so much a particular editorial policy that determined what went in. It was just what the editor could get?

Fritz: Yes--what was sent to him. During my own editorship, I used to write a lot of letters for articles and I think I interviewed more people than I wrote to, begging for articles. I presume that Dana did the same thing because Dana was a very good editor. And Smith, my successor, was a very hard worker. Zon and Dana had less time to devote to the Journal than I had. Smith's editorials were beautiful essays.

Mauder: What did you look for in articles that you were trying to get for the Journal?

Fritz: Well, I was satisfied to publish an article even though the thing that was proposed, or explained, was still experimental--though the authors weren't sure whether it was going to work or not. I wanted an article on what was being done right then.

My editorship was so long ago that I don't recall very much about the articles published in the first twenty years. Some of my own contributions as articles were in the same class--polemics--although I was generally on the unpopular side.

Mauder: Well, you were seeking for a more scientific type of article, is that right?

Fritz: I wasn't so much interested in the scientific aspects alone (I wouldn't be against it), but when you go into real scientific work, you are taking up a subject which might require ten years to get an answer. I felt that we had problems right now today in trying to sell forestry. Why not concentrate on the immediate problems at once and let the glamour projects wait until all of us learned more about the nature of the problems and how they should be approached.

The problems I thought should have high priority were in the field of forest management. Fortunately, a few management projects were set up very early, but as I said earlier, they take years to yield results. An outstanding project was the ponderosa pine project at Fort Valley Forest Experiment Station, under G. A. Pearson, in northern Arizona, started in 1909.

We got many policy articles. Most of them were published, perhaps all.

- Fry: And this opened up the whole question of forest policy in the Journal--as I understand it, about the first time it had really become a subject of wide dialogue between members of S.A.F.
- Maunder: Did you get many scientific articles during your chief editorship?
- Fritz: There were very few forestry scientists in the first two decades of American forestry. The Forest Products Laboratory did much scientific work on wood. The Lab had to feel its way, just as did the foresters, but it had a real advantage. It could work on projects that would yield at least preliminary results in a few years, whereas silvicultural research would require many years. The basic work at the Lab in those early years was also a training ground. To study wood was somewhat new in the U.S. That the Lab built a strong foundation is evidenced by the reports and research articles that now appear in the Forest Products Journal, twenty-five years or more younger than the Journal of Forestry. The Lab had its own outlet--a long series of technical bulletins, notes and articles. The Journal printed some.
- Maunder: Did your role change in any way in the period from 1922 to '30?
- Fritz: No, there wasn't any change.
- Maunder: Did you have a feeling you were being groomed to become the editor, or were you ever told by any of your predecessors that this might be the case?
- Fritz: No. In fact, I wasn't even in California when the invitation came to me. I was at Cornell at the time as an exchange professor, and I didn't have the slightest idea I was being considered for the chief editorship. It hadn't even occurred to me that I would want to be the editor. I had been on the board of editors of the annual year book of the graduating class at Polytechnic Institute in Baltimore, but I wouldn't consider that editing. It's something a kid just likes to do. (Incidentally, it was never published.)
- Maunder: Well, what was the first hint that you were going to be editor of the Journal?
- Fritz: I think it was a letter or telegram I got from Paul G. Redington, then president of the S.A.F.
- Maunder: Redington was in San Francisco then, head of that Forest Service Region?
- Fritz: He was president of the S.A.F.
- Maunder: And was he also head of the Forest Service's California Region at that time?
- Fritz: Yes. Now maybe I am wrong. Perhaps Redington had already left the U.S.F.S. to take the directorship of U.S. Biological Survey.

Maunder: Did he make a personal appeal to you to take on the job?

Fritz: I don't remember. It came to me as such a surprise, I thought, "Well, maybe he's trying out several. He just wants to see how I feel about it."

Maunder: You were succeeding Sam Dana, weren't you? Was Sam editor up until 1930?

Fritz: That's right, 1928 to 1930. Dana was Zon's successor. Dana was, of course, well-known as a writer and a very able man. At that time we published only nine numbers. Sam carried the Journal through June. I picked it up with the October, 1930, number. Dana had too many duties as dean at the University of Michigan, so he asked to be relieved. Paul G. Redington told me later when I asked him why I was appointed, "Well, Dana said that you were the only associate editor who ever gave him any help." So I was appointed.

Maunder: In other words, there was no controversy that caused Sam Dana to leave?

Fritz: Oh no, none whatever. Dana was one of forestry profession's best. He had his hands in a lot of things, and the Journal was dropping back as to the date of publication. That editorship to me was a very expensive thing, expensive in view of the value of a dollar in those days.

Maunder: How do you mean? You were sacrificing the time you could have been using to make additional income for yourself?

Fritz: I had the pleasure of doing it, but it came at a time when I was to write a report on a study I made in 1928-1929 on Pacific Lumber Company land. Its purpose was to find out what becomes of the wood in redwood trees: how much of it is lumber, how much is shingle bolts, how much of it is something else, and how much is left in the woods.

I wanted very much to write that report because of its immediate interest to foresters and the lumber people. That was something that touched their pocketbooks. I felt such a project would help sell an experiment in selective cutting. Its data was very helpful for some years. I am going to turn the raw data over to the Bancroft Library for safekeeping.

Fry: You became editor-in-chief when you were teaching one semester at Cornell, is that right?

Fritz: I have to think hard. It has been a long time ago. I feel sure it was early 1930 when Redington wrote to me. Yes, because I had the teaching semester. I was in Florida with relatives in January. The spring semester began sometime late in that month, and I taught at Cornell until June. Then my family came up from Florida and met

- Fritz: me in Ithaca. We drove back to California, and on the way back, I stopped at a number of places where there were foresters and talked to them about what they thought of the Journal of Forestry, what I could do to make it more useful to field men, and its policy and whatnot. I had some ideas what the policy might be, from my associate editorship, but I needed to know what others thought.
- Mauder: I take it that the editor determined this.
- Fritz: He did, within reasonable limits of course.
- Mauder: He was not governed by the S.A.F. Council or ?
- Fritz: It would have been a fine thing if the Council had taken some active interest. I went to one Council meeting in December, 1932. The Councilors talked about everything but the Journal, which was the principal output of the S.A.F., until I brought it up when our time was running out. I thought it showed ingratitude to a volunteer editor. So I thought, "To hell with it," and resigned.
- Mauder: When you went to the editorship, you did it of course as a strictly unpaid volunteer within an organization which had two paid employees, and these were in Washington, D.C.--an executive secretary and a business manager.
- Fritz: They had a business manager, Miss Warren. Her name was Hicks at that time; then she was married and divorced, and she retained her married name, Warren. There was also a paid secretary at that time.
- Mauder: And what sort of a person was Miss Warren as you remember her then?
- Fritz: I would say a dynamo. She took a sort of a mother-hen attitude over the foresters that she had to deal with. We always got along well except for one occasion which was very embarrassing to me. I was a new editor and I was three thousand miles away in California when it happened.

On my drive West from Ithaca, I went to Baltimore, where the Journal was printed by the Monumental Press (I think they still print it). And I had relatives there and remained a couple of weeks, visiting back and forth between Washington and Baltimore, and of course, I called on Miss Warren and the printer. I told her I wanted the book to be exactly like Dana left it, no change in paper, format, or type.

Well, the first issue came out that way, but the November and December issues came out on "pulp." It stank. When I opened my copy, I thought, "What the devil have I done wrong!" It would give everybody the impression that the Journal of Forestry was just another cheap pulp magazine.

So I wrote to Miss Warren and protested the change in my instructions as to paper.

Maunder: Had she taken it upon herself to order it?

Fritz: Yes, to save some money for the Journal by changing to a cheap grade of paper. She was a keen business manager. When the December Issue came out, it was really bulky. Dana told me he had about thirty articles in his file, and he said, "None of them are good but that's all you've got to start with." So I thought I'd clear the decks right away and print them all, good or bad, just because I didn't want any author to feel hurt. Paper was already bought for two issues. The December number looked bad because of the paper and the book's bulk.

Maunder: What reaction did you get from the members?

Fritz: Very, very little. They probably thought it was a matter of economy. But it was one of those cases where it is better to forget it.

Maunder: What responsibilities did the people in the office in Washington have to assist you in the job of editing and publishing the Journal?

Fritz: Well, I don't know what they were asked to do, but obviously Miss Warren was the business manager and therefore had to watch the cost. She meant well. She had to look after all dealings with the printer and keeping books on costs.

I tried to start a program of getting advertising to help meet costs but I was voted down by the Council. They said the Journal of Forestry is a professional magazine of a high quality, and they didn't want advertisements of equipment, and so forth, in our magazine. Well, now the Journal gets a handsome help from advertisements.

Fry: It must have been a tremendous strain on you to handle the editorship and your faculty duties as well. How did you work it out?

Fritz: It didn't work out too well for me; it proved to be a very expensive experience. I lost out at the University because I gave the Journal too much time. I put in many a week of thirty hours, mostly at night. It advanced the need for eye glasses. I was a fast reader then and I could edit very rapidly. In addition to my other reading and teaching, it was rather bad for eyes.

Maunder: Was there any stipend involved in doing this work?

Fritz: Not a penny. I figured it cost me all the fees I could have received from consulting work. I hadn't been doing very much in the consulting field at that time, but it was enough to make it possible for me to stay at the University of California. All University personnel took a ten percent salary cut during the depression.

Maunder: How long were you chief editor of the Journal?

Fritz: Nearly three years, and that's a story in itself. I discovered at the University of California that even though I was told that my editorship was considered a legitimate University faculty member's work and would be accepted in lieu of research, I suddenly found out that it was not the case. The dean himself told me that.

At the same time, I was a little fed up by the lack of interest in the Journal on the part of the S.A.F. Council. I attended Council meetings, of course, and when it came my turn to talk about the Journal and what it required, I got very little response, so I felt I was wasting my time.

Maunder: This was, of course, during three of the hardest years of the Depression, and part of the trouble lay at that point, didn't it?

Fritz: Not exactly. They were not years of stress for the Society of American Foresters. In fact, we were pretty well off during the Depression. Our membership increased very rapidly because so many men went to forestry schools merely to get jobs with a CCC camp as a foreman, or a WPA camp. For example, at the University of California we had, as I recall it, 375 students in the year 1937, and many of them became members of the Society. In fact, the secretary of the Society wrote me once that the University of California had the best record of alumni joining the S.A.F. It was one of the voluntary duties I took on to get the alumni interested in the S.A.F. and in joining.

Maunder: When you resigned from the editorship, this really put the issue rather squarely before the Council, did it not, to face the fact that it needed to hire a full-time editor?

Fritz: Well, I think they were stunned. Stunned, not because I was leaving, but because they suddenly realized some other provisions must be made.

Maunder: To find somebody to take it?

Fritz: To find somebody to take my place and do it quickly, and to solve the problem of publishing a Journal of quality. Quality is related to the interest of the editor and the time he can give it. I really was sorry to quit the editing. I enjoy that kind of work. Even in my retired days, I help writers of articles and books. Just recently I went over a manuscript on redwood for a botany teacher.

Maunder: Franklin Reed followed as editor the next month, January of 1933.

Fritz: That's right. Of course, I had a lot of articles ready for future issues, and I helped on the editing that spring. I knew Reed very well and liked him. He wasn't a self-starter but he had good ideas. He needed help.

Fry: When you were editor of the Journal, do you remember the incident of the Charles Lathrop Pack Foundation offering to subsidize

- Fry: publication of the Journal, and the Society apparently turning this down even though you wanted it? I was wondering what the story was on that and why it was turned down.
- Fritz: That is very hazy in my recollection. I don't remember that well, but I'm not surprised that it was turned down.
- Fry: Reed wrote a letter to Pack and said that they couldn't accept the offer.
- Maunder: Why are you not surprised that it was turned down?
- Fritz: Let me ask a question. What was the date of that episode?
- Maunder: It was in the period of your editorship.
- Fry: Yes. You were editor but I don't have the exact date of the letter.
- Fritz: There was a celebrated controversy between H. H. Chapman and Pack. You can't go into these controversies without bringing in Chapman. But wasn't it the American Forests Magazine, rather than the Journal of Forestry? It would have been a good thing for the S.A.F. at that time to have more non-foresters among its membership. There was a goodly number of men in the lumber and related business who had a serious interest in forestry but who couldn't understand why foresters had to be so pugnacious about its introduction on privately owned lands. They might have been a leavening and informative influence.
- Pack was a multimillionaire and a very fine man. He had a real desire to do something for the public. He was also a practical man, the kind that looks for action rather than words. At the same time, he felt that he ought to have a chance to convey his views to the public, and his outlet would have been the American Forestry Association magazine.
- Now there again, my memory is hazy, but I think he was president for several terms of the A.F.A. Then Chapman got into the picture and the fight got so hot that Pack just threw the whole thing in the scrap basket as far as he was concerned, withdrew from the American Forestry Association and started an association and magazine of his own. He called it the American Nature Association. The magazine was called Nature.
- Maunder: American Tree Association.
- Fritz: American Tree Association, yes.
- Maunder: And Emanuel, let me interject something here. There was a controversy, but it wasn't only H. H. Chapman. There were on the Board of Directors of the American Forestry Association a number of men, and among them the forester of the American Forestry Association, Ovid M. Butler, who were quite unhappy with the way Mr. Pack was

Maunder: trying to run the show and direct the editorial policy of the magazine. And finally it came to a showdown and Pack's influence was removed and his financial support was lost and

Fritz: It was in the early Twenties.

Fry: That would have preceded Pack's offer to back the S.A.F.

Maunder: Right. And I think the reasons for S.A.F. being rather standoffish of Pack's offer was the memory of the experience earlier with the American Forestry Association.

Fritz: Let's go back a little. I started to tell you that when I came back West by automobile, I called on the Journal's office and on the printers, also I called on the Forest Service. One man (I won't mention his name) asked, "What's going to be your policy on the Journal?" I said, "I'm going to continue the editorials and direct them to the fact that forestry is based on the cutting of trees for products and that as long as people are cutting down trees, that's where foresters are needed. There must be a more realistic relationship between foresters and timber owners. I shall try to bring the two together."

My argument was that closer utilization, for example, was to the interest of the forester. He should be interested in the future of doors, wooden window frames and sash, and the future of lath and the future of shingles, because all make for closer utilization. The closer the utilization, the better the realization in dollars and therefore the better the possibilities for forestry.

Fry: So you wanted this to be the primary aim of the Journal?

Fritz: No. My main interest in forestry originally was silviculture. I had been in the Experiment Station in Flagstaff, Arizona, the first forest experiment station in the U.S. Silviculture, economics, and so forth, must be given proper coverage.

Fry: Well, what I meant was, when you first became editor of the Journal, did you see as the primary policy publishing articles which could be of practical use in the field of utilization and timber management?

Fritz: Absolutely. Like the article I asked A. E. Wackerman to write on the Crossett Lumber Company's forestry program. His company declined Wackerman the permission because they wanted more time to be sure their forestry policy was effective. Such an article would have been stimulating in the promotion of forestry. Then the Urania Lumber Company in Urania, Louisiana.

Maunder: Henry Hardtner.

Fritz: Henry Hardtner was a pioneer forestry convert in the southeastern

- Fritz: United States. Then there was the Great Southern Lumber Company. They had actually started after World War I to plant on cutover land, which was quite an undertaking. So I wanted articles on that.
- Fry: And instead, what did you get?
- Fritz: I started to tell you of the U.S.F.S. man who asked what would be my policy on the Journal. He reacted with "If that is the case, I'll see that you do not get past three issues."
- Maunder: Did you ever try to get an article out of Goodman up in Wisconsin?
- Fritz: I think I got something from him. C. B. Goodman, wasn't it?
- Maunder: Yes.
- Fritz: Did you ever meet him?
- Maunder: No, I wish I had. He must have been one of the most interesting men in the industry. His personal papers or those of his company would have historical value.
- Fritz: He was a short man but vigorous and a delightful gentleman. At meetings of lumbermen, he would listen to their arguments and disputes with the government and quietly get up and say his little piece, and point out the obligations each lumberman has. Goodman was one of about twenty I saw in action at one time or another who were well-balanced and farsighted. and had the guts to make their ideas known to their fellow lumbermen.
- Fry: And these were the ones that you had hopes of getting papers from?
- Fritz: Yes, not necessarily from them personally, but from their employees--the company foresters or woods managers.
- Fry: The man who was really doing it.
- Fritz: I got an article on the McGifford loader. You know that is the loader that hoists itself off the rails. I didn't want it because it was a McGifford loader but because the Science and Industry Museum in Chicago had put up quite an exhibit depicting lumbering from way back to the present. Every machine was built in miniature. The young man who organized the exhibit was a forester who eventually became one of Rand McNally's top cartographers. I hoped to get other articles of a similar nature which would show the marriage of lumbering and forestry instead of just a long drawn out cold war.
- Maunder: In a sense, you were representing the interest and the inclination of what was just becoming a merging industrial forestry. And as such, you were still running against the currents of the older

Maunder: Pinchotvian group whose Inclination was more along other lines. Isn't this where the war really developed between the two groups, and weren't you in the eye of the hurricane there in the editing ?

Fritz: The way you put it, it looks like I was at the end of one and at the beginning of another. There was too much of polemics and of public excoriation of the lumber industry. I'm not defending the lumber industry. I knew better than men like Chapman why the industry reacted as it did toward foresters.

When they discovered that I taught lumbering and wood technology, I could sit at their meetings and join in their discussion. In time, I had broken the ice. I didn't break the ice on forestry but my part in lumbering served as a catalyst to get a favorable ear for forestry.

Fry: Did you usually write the editorials?

Fritz: While I was editor?

Fry: As editor-in-chief.

Fritz: I think I wrote every one. You have probably seen one there that was called "Lath, Sash and Shingles."

Fry: Yes, but i didn't read it.

Fritz: Another was on shop grades. Now the average forester knew nothing about those things, and yet trees were not cut to make lath solely unless it was by a small mill in very small timber. Lath was all made of stuff that ordinarily would have gone to the fire.

There was a time when you couldn't even afford to bring in some kinds of logs, and they would have to be left in the woods. Times have changed. The better lumber prices make it possible to bring in the stuff that, in former years, had to be burned. The irony of it is that conservationists who once condemned lumbermen for their wastefulness now characterize them as being so greedy, they even use the bark.

Fry: What you were trying to do in your editorials and in the Journal was to disseminate this knowledge so that the people who had the power to do something about it in industry might conduct their forestry practices better for utilization?

Fritz: No, those editorials are written primarily for foresters, to let them know who butters their bread. Who butters any forester's bread? It's the man who owns the timber and has to convert it into a useful product. Now, if he hires a forester to supervise the marking of trees to be cut or to grow another crop, the money the forester gets as wages, or as a fee, still comes out of that lumberman's pocket. That's what a lot of early-day foresters

Fritz: didn't understand, or didn't want to understand. So those editorials were directed largely toward the forestry profession itself.

Fry: Your very first editorial--I think it was your first one--you really got into trouble. Do you remember that?

Fritz: The Interior Department.

Fry: You're right. It was the Interior Department. You said the Interior Department had an infamous reputation, and who was it--somebody wanted you to withdraw this, and you did reprint it.

Fritz: I don't think I used the term infamous. The Department has had some very good secretaries. Paul Redington, the S.A.F. president, called me long distance from Washington. He reported that many Washington foresters objected to my description of the Department of Interior. I liked Redington but he scared easily. We were good friends in Arizona and New Mexico, and continued to be when he was transferred to California as Regional Forester. He was very friendly to me. Incidentally, Redington at that time was no longer in the U.S.F.S. but was director of the Biological Survey; at least, that's my recollection.

Fry: He had asked you to be the editor too, hadn't he?

Fritz: Yes. I thought, "This fellow is in a jam. I've got to help him out. Who am I? Just an editor trying to make a place for American forestry."

Maunder: So did you change your editorial?

Fritz: I gave him permission to reprint a revised version from which the offending adjective was omitted. On Redington's initiative, the revised version was mailed to every Journal subscriber with the request that he substitute it for the original. The new editorial also carried a tag stating that the editor sincerely regrets having cast aspersions on a good department like Interior. It was a damn lie because, in the sense that there was any aspersion, it was a deserved criticism, and furthermore, I thought it was double-crossing me by the Forest Service people when they themselves had been condemning the Interior Department ever since the days of Pinchot.

It was the rankest kind of hypocrisy. But there was something in the wind, possibly political, of which I was not aware. It must have concerned the Hoover administration plan for reorganization, and the foresters were afraid of the Interior Department.

Fry: And you wrote Chapman that you would be happy to resign if asked to by Redington.

Fritz: Did I say that? Chapman made that episode a criticism of Redington.

Fry: Yes, and you'd just been in the editorship for a month.

Fritz: What's the date of that letter?

Fry: It occurred in November, 1930, and we have it numbered in file S3:2. It's a letter to Chapman. but the letter regarding this November editorial might have been in December.

Fritz: I'd just love to see that again. As I say, I've made an awful lot of mistakes and that was one of the worst. I regret to this day that I permitted the change. It was hypocritical of the Washington foresters to take such umbrage. I still believe some boot-licking was involved. It was foolish also of Redington to send out a revised editorial and to ask that it be substituted. It accomplished only one thing--it called attention to the situation.

Fry: Well, I guess what doesn't show up in the letters, you might want to clarify on the tape. Somehow you did send out these reprinted copies leaving out this phrase.

Fritz: I did not send it out. This was done from Washington. I received only the copy to be substituted in my copy of the Journal.

Fry: And then you heard again from them that what they wanted from Redington was this replaced in every Journal that was mailed out and you refused to do this. This was what you felt was too much. You had already permitted your regrets to have been printed.

Fritz: I don't recall this, but if I did refuse I must have had second thoughts on having acquiesced to the change. It was silly. You take, for example, a lawyer would ask a question in court knowing that the judge would disallow it. But he gets the question before the jury. It's the same thing. So you've got your Journal, you've got my editorial in it, then you get the correction paper. What would you do with it? You'd stick it on or paste it on. That's what I did with mine.

Fry: So your "unsavory" quotation probably stood.

Fritz: You know, I think the term I used against the Interior Department was "unsavory."

Fry: It was "unsavory," yes. I just found it here in my notes.

Maunder: Was there a spirited exchange of letters in the period in which you were editor? Did you get a strong rise out of some of the membership in reaction to your editorials?

Fritz: There were not very many but those I got were very rough, from men like Ward Shepard and Ed Munns and a few others. Earle Clapp and Raymond Marsh, while they didn't write, would tell me about it or would tell others, and I got the word that my editorials were too strong. They felt that I should have sought more articles of the type that indulged in policy discussions, and the relationship of forestry to the general economy and stable communities, whereas

Fritz: I tried to get articles which showed forestry as to actual practice. I was unsuccessful in doing this because the field foresters were not writers. They were busy on their jobs and didn't indulge very much in writing. I did get one article on the planting program in the redwoods and several others, but they were not very well accepted by the membership in general. When I say "in general," I mean the old-timers who still ruled the roost.

I resigned voluntarily and possibly in a huff because of the statement the dean of the college made to me about doing that kind of outside work, and also because of the lack of interest of the Council.

Maunder: What was the dean's attitude? Was his feeling that you should be doing research rather than this work?

Fritz: Well, I don't like to say it, but when you're editor of a magazine like that, your name is on the front page. You're singled out as being with the University of California, and I don't think that sat well with the head of the school. I don't think the dean of the College of Agriculture cared very much, but he was the man who had the final say as to a professor's future.

Maunder: Are you suggesting there may have been a little bit of perhaps personal ego involved in the matter?

Fritz: I'm afraid so. Also, it interfered with what I was trying to do locally in getting forestry moved into the woods. I wasn't doing any teaching and consulting work in forestry. My consulting work then was almost solely in the general field of wood technology, the decay of wood and attack by termites, wood preservation, the grading and seasoning of lumber, and the like.

I think the format of the magazine today is better than it was when I had it but, except for the fact that there's a better class of writers now and it's easier to get articles, I think the Journal has slipped in the sense that it has lost leadership. If one wants to read something on practical forestry today, he has to read magazines like The Timberman, The Southern Lumberman, and the excellent Northeastern Logger. I think there's a lot of dirt forestry in those magazines, good stuff. That's the kind of stuff I was trying to get for the Journal of Forestry, but if I had gotten it and printed it, I think I wouldn't have lasted more than six months.

Maunder: Do you think that these periodicals you've mentioned maintain high professional standards of editorial writing?

Fritz: They are excellently done editorially for their particular field. They are not professional magazines; they are trade magazines, but trade magazines often run technical articles. You will find that many foresters, when they can't get their stuff published elsewhere or if they want to be sure that it's read by the people to

Fritz: whom it is addressed, will not give it to the Journal of Forestry but to a magazine like The Timberman. In my own case, I have frequently given short articles to a trade magazine because I wanted them to reach the people who could use them. They would not have come across them otherwise.

[Since this interview was made, the trade magazines have changed ownership but "dirt" forestry still appears in them. The Journal of Forestry too has changed and has been greatly improved in contents and format under Hardin Glascock.]

The "Unholy Twelve Apostles"

Maunder: Emanuel, now we want to talk specifically about some matters that had to do with your time as an editor and immediately following your editorship of the Journal of Forestry in the Thirties.

You will recall that on June 13th, 1934, twelve members of the Society signed a petition which they presented to the president and Council, criticizing the present policies and methods of management of the Journal. And at this particular moment, Franklin Reed was editor-in-chief of the Journal, having succeeded you in that position only a few months before.

Fritz: A year and a half before.

Maunder: I have some notes here which show that your editorship ran from October, 1930 to December, 1932.

Fritz: Right. The petition was introduced a year and a half later and another six months later, the matter was discussed at the annual convention, January, 1935, two years after my resignation.

Maunder: And Franklin Reed had begun then, in January of 1933, and was still editor at the particular moment when this petition was presented. Now, I think it is also true that Reed continued in a sense the policies that you had initiated as editor, had he not, generally speaking?

Fritz: To a great extent, yes. You should know that the controversy was not so much who was editor but the attempted use of the Journal by a clique of socialistic convictions.

Maunder: And was it also true that even after you resigned your position as editor-in-chief, you continued for a long time thereafter to give Reed a great deal of help in getting out the Journal?

Fritz: Well, naturally every editor keeps his editing way ahead of his needs. I made my decision to resign very suddenly in the month of December. I had two or three issues edited ahead so they would require very little more work, and maybe some new stuff would come

Fritz: In to me direct, and I would edit it for Reed, but that had nothing to do with policy. The January, 1933, number was either on the press or ready for it. I have forgotten. I must have completed the editing for two more numbers, so Reed had a running start.

Maunder: But you were not an "associate editor" in 1934?

Fritz: No. I was completely out and at my own free will without any pressure. There had been some criticism, but no more than any editor receives. There was some "nit-picking" by a few in the lower echelons in the U.S.F.S. offices that an editor has to laugh off, and by a few others, e.g., Ward Shepard, who was quite critical, but he was not a well man.

Maunder: In this article that we carried in our Journal Forest History back in the fall of 1962, on "The Evolution of the Society of American Foresters as Seen in the Memoirs of H. H. Chapman," there is quite a long section that has to do with the editorship of the Journal of Forestry. And your resignation from the editorship of the Journal is noted here in December of 1932.

Chapman describes the event as follows: "On June 13, 1934, twelve members of the Society petitioned the Council to give consideration to needed changes in the editorial policy of the Journal of Forestry. The twelve members who signed this petition were George P. Ahern, Carlos G. Bates, Earle H. Clapp, L. F. Kneipp, W. C. Lowdermilk, Robert Marshall, E. N. Munns, Gifford Pinchot, Edward C. M. Richards, F. A. Silcox, William M. Sparhawk, and Raphael Zon. With the exception of Ahern, Marshall, and Richards, all were members of the Forest Service or affiliated with it. Gifford Pinchot and Major Ahern had for some time been conducting a vigorous campaign to secure national legislation which would give the Forest Service authority to 'put an end to forest devastation' by regulating the methods of cutting by all private owners including owners of farm woodlots. The Editor of the Journal, Emanuel Fritz, [sic] did not sympathize with this policy and the men who signed the petition were determined to force the issue."

"The petition raised three points: 1) the separation of the offices of the Editor-in-Chief and Executive Secretary, 2) the selection for Editor-in-Chief of a man of high literary and technical attainment and with strong social convictions, and 3) a certain degree of independence for the Editor-in-Chief within the limitations of policy formulated by the Council."

Now, a little farther on here, he describes how all of this came to a head, following your resignation in December of 1932. But then in January of 1935, at the annual meeting of the Society in Washington, D.C., William Sparhawk had prepared for the petitioners a long statement covering the charges against the editor. Now the editor at that time was Franklin Reed and in our footnote we note this fact, but we also note the fact that their charges were probably directed as much against you as the former editor, as they were

Maunder: against Reed as the present editor. And that you were present at this annual meeting, according to Chapman, "prepared to defend yourself," and that he, Chapman, asked you a favor, namely that you say nothing in rejoinder to these Twelve Apostles in their statement.

Then he goes on to say that you, however, made rejoinder to the Sparhawk statement, and that in so doing, you spilled the beans. By launching your defense, you deliberately attacked one of the signers of the petition in a personal manner, accusing him of Communist sympathies. Now what do you have to say about that? What did you actually say in response to Sparhawk?

Fritz: It sounds like Chapman asked me to make no response at all to Sparhawk. (Are you sure it was Sparhawk?) Actually, if my memory doesn't play me false, I was on the program and was invited up to the podium where I was to--and did--speak at length about Journal problems. While I was up there, Chapman had left the room to go to the White House.

Maunder: Yes, to present a Schlich Medal to Franklin Roosevelt.

Fritz: We went through part of the lunch hour. It must have been the vice-president who had the chair and who decided to recess for lunch. The topic was to have been resumed after lunch. Don't forget that: the Journal matter was to have been resumed after lunch. I was speaking more or less "off the cuff" and in general terms from notes I made while the spokesman of the Twelve Apostles was speaking. My only preparation, as I recall, was notes on a card file concerning each of the petition signers.

I had not reached a discussion of this particular group of men when the meeting was recessed for lunch. I was going to let the audience know just what each petitioner had done to the Journal. Not one of the Twelve gave the Journal any help. One was an associate editor whose own article had to be heavily edited to make it readable. Another was the one I mentioned earlier as having threatened to end my editorship before it got started.

Fry: You never did read your notes on them?

Fritz: I will come to that. Sparhawk had a long statement and my rejoinder was equally long. I was not defending myself, I was defending the policies of the Journal at the time Reed was editor. I want to make that clear.

Maunder: Did you make those policies or did the Council?

Fritz: No one had suggested anything to me as editor as to policy. As far as I know, the editor, until the latter years of Clepper, had full sway. But there might have been some suggestions on the part of the Council or president that the Journal ought to do this or ought to do that. Well, that's all right. They certainly had that privilege

- Fritz: and they were supposed to have and show an interest in the Journal. But I was not given any orders as to what the policy should be. All of the Twelve and the many others knew what my views were long before Redington tendered me the editorship.
- Maunder: Did you have to submit any editorials you wrote for publication to anyone before they were published?
- Fritz: I wasn't asked to, and why should an editor have to do that?
- Maunder: I don't say that you should. I just asked if you were ever asked to do that.
- Fritz: No. No one knew what the subject was going to be until it appeared in the Journal. I wrote several editorials during Zon's editorship which he published without revealing the authorship. These were on practical subjects such as concentrating on the great expanse of conifers in the West and ignoring the hardwoods of the eastern U.S. Another one concerned the term "selective logging": just what does it mean, the selection of logs after clearcutting and abandoning the rest, or does it mean the felling of trees on a selective basis and leaving the others stand? I had seen some of the selection of logs from clearcutting. It was very wasteful. Once a tree is felled, it should be utilized as far as market requirements permitted.
- Maunder: We're wandering away from the subject again.
- Fry: Do you mean that you and Zon really didn't come to a splitting of the roads until later?
- Fritz: I wouldn't say that we ever split, but in my opinion, Zon did some things that are not regarded as good scientific split.
- Fry: This was after you became editor?
- Fritz: After I quit the editorship. Zon loved his editorship and could not adjust to someone else sitting in the editor's chair. Zon was the mouthpiece of the Pinchot group.
- Maunder: Who was the member of the Twelve Apostles you implied was or accused of being a Communist in the course of this discussion in January's annual meeting of 1935?
- Fritz: First of all, I did not accuse him.
- Maunder: What did you say?
- Fritz: I said that one of the Apostles (a signer of the petition) had that very morning been reported in the newspapers as having been accused of being a Communist the day before in Congress. A big difference, isn't it?

Maunder: Well, who was this man?

Fritz: Robert Marshall.

Maunder: Who called him that in the Congress?

Fritz: I don't recall. I think it was in the House of Representatives.

Maunder: How did you happen to know that he had been called this in the Congress that very morning?

Fritz: It was in the newspapers. (It was in the morning newspapers so the accusation must have been made the day before.) I didn't accuse him of being a Communist. That's what Chapman said. Now let me go on from there.

At the close of the recess for lunch, the discussion on the petition was to have been resumed. I remember skipping lunch to go down to a tailor shop to have my dress suit altered for the banquet that night. When I got back, the first man I met was Chapman and he was boiling mad. Chapman, you know, was of chunky build and never walked erect but leaned forward with those long arms of his hanging down in front of him. He came at me like a gorilla and said, using the mild profanity he used to use, "You didn't follow my orders."

I probably told him that I wasn't under his orders and that I certainly felt that way about it. I told him what happened. He told me L. F. Kneipp came to him and said that I accused Marshall of being a Communist. Kneipp and Marshall were very close friends.

Fry: Did you tell him you'd only implied it?

Fritz: I must have told him it was in the newspapers in the morning, but that didn't make any difference to Chapman. When Chapman had his mind made up that that desk there was white instead of dark gray, that settled it.

Maunder: Well, do you suppose that he felt that by making this implication, you may have alienated a lot of the members present? There are a lot of people who don't like this kind of implication. They don't like this assigning labels to people. And Chapman may have felt that by this tactic or statement on your part, you gave the enemy in this case some ammunition.

Fritz: Well, you make me recall the comments made personally at the end of that talk. I have never before or since been approached by so many people who shook my hand and said, "That was a wonderful thing you did this morning. You put those fellows in their places." And one of those men was Walter Mulford. I was pleasantly stunned by Mulford's favorable comment. I knew that he did not approve of the petition. He was a very meek and reserved man.

Fry: What else did you say in that speech? We've just been talking about one remark here, but you said you had notes on all of these men.

Fritz: Yes. It was my intention to point out to the Society members that this group had designs on the Journal, to make it a sort of propaganda organ to promote public ownership and/or federal control of all private forest land. They even had designs on the national parks.

I think most of the audience wanted to hear what I had to say about the signers, but when we reconvened after lunch, Kneipp moved that we drop the subject and go on to the next item on the program. Chapman was in the chair. So I lost an opportunity to show how unfair the petitioners were to Editor Reed and how they were endangering the independence of the Journal. On that day, Chapman showed his color. He was not in favor of the petition, he felt the editor should have independence, and he had been all for my being on the program to protest the petition. My reference to Marshall would have pleased him, had not Kneipp worked him over. Chapman made life miserable for Reed and soon had him separated from his job as secretary and editor. Reed died soon thereafter. He was a very sensitive person.

Mauder: Were there proceedings to this meeting?

Fritz: There should have been.

Mauder: Was there a transcript made so that there would be a verbatim record of everything that was said?

Fritz: It would be a wonderful thing to have.

Mauder: Would you know if there was such?

Fritz: I don't remember that anything was published.

Fry: Wouldn't Reed have seen that this would have been made? There are proceedings of the annual meetings during these years in here.

Fritz: All this took place more than thirty years ago before we had tape recorders and before the S.A.F. could afford to hire a court reporter.

Please don't think I was proud of the stand I felt I had to take. When I adopted forestry as a profession I had one single purpose-- to put forestry in the woods. I had heard or seen too much of condemnation of lumbermen destroying the forest, too much missionary zeal, too much worship of Pinchot. At the same time, there was a growing number of young foresters going into private employ who had the same idea I had. These young fellows had to submit to the ridicule and sometimes the suspicions of their counterparts in public employ. They had to overcome opposition from the woods workers

- Fritz: and had to win the confidence of their bosses. If there have been any heroes in American forestry, it was this bunch of foresters on industrial payrolls. It took courage to go into private employ in those days.
- Fry: About that petition--I wonder about the first point. It says that the Twelve Apostles suggest that the editor (this future editor that they want) not be subject to dictation by the Executive Council in editorial policy, and yet you said that you hadn't been subject to dictation by Executive Council. Why did they put that in their petition?
- Fritz: They were probably thinking of the future. It was already plain that the Pinchot group was losing control of the S.A.F.
- Fry: Well, do you think that they were really serious in wanting to start a new magazine?
- Fritz: There were rumors. If there was any such thought they could control the magazine, I am sure that it would have become a propaganda organ.
- Fry: In other words, they were criticizing you for not having enough of the New Deal spirit in yours.
- Fritz: Well, that's about right.
- Fry: They said it was lacking in the "spirit of social leadership," while the problems "were not discussed in the spirit of the New Deal" over the last few years.
- Fritz: That is certainly true. The S.A.F. is not a welfare association. It is a society of professional foresters. The social welfare game should not be the main business of foresters.
- Fry: And so you think their new magazine would probably have been specifically a magazine to back up their efforts to get federal control of forest management?
- Fritz: You have no idea how close this country was to a dictatorship and a socialistic form of government, the forerunner of a strong bureaucracy topped by a dictator. In 1940 or '39, Earle Clapp wrote to all the regional foresters and all the experiment station heads, to do their utmost to influence the forestry schools to adopt programs that the Forest Service was promoting. Now that was really something! You will find a copy in my files.
- Fry: This letter went to whom?
- Fritz: It went to all the regional foresters and to all the heads of the experiment stations to exercise their influence on the schools to make their policies those of the Forest Service. Now that was

- Fritz: really trying to control education, wasn't it? And I know that here in this school, when we were in Giannini Hall, the head of the experiment station did actually try to force his influence on us.
- Fry: On what issues?
- Fritz: Influencing the faculty to follow the tenets of the U.S.F.S. and the support of the U.S.F.S. efforts to get control of private forest land management.
- Fry: Regulations specifically?
- Fritz: Yes.
- Fry: Did this actually trickle down into classrooms or do you know?
- Fritz: Well, it certainly would have if the head of the school should have gotten the faculty to follow the leadership of the U.S.F.S. Mulford would not have stood for it. Our school, to a man, opposed the kind of federal regulation Pinchot and Clapp wanted.
- Fry: Was Pinchot the figure behind this move to get forestry regulations?
- Fritz: He was more than a figurehead; Clapp, as acting Chief Forester, followed the Pinchot line.
- Fry: From a letter in your files that Chapman passed along to you, I get the idea that Pinchot was willing to put up money to get this new magazine started. Do you remember anything about that?
- Fritz: No, I don't remember that. I wouldn't be surprised though, because at one time--and I think it was in the Forties or early Fifties--Mrs. Pinchot, after G. P. died, actually started a counter organization.
- Fry: What was that?
- Fritz: What did they call it--American Conservation Association, something like that.
- Fry: Oh yes. Well, they still have one called that.
- Fritz: Some of the Twelve Apostles and some of their sycophants were involved in that.
- Maunder: Emanuel, I have been studying Volume Thirty-three of the Journal of Forestry for 1935, in which the "Proceedings" of the annual meeting of that year are published. These "Proceedings" cover January 28, 29, and 30, and they seem to be quite complete with a rather notable exception of the morning session of January 29, which is the session we've been talking about in which this storm blew up between you and others--and that is expunged from the record here.

Fritz: I'm sorry to be reminded of that. I had completely forgotten about it.

Maunder: That part was not published. Now, every other session, morning, afternoon, and evening, of every other day is represented in here by some comment and reports of one kind or another and papers, but the morning session, January 29, does not appear here.

Fritz: Who was editor then, Smith?

Maunder: I believe so because at the very beginning is a little editorial by Henry S. Graves, announcing Herbert A. Smith's appointment as editor of the Journal.

Fritz: Well, Smith was all that I described him as being, a real gentleman and a scholar. He was also imbued with the spirit of Pinchot. His editorials were more like essays. He was a very good writer. One could not call his editorials propaganda.

Fry: So he was a New Deal type.

Maunder: Would you say that he withheld this part of the debate?

Fritz: I doubt it. It is very likely that he never got it. Smith was a very honest man.

Maunder: Why? He's got everything else here.

Fritz: Who was the business manager or the managing editor?

Maunder: Franklin W. Reed.

Fritz: Well, Reed was an employee. If anyone took notes, it is likely that he was ordered not to give them to the editor. But I doubt the performance was recorded.

Maunder: Weren't you aware of this item being missing from the Journal?

Fritz: That I don't remember. In this case, I probably did.

Maunder: Didn't you ever challenge the editor with why he didn't cover this in the Journal?

Fritz: No. No, I don't recall ever challenging him, and I don't recall ever noticing that was missing. I heard it, and that was all I was interested in.

Fry: Well, do you think Chapman would have asked him to take it out?

Fritz: I don't know.

Maunder: Did this discussion on the morning of the twenty-ninth become a real shouting match?

- Fritz: I don't recall any interruptions. The Twelve Apostles were badly outnumbered.
- Maunder: I'm trying to understand why it's not in the "Proceedings," and it seems to me that if it had descended to that level, it might have been kept out for purely good professional reasons.
- Fritz: I recall no interruptions. The afternoon session might have been different, if Kneipp had not moved to drop the subject.
- Fry: But then Chapman took over after lunch.
- Fritz: On an occasion like that, I might have gotten wrought up, but not on that one. Awaiting my turn while sitting in the audience, I got myself in as calm a mood as possible. Usually I am very tense on the platform. Sparhawk was very serious. I knew I had to be calm. In fact, this whole business was a comedy and I tried to treat it as such. I spoke with no rancor or vehemence. This part I remember very well. I think it hurt the petitioners' cause.
- Fry: Sparhawk's statement is also stricken from the record here.
- Maunder: That's not in here either?
- Fritz: That's something that I'd like to look into--why it was cut out. Or have I forgotten that I noted its absence. Perhaps there's something in my file on that. If the S.A.F. file for that performance has been saved, I hope I can see it just to read the whole story again. I really enjoyed the scrap. The motivation and action of the Twelve was silly and childish. A sense of humor would have helped them. But they left Sparhawk holding the bag; his companions did not rise to help him. Kneipp's motion to drop the subject was fortunate.
- Perhaps we should be glad a full report of the morning's proceedings were withheld from the Journal. It wasn't pretty. I never could understand why some of the signers put their names on the petition. The petition was probably the work of only four or five. The others probably were talked into signing.
- Fry: What were all the undercurrents that seemed to come to a head here in 1934?
- Fritz: I think the January, 1935, convention of the S.A.F. in Washington was a turning point in the battle for federal regulation. The National Recovery Act had been passed and its Article X, applying to logging, was put to work. The general economy was improving. (Logging was almost at a complete standstill until about 1934.) Proponents of federal regulation were being beaten down by those who favored cooperation.

This whole matter as we talk about it here reminds me of the U.S.F.S. man who said he would see me removed from the editorship before my

- Fritz: third month if I followed the editorial policy I announced to him. We have already discussed this when you queried me on the Journal job.
- Maunder: Who was this? Earle Clapp?
- Fritz: No, I won't mention his name. He was a good fellow but he was over-enthusiastic, and sometimes overzealous. However, his name was on that list of Twelve Apostles. So you see the hierarchy in Washington wanted that Journal as its own particular mouthpiece.
- Maunder: Had it been that way under Raphael Zon's editorship?
- Fritz: To a large extent, yes. Zon was one of the petitioners in 1934.
- Maunder: Raphael Zon had been, to all intents and purposes, editor-in-chief of that publication for roughly twenty-three years because even while Fernow was the editor, Zon was really doing most of the work, was he not? At least, that is the interpretation that is given by Franklin Reed here in his "History of the Journal of Forestry." On page 787, in this October, 1934, issue, he summarizes the issue of the Journal by citing the various editors-in-chief. And he says: "To all practical intents, Zon was editor-in-chief for the Society for twenty-three years. He served on the editorial board of the proceedings from its inception. . . ." That was back in about 1903 or 1904, I believe.
- Fritz: 1902, probably. The Journal started as "Proceedings" in that year.
- Maunder: "During the same period, he was Fernow's right hand assistant on the quarterly. During the five years that Fernow was editor-in-chief of the Journal, Zon was managing editor. Zon's resignation was at his own initiative for a combination of reasons, one of them being that his official duties no longer left him this necessary spare time." And then Dana took over in 1928. Well, the point I would like to raise here is this: having had such a long span as the editor of the Journal and of its predecessor publications . . .
- Fritz: Not editor but influence you mean.
- Maunder: Right. But managing editor in many cases is the man who is really cutting most of the editorial pattern. And I would imagine that over this long period of time, Zon must have had quite a proprietary feeling about the Journal.
- Fritz: He did that. There's no question about it. But I would disagree that the managing editor has more power over what goes in the book than the editor in this particular case. It might be in a commercial magazine where you depend on advertising. But you take for example, Dana. Dana was a very well-educated man, a man of superior intellect and standard of ethics, a man of good common sense and independence. And although he's never said this to me, I sensed, when I took over the editorship, that the people in Washington

Fritz: hoped to get control of the magazine. They couldn't get control of it while Dana was in charge of it.

Fry: These were the federal foresters you're talking about?

Fritz: Yes. Most of them were federal foresters.

Maunder: You three, Zon, Dana, and then you, took on the magazine's editorship, and then all of you had to give it up for essentially the same reason, that it just required more time than you could reasonably afford to give it?

Fritz: It was a very thankless job for any volunteer editor and for me it was very costly. I'll just give an example of the time involved. I had a comparatively light teaching schedule, but I had considerable other work to do also. Some of the administrative work at the school was farmed out among the faculty members, and I was also interested in this controversy over the control of lumbering by the federal government.

My wife and I used to attend plays, concerts and lectures in Wheeler Hall or somewhere else around the Bay Region. She wanted to arrive before the crowd came when it would be hard to find a seat (when they're not reserved), and she insisted on being there at least a half an hour early. So to occupy that half hour--sometimes it went to an hour--I took along two or three articles and would edit one or more before curtain time.

Fry: You mean you just used every available moment.

Fritz: I had to but I enjoyed it.

Maunder: When did that so-called clique within the profession go into eclipse as far as its power was concerned?

Fritz: You've got to put several things together there. I think Silcox was the Chief Forester and he was followed by Lyle Watts. I knew Silcox when he was regional forester in Missoula, Montana. He quit the Forest Service for a number of years and was sort of a union boss of the typographers in New York City. He had strong socialistic tendencies. Nevertheless, I asked him one day, "What is the matter with the Forest Service back there in Washington? It isn't like it was when you and I were in Missoula." And he said, "No, it isn't. I'm terribly concerned over the self-righteousness of the Forest Service." And in just those two words he expressed my own sentiments.

Maunder: Who first called the petitioners the Twelve Apostles?

Fritz: I don't know where it arose.

Maunder: Was it well bandied around? Was this common talk?

Fritz: Yes.

Maunder: Was it ever published in the Journal in this way? Were they called this publicly in the Journal?

Fritz: Could be. If I had been editor at the time, I certainly would have used it.

Maunder: Well, how long did this group hold sway? When did its power reach its apex and when did it start to go into decline?

Fritz: In my opinion, the January, 1935, confrontation was the beginning of its eclipse. But its end came shortly after World War II. There had been some deaths, the country's economy began to boom, the Forest Service was on the verge of a boom itself in timber sales and therefore had public relations problems of its own. A time-consuming effort toward a redwood national forest was made at the behest of Congresswoman Helen Gahagan Douglas. The Tree Farm program was expanding rapidly, and other events changed the entire forest situation.

The forestry profession has grown out of its sophomore period. The men in responsible forest jobs, private and public, are more objective, better trained, and have had more field experience. Most important, the forestry schools are far better. Their professors have better backgrounds in science and economics, and this has increased their independence. What has gone before is now history. I was glad to have been a part of the profession in its "teen" years, even though my part was small.

Maunder: When you were editor, were you seeking to build a bridge of understanding between the two groups?

Fritz: As the editor, yes. Let me make something clear at this point. The difference between the two groups was really a clash of philosophies. The Pinchot-Forest Service group was determined to get control of all private lumbering through Congressional legislation. The other group felt the cooperative approach was more democratic. In the U.S. there always have been some people who wanted all authority centered in Washington and some others who were for the private enterprise system. Foresters in private employ resented a federal bureau ordering their activities. Each side was still learning the timber management job. Of the two, the private forester had the best opportunity to learn the job because he had to prove himself in the accounting room as well as in the woods. The editor of the Journal was expected by the one to beat the drums of doom if the government isn't given the authority to regulate all forest practices, while the other side expected him to publish stuff of practical use to the manager.

I was interested in applying forestry in the woods. A common expression I've used a hundred times was, "Take forestry out of the swivel chair and put it into the woods where it belongs." And that

Fritz: is what I was trying to do in the Journal. When you look over the list of men who formed those Twelve Apostles, you'll find that some of them never had a forest to manage.

Maunder: When you were editor, you not only solicited articles, but you critically read them, made suggestions for improvement to the authors, and carried them all the way through the editorial process, including copyreading and proofreading--all this by long distance, I presume, with the authors and the publisher, by mail.

Fritz: You're quite right. I also wrote the leaders, a brief summary at the head of each article. I had a card index, which was my guide as to the authors and the titles. The cards kept a record of when an article was received, what was done with it, and so on. Incidentally, that card index came in very handy to me one time. Zon was a peculiar type of man. He had a lot of excellent qualities and he was a very able man, but he was very one-sided and suspicious.

After he gave up the Journal of Forestry editorship, he felt that the magazine was going to the dogs, that no one could do a job like Zon. He wrote me a very nasty letter once, accusing me of refusing to publish an article written by one of his own staff. He said that I didn't even acknowledge it. I immediately went to my card index and I found the whole record there--the day I received the article, the day it was acknowledged, what was done with it, and when it was to be published. It was not possible to publish an article within thirty days after its receipt.

Maunder: Was there much plagiarism on the part of the Washington office?

Fritz: There was some. I first learned about it while I was stationed in Arizona at the Experiment Station near Flagstaff. There would be long letters and long distance telephone calls from Washington. Gus Pearson was the head man at the Station. He was a very honest man, very conscientious and very sensitive. Sometimes when the telephone conversation was ended, he would walk around the room, evidently distraught or distressed. He then would unburden to me (he and I had become very good friends), "What do you think so-and-so said to me?" or "What do you think so-and-so is doing?" Generally it concerned plagiarism or a dictatorial attitude at the other end of the line.

Maunder: Nevertheless, you were elected a Fellow of the Society of American Foresters.

Fritz: Yes; I was made a Fellow in 1951. I knew my name was up because it was published along with the names of other candidates. I gave it little thought because I felt I'd never make the grade.

Maunder: Weren't you denied election as a Fellow for quite a long time because of this row?

Fritz: It's possible, but I don't recall having been a candidate earlier. At least, I was not among earlier lists of candidates.

Maunder: How many blackballs knock out a man as a Fellow?

Fritz: Election needs only a majority among those Fellows who actually vote. Those who vote on Fellow candidates are the existing Fellows themselves and, I believe, the officers and Council members.

I was astonished when I was elected. I told an S.A.F. official of my surprise and he volunteered this, "Not only that, but you were near the top." There was satisfaction in that.

Have you found the letter about the Apostles?

Fry: Yes.

Fritz: Thanks. By the way, Chapman was very wrong in that interview you had when he said I was editor at this time. That controversy was during Reed's editorship. Reed badly needed a job. It was in the depression years. He was a nice friendly person, and he had the same general ideas about the private enterprise system that I had, that is, anti-socialism. Chapman made his life miserable.

Maunder: Why?

Fritz: In some respects, Chapman was right because Frank Reed liked to take things easy. I tried to help him out. It's a darn good thing that somebody in the audience recommended that we pass up this subject and go to something else, because I was loaded for bear, but foolishly I fired my small ammunition in the morning and landed with the big stuff still in its racks.

Maunder: Bob Marshall was one of the Twelve?

Fritz: Yes. He took no part in the January, 1935, S.A.F. meeting, as I remember it, but at another meeting he was very much in evidence. At the time he was forester for the Indian Forest Service but took in a wider territory on his own. He was programmed to speak, I believe, on the operation of the N.R.A. I was chairman of that session, and I let him go full blast until he ran down.

In some way, I had learned that on his western tour of Indian forests, he visited also other areas in a search for violations of Article X of the N.R.A. and for proof of the need for federal regulation. He included the redwood region. A California Forest Experiment Station man was guiding him, and this chap was not noted for fairness. He took Marshall to a large logging operation and pointed out the lack of seed trees required by Article X.

Marshall reported this presumed violation to his cohorts in Washington. What actually happened was this: the U.S.F.S. guide did not tell Marshall that the area he examined had been felled several

Fritz: years before Article X's birth. The Depression had idled the operation and the logs had to be left. So Marshall came to the meeting prepared to prove that Article X is not enough.

After Marshall finished his accusations against the industry, I took the podium as a member, rather than as chairman, and explained that Marshall had been deceived by his Forest Service guide and that in his eagerness to find a culprit he did not analyze the situation. I mention this only to show how avid for muck some of the enemies of private enterprise had become.

Fry: Chapman was president of the S.A.F. when this happened, and I think he had just run for re-election. Hadn't you run too, at that same time?

Fritz: Yes. I didn't want the job. Nobody could win against Chapman. The Constitution required, I think, four, five, or six candidates, and they couldn't get anybody to run against Chapman, which was like going against Franklin Roosevelt in the first term. Several of us had to volunteer the use of our names but we knew very well that we didn't have a chance.

I was asked several times in later years to run for president, but I declined. Such a job is not for me. I think I would have won. I had many followers in the federal bureaus as well as outside.

Fry: Did Chapman run by assuring everyone that he was not going to let the government foresters gain control of the Society? I read some reference to that in your papers.

Fritz: It could be. He felt that way about it. He was hot and cold on things like that. But I am sure Chapman was opposed to the machinations of the Twelve Apostles.

Fry: Well, then after this petition was presented, you wrote a rebuttal which, I guess, appeared in the Journal, but it was edited, I believe, in the process by Granger.

Fritz: Edited by Granger?

Fry: Your rebuttal was. Granger was, I guess, in some position to go over it at this point.

Fritz: I don't recall that Granger ever touched anything that I wrote.

Fry: He and Reed suggested that you shorten it.

Fritz: Well, maybe shorten it.

Maunder: There is no editorial judgment more critical, Emanuel, than that!

Fritz: I have a tendency to be too wordy. So I've always welcomed someone willing to read my stuff critically and let me know candidly what

- Fritz: he thinks of it, so I could study it out more. But, frankly, I don't remember preparing a rebuttal.
- Maunder: When you quit, this thrust the responsibility into their laps and they called upon Franklin Reed to take on the responsibility, right?
- Fritz: It was the logical thing to do. He was the executive secretary.
- Maunder: And they agreed that within six months, by May of 1934, they were going to solve the problem and find an editor to take on the job?
- Fritz: Yes, that's correct.
- Maunder: Then when May, 1934, came around, they had not made the decision. They had not yet found the permanent man.
- Fritz: Do you mind if I go upstairs and get the volumes of the Journal?
- Fry: No.
- [Take off for a few minutes.]
- Fritz: I brought these down by volume. After Reed was editor a while, Herbert Smith was made the editor.
- Maunder: When was that?
- Fritz: '34, I think.
- Maunder: Now wasn't that a concession to the Twelve Apostles? Wasn't Herbert Smith more a representative of their position than of the other?
- Fritz: Herbert Smith was one of the few scholars.
- Maunder: He had his Ph.D.
- Fritz: Did he? I didn't know that.
- Maunder: Yes.
- Fritz: He was a brilliant man, a beautiful writer, and his editorials were really excellent but harmless essays. He declined an honorarium for serving as editor but he must have worked diligently. He had better success than I had in getting the associate editors to help in the editing, and not only editing but returning the edited manuscripts promptly.

Reed's Dismissal

- Fry: About Reed's dismissal as executive secretary, you just mentioned

Fry: (before I got the tape recorder turned on today) that this was a very sensitive thing when it came up.

Fritz: This was a very distasteful thing to me, to have to slide with Chapman in finding a successor to Reed. I had a great liking for Reed. He had a lot of ability. He was an excellent writer, and he and I shared the same views as to private enterprise versus federal regulation and domination.

He had some difficulties, and some of them were due to having antagonized Chapman because of his stand for cooperation as against federal domination. Chapman himself was for private enterprise generally. But Reed was not inclined to change his views because of Chapman's views.

Fry: Just where did their views conflict then?

Fritz: On important details, especially where the Forest Service policy was concerned.

Fry: This doesn't come out in the records, because in the records Chapman's reasons are given largely as Reed's operational inadequacies in running S.A.F. He mentioned that Reed was incompetent, and he mentions several things here that Reed should have done and failed to do and that sort of thing. But you feel that there was something underlying this?

Fritz: There was more to it in the background. Reed came to the West on several occasions to weep on my shoulder. Apparently, Chapman, who was hypercritical, rubbed him the wrong way, and Reed rubbed Chapman the wrong way. We needed a man of somewhat different type than Reed. And we found a man in Henry Clepper.

Fry: Well, are you saying that you first found Henry Clepper, and then wondered how you could go about getting rid of Reed?

Fritz: Not at all.

Fry: When did this movement start to replace Reed?

Fritz: Chapman had a very clever way of presenting his side of a case convincingly. It was rare that Council members or anyone else crossed swords with him. He was actually vindictive and could cause a man a lot of professional trouble. (I knew personally because he gave me a hard time too.) Chapman had to have a whipping boy, one over his knee and one in reserve.

Fry: So this was in 1936 when this happened.

Fritz: Somewhere around there.

Fry: And I believe Chapman had been in two years at that point as president of S.A.F.

Fritz: I think Chapman had two terms as president.

Fry: So I was wondering, since Chapman was also in in 1934, if this was in any way a throwback to that Zon petition that we were talking about.

Fritz: The Zon petition had its aftermath. It left a lot of wounds.

Fry: How did that affect Reed's standing with the Society?

Fritz: Compounded his troubles.

Fry: In other words, Reed did carry some of the blame for the dissatisfaction there? Is that what you mean?

Fritz: Well, I wouldn't put it quite like that, but his gears did not mesh with Chapman's. In thought and action, Reed, as its paid secretary, was a concerned member of the S.A.F.

Fry: This Zon petition was largely Forest Service people. And they were antagonistic toward Reed also, is that what you mean?

Fritz: Less antagonistic to Reed as a person than for his opposition to public regulation. Chapman was consistently inconsistent. He would defend one today and breathe fire upon him the next day.

Fry: How did the Twelve Apostles feel toward Reed?

Fritz: They felt the same way toward him as they did toward me. We were not on the same wave length.

Fry: Which was that they would rather have somebody else as executive secretary.

Fritz: They wanted someone who would follow the Forest Service line, someone they could influence or control.

Fry: This began officially in your records on January 28, 1936. You were a member of the Council, and the Council voted to dismiss Reed at their Atlanta meeting. I think you were contacted by mail about this. You didn't go to their meeting apparently. And Chapman's memo on that meeting says:

"This action is to be confidential with the Council and not to be announced in any way. Mr. Reed's status with the Society and the public is that no action has been taken and that his services are continued."

So that in other words, Reed was to be retained for a year, although he had been officially dismissed by the Council. Now why did the Council decide to time it this way? The information did leak out, and it presented a lot of problems for everybody.

- Fritz: I have completely forgotten that Chapman had made that statement. Is it in here?
- Fry: Yes, if you want to read it--that second paragraph.
- Fritz: Well, as I read it, I would say that was characteristic of Chapman, and looking back, and just reading it, I would say it was self-protection. Chapman should have known it couldn't be kept secret. Chapman himself couldn't keep a secret.
- Maunder: In other words, Reed learned of his dismissal before the Council had even notified him.
- Fry: He even learned of it the night before the Council voted, and then when he returned to Washington, he said that news of it had leaked to Washington, D.C., and then he went up to Yale and found people there who knew of it. So Reed actually knew of it from the first but he was not notified of it until later and that comes out in the correspondence here. And then finally the thing came up before the entire S.A.F. for a vote.
- These are the formal charges against Reed. "He has made unfavorable appearances before sections, schools and public meetings."
- Fritz: This is statement number four on Franklin Reed.
- Fry: This is quoting from the formal charges that were made against him.
- Fritz: This is different than the other.
- Fry: That's right.
- Fritz: "He has made unfavorable appearances before sections . . ." That is true, unfortunately. Reed was inclined to ramble.
- Here is number two: "The lack of initiative and good judgment in undertaking investigations in handling situations which require tact." Well, I don't know about that.
- Maunder: You can't think of any examples in which that was the case?
- Fritz: He had to be pushed.
- Maunder: Who was doing most of the pushing?
- Fritz: Chapman, who was president. Let me read further. Number three: "Failure to properly systematize and supervise the business and details of the office and he delegated duties without giving adequate supervision." There was some truth in that. I don't think Reed was an administrator. He was miscast for the job. It was very unfortunate for him because he would have been a good man somewhere else, and it was very unfortunate for Reed that Chapman

Fritz: was so abrupt regarding his duties, not to try to develop him and instead just give him hell all the time.

Fry: Yes, well, this probably made Reed even worse.

Fritz: Yes indeed. It made him a physical wreck. He died shortly after he was dismissed.

Maunder: He did?

Fritz: I agree with others that his death was hastened by Chapman's treatment.

Maunder: And his death was attributed to what?

Fritz: The immediate cause?

Maunder: Yes.

Fritz: I don't recall. I think it was a stroke.

Fry: And his wife was already in some kind of a sanitarium.

Fritz: Yes, and I have a hazy recollection that he lost some functions.

Maunder: Well, that would usually go with a stroke.

Go on with the charges.

Fritz: There were four. Number four: "Inability to harmonize his personal opinions with his position as executive secretary in relation to the Council." Well, that could have been worded a little differently if it had been worded by someone else: "Inability to harmonize his personal opinions with his position as executive secretary and with the president." Because the president was forcing his views on the Council. And for a while I must admit that I took some awful junk from Chapman and voted with him because you have to make some allowances for a man when he's trying to do some good.

Number five: "Evident inability to exert sufficient sustained effort to meet the greater growing requirements of an expanding organization." Well, I think my recollection is clear on all of those except one of them. He was not a self-starter.

Fry: So that actually it appears that it was time for the Society to have a new man in?

Fritz: Yes, I would say that that's correct. Under a different president, Reed could have become a good S.A.F. secretary.

Fry: It is interesting that also in your files is a letter from Butler, which was dated even a month before the action of the Council.

Fritz: Now, I have just read that third paragraph that you have shown me. Some of that comes back, and I am surprised that others besides myself recognized that the business manager, Miss Warren, was a domineering personality. And of course, we all knew that Chapman was very aggressive--and domineering.

Only this morning, I opened a file and came across several things which I will turn over to you for the file marked Chapman. This is to be turned over to the Bancroft Library. It shows how domineering and aggressive Chapman himself was, and how arrogant and vindictive he could be if anyone crossed him. I hate to say that of Chapman because Chapman did a great deal for forestry and for the Society. Yet certainly he kept things stirred up continuously.

Fry: We might as well read into the record this list of Council members who voted on the dismissal. Dana, Spring, Besley, Collingwood, Rhoades, Winkenwerder, and Chapman were present. And then Korstian and Granger, who were just past Council members. And absent but voting: Rutledge, Kotok, yourself, and Shepard.

Fritz: Was that unanimous?

Fry: I don't know how the vote went.

Fritz: I believe--and I hope you can check it from my papers--that I voted for Reed's dismissal.

Fry: Yes, you did.

Fritz: And whether I made any comment on it or not, I don't remember.

Fry: Yes, you did.

Fritz: It was in a letter.

Fry: You have several letters there that go back and forth as this became a Society issue, pointing out how Reed made it difficult for you when you were editing the Journal, two or three years previous.

Fritz: Reed made it difficult for me?

Fry: For you when you were editing the Journal because of what would be done in the Washington Office. You were sitting here in California editing the Journal.

Fritz: I don't recall that Reed made anything difficult for me. I might have forgotten it.

Fry: But at any rate, I assume that you did vote with the Council on dismissing Reed at this time. Now, later on when they got votes from the entire membership on it, that was when you abstained.

Fritz: Well, it was very rough on Reed because he had some health difficulty.

- Fritz: I'm reminded of that by reading paragraph three, that his wife was quite ill. The man was really despondent. With Chapman as president, Reed could not have been given the S.A.F. secretaryship at a worse time. Previously, he had lost his job because of the Depression.
- Fry: This was his job with the National Lumber Manufacturing Association?
- Fritz: I don't remember what it was. I personally liked the man. We used to have some private correspondence, and my letters are probably in the files. But I don't recall that he made things difficult for me as editor.
- Fry: Miss Warren was the business manager and Reed was the executive secretary while you were editor.
- Fritz: Miss Warren gave me a bad time in the first three months of my editorship. I had it out with her early and then we got on very well. She had a lot of drive and was very interested in her job in a forestry organization. I have already told you about the poor paper she bought for the November and December, 1930, numbers.
- Fry: Well, on this Reed case, the information leaked out and apparently Reed says, in a letter, that Besley showed him the dismissal statement on January 27, which was the day before the meeting in Atlanta at which he was dismissed. And so I thought perhaps you knew something about the relationship here on this list of Council members. There might be some trying to help Reed who were privy to the Council's actions, like Besley and maybe other friends. Do you know anybody like that?
- Fritz: Let me go down the list. Dana was, and still is, a very independent person. He makes up his own mind and is not influenced by gossip without checking. I don't know what Dana's reaction was to Reed, but whatever he did I think was done conscientiously and very fairly. Spring, the same way. Besley, the same way. Collingwood, the same way. Rhoades, I don't know. Winkenwerder, yes or no. H. H. Chapman certainly was against Reed. Korstian, I don't know. Granger would always side with Chapman. Rutledge, I don't know. Kotok would side with Chapman's view and so would Shepard, and, as you say, I also was with Chapman (probably with my fingers crossed).
- We badly needed an executive secretary who first of all would not inject his own views and himself too much because he was a hired man. Direction was up to the president and Council members. Of course, Reed was a member himself. He could act as a member but he also would have to be circumspect knowing that he was also a paid employee.
- Fry: But it doesn't sound as if it was a question of paying him. It appears that he was thought to be incompetent by a number of people. Chapman points out that Reed's administration was untidy regarding

Fry: stenographic services, he felt that Reed had not gone about filling the Forest School report which had just been put out by the S.A.F., and the revision of the Constitution had been handled badly, and that Reed at one point was supposed to have provided for an unsigned ballot at the annual meeting and he didn't--he had a place there for everybody to sign his name on the ballot. I was wondering if you knew of any of these instances.

Fritz: You didn't know Chapman of course, and very few of the present generation of foresters knew him. He was very much of a martinet. Even though he didn't have any authority over a person, he didn't ask him to do a thing, he told him. He expected obedience like unto a military command. And a military command is in two parts, as you know. One is the alert call and then the order for action.

I doubt very much if Chapman made inquiries at all as to what may have delayed Reed in acting quickly on the report that you mentioned (which I don't remember at all). Maybe it was delayed. It must have been because Chapman expected quick work. Reed needed the empathy of his superior, not his harassment. Under Chapman, Reed hardly knew what to expect next.

Fry: This was apropos of the action of a countermove led by these men here: Ayers, Baker, Boyce, Brown, R. S. Kellogg, Recknagle, Titus, Ziegler and Damtoft. And these nine members had sent him a letter on June 4, saying that Chapman was constantly usurping the duties of the executive secretary. And in answer to this, Chapman points out these specific complaints he had against Reed. And all this time, Reed was staying in the chair of executive secretary.

Fritz: Unfortunately for Reed, Chapman had a way of magnifying any shortcomings of a person. I know that because that's the way he was with me.

Fry: You felt that Chapman magnified yours too. Well, apparently he had no trouble getting a vote from the Council on this, and also he apparently assumed that everybody would keep it quiet for a year while Reed found another job. In fact, he had wanted Reed to quietly resign.

Fritz: I wish I could see that correspondence on Reed.

Fry: Would you like for me to get it? I could just run upstairs and get this from your files.

Fritz: Please do that.

[Tape off a few minutes.]

Here is an editorial on the wilderness, written by Editor Herbert Smith. He was a magnificent writer and a good thinker. He was not a forester. He had a lovable personality and was quite a gentleman; he had been a teacher of English, specialized in English

Fritz: in college. His essays written as editorials are really wonderfully well done and well thought out. And the one on the wilderness, he gave it the title, "A Cult for the Wilderness." That was published in the December, 1935 Journal of Forestry. I must read it again because it ties in with what we've gone through with the wilderness extremists in the past few years.

Fry: Here is the letter that you wrote to H. H. Chapman on January 15, 1936, in which you give him in advance your vote to discharge Reed in case the Council took any action on it later that month.

Fritz: This was what I was referring to in my discussion with you.

Fry: "Reed has no conception whatever of the duties of a secretary nor of his limitations nor the implications of the job."

Fritz: Now this is something that I think is important. Miss Warren was domineering and tried to run Reed as well as the Society, and also tried to run the editor. "Too much procrastination," I see here in this letter of January 15, 1936, from me to Chapman. Reed was indeed a procrastinator. And then I say: "Yet, Reed is not fully to blame. We must be fair to him. We have let the Reed-Warren situation develop for five years."

"I made a broad hint in my letters to Granger particularly in my report on the future of the Journal of a situation but it was missed. Yet, Reed is very able. He writes very well and intelligently and I have no reason to believe him to be other than completely honest. He is sensitive and this has made it hard for both of you. It is a tough combination: an aggressive president, a lead-footed executive secretary, and a domineering business manager."

I had forgotten that I had written that way, and I believe I was right at the time. As I told you earlier, Reed had some personal qualities which I admired and liked very much. I wish I could have saved him.

Fry: Yes, apparently he was a very personable man, amiable.

Fritz: Yes, he was a good companion. This was in 1936.

Fry: Yes. Now here is Chapman's answer. This is the one I was reading to you. And this certainly sounds to me as though there was unanimous action on the part of the Council. This is the January 31 memo of the action which was taken January 28, 1936, to fire him.

Fritz: There must be something before January 31, because my letter to Chapman is dated January 15.

Fry: Yes. But this is where the file begins so we don't have anything earlier than that. That was why I was asking you how you got this underway. I thought you might remember how it first started. In

Fry: your very first letter here, you refer to a letter from Chapman, and you say, "I have read your complaints carefully and with a good deal of interest. You have my sympathy. You have had a taste for two years of what I had for three. You have made a very strong case and I feel the Council is justified to take some action." So I gather that this perhaps got underway with a letter from Chapman.

Fritz: There would have been something---

Fry: Well, that's what I thought, that somewhere along the way this got started with some other correspondence.

Fritz: Earlier than January 15?

Fry: Yes, but I don't know where that would be unless it's in some other---

Fritz: Yes. Well, I'm glad you have this much. As I said earlier, it was painful and regrettable, and I regretted having to do this because I liked Reed and he had a lot of good qualities, as you see I mentioned in one letter of January 15, 1936.

I believe though that Chapman was trying to do something for the Society to shake it loose. It was getting stodgy and also it wasn't keeping up with the work. You see, this was in the Thirties during the depression. The Society of American Foresters got more members during the depression. There was a net gain.

Take right here in this school: We had more students in 1937 than we have right now. We had about 375 students majoring in forestry. Right now I doubt that we have two hundred. It was all due to the CCC and the WPA programs because in them they were practically guaranteed jobs as foremen. It was a good thing for them.

Fry: But I gather that the S.A.F. was not particularly long on funds because when the question of a new editor came up in 1934 (this editor that the Holy Twelve wanted), the whole idea was that everybody thought that you should have a paid editor, but nobody knew from where the funds would come for a paid editor at that time.

Fritz: Well, of course, they were getting new members. They lost some but they were getting more new members. But when you add it all up, that wouldn't be a great deal of money. Five dollars a head I think the dues were at that time. They were very moderate.

Fry: As a matter of fact, I think some of the men who came to Reed's defense were men who had been on a committee that previously had raised money to first start paying the executive secretary. And I think that's some of these men here.

Fritz: That I don't remember. There are a good lot of men here, good reasonable men.

Fry: It must have been a little painful to have gone against them too,

Fry: then, along with Reed.

Fritz: Yes, it was indeed, but I would say, looking over that list that you have, I would say none of them were as well acquainted with the situation as Chapman and I. Now I was helping Chapman to make something of the Society, and we needed a man of imagination and a hard worker. Chapman was a terrific worker but at the same time, he was just like a steam roller. He didn't care who was hurt.

Fry: Well, what about these two theories that seem to be going around the grapevine? One of the theories was that the firing was because of the difficulty between two men who could not get along; I suppose that was Chapman and Reed. And a second theory that Chapman had heard was that Reed's trouble was with men in the United States Forest Service who had finally accomplished their foul purpose. And Chapman comments: "They did not realize that the Council is free from the influence of the Forest Service." Do you agree with Chapman's comment?

Fritz: I should say not. There were always some U.S.F.S. men on the Council.

Fry: You think that the Council at that time was not free from the Forest Service?

Fritz: They certainly tried to influence it.

Fry: Well, do you think this firing was a part of this larger problem then, of too much Forest Service influence? Because that's what this grapevine theory hinted.

Fritz: Of course, I don't think much of their thinking that way. As I said earlier, the Forest Service wanted a pliant secretary, one they could influence in their behalf.

Fry: So this might have had an element of truth in it then?

Fritz: Oh yes. Decidedly so. I had Forest Service men come to me and sound me out on certain things to see where I stood, in other words, to see if they could use me or not. Well, sometimes I would have to side with the Forest Service. Sometimes I wouldn't, and I wouldn't budge if I thought I was right. And that was probably like Chapman too.

Fry: There were some other--I was wondering about the section of this controversy that concerned the timing and if you remembered anything about this. There's a letter here from Kellogg that asked you, "What do you know about the talk going around that the Council has tied a can on Frank Reed?"

You say, "I have your note concerning Frank Reed. I'm not in a position to comment on Reed's status, which is a matter purely between himself and the Council." You're living up to the letter

Fry: of the law here as laid down by the entire Council.

Fritz: It's too bad it got out, although I don't know why it was made a secret. Chapman ought to have been smart enough to know that even he himself would let go of it in general conversation.

Fry: Then the question came up: Should they send a copy of the charges to Reed because then Reed had begun to say that he had been dismissed but that he had never seen a copy of the charges.

Fritz: Is that so?

Fry: And so here's your answer: Chapman circularized the Council and asked if the Council felt that they could at that point release the charges to Reed.

Fritz: Looking back, I'm surprised that Reed was not given a list of the charges against him.

Fry: Well, Reed himself--I'm not sure. It's not clear to me that Reed was supposed to be told at all.

Fritz: That's not very nice, and that's probably one reason Chapman wanted it confidential.

Fry: Yes, and that's probably one reason--see, you were supposed to even destroy this memo that Chapman sent you. He says at the end of this letter telling about the action, to please destroy it.

Fritz: He asked me to destroy it? I think that's typical of Chapman. Things like that, I didn't like because--it's a darn good thing that a man like Chapman didn't become President of the United States. We'd have had a helluva time with Congress.

Fry: Well, then in August the next step was that there was a petition to review Reed's firing and it was signed by these men here. These nine men with the exception of Damtoft.

Fritz: I'm sure they were not of the same school. Reed was a Biltmore forester and I'm sure Damtoft was a Yale forester.

Fry: You think that this might have had something to do with Damtoft's not asking for a review. I think the idea of the review was that Reed might be rehired or reinstated.

Fritz: Well, you can see from that that there were two schools of thought. There was a real schism in the Society. When it came to improving the Society and the secretary's office, I was certainly with Chapman. But when it came to policy matters, Chapman and I certainly didn't see eye to eye at all, and certainly not in regard to the Forest Service, because I was a private enterpriser. I learned that in my early days, when I had to listen to a lot of screwball socialism from an uncle, uncle by marriage and a ne'er-do-well.

Fry: Well, did you think that Reed's firing had something to do with that schism or not?

Fritz: Well, it certainly kept it alive. He didn't cause it. Chapman made many enemies as a result of deals like this--keeping a man in complete darkness. And frankly, I had forgotten that it was kept in darkness. And I don't know why there isn't a letter in my file in which I protest that a man should be furnished with a set of the charges. That's true in law.

Fry: Later, when you abstained in the balloting of the total membership, do you remember why you felt that you should abstain from voting at that time? This file still has your unmarked ballot.

Fritz: I had an unmarked ballot?

Fry: Yes. Now, let's see, there is something written on it: "No vote cast. Was member of the Council at the time. I still feel the Council was right but feel also that Chapman's handling of case was very tactless if not unethical." Well, that was probably a protest vote against Chapman. Is that what you meant?

Fritz: I had given him my letter of O.K.--the letter of January 15, 1936.

Fry: Yes. That was for the Council vote. Later on, a petition was sent out to every S.A.F. member, and you had to vote on it. So, in other words, the entire S.A.F. sat in judgment on this whole thing.

Fritz: Chapman's handling of the case was very tactless, if not unethical. It was a very typical dealing of Chapman. Certainly you can handle a case like this more aptly and not create a stink through all the Society of American Foresters, and Chapman had a knack for--he could arouse more opposition and more support. And that just shows all the way through that Chapman was one of the heaviest contributors to the schism in the Society of American Foresters of those days on not only policy matters, but matters of administration and of god knows what else, and of individual members.

He ruined one man completely by an accusation which I thought might have had an element of truth in it but mostly I would say No. And it was very unfair; why bring a thing like that out in the open? You notice how private business handles such matters. When a man is not up to what the boss requires, the thing is handled quietly. He doesn't shout his charges from the rooftops before talking to the man himself.

Well, I'm glad that you called this to my attention. I'm very glad that I didn't send this ballot in, although I thought that I had voted. My recollection must have been influenced by my letter of January 15. The whole thing was made a mess by a viciously vindictive president.

Maunder: Was that note that you wrote on the ballot one which you have

Maunder: subsequently, in reviewing this file, put on the ballot?

Fritz: No. I wouldn't do that on my own copy. It must have been at about the same time. Once I filed something, I rarely had to refer to it.

Maunder: When was that put on the ballot?

Fritz: Well, you will notice that in my letters, I often write marginal notes and comments as I read the letter. I still do it. Now, the handwriting there is the handwriting of that time. Now, my handwriting has gotten worse and worse. I can't read it myself. But it was not quite as bad as Chapman's. Chapman's required a great deal of study, very illegible.

Fry: Oh yes. That's going to be a problem for a future historian. Here's a letter here from Chapman.

Fritz: You might find my--what did I call them?--translations, or deciphering.

Fry: Yes. Some of Chapman's letters are "translated" by you.

Fritz: Frankly, I hate to have you inquire into these things so much and so deeply because they are very very distasteful to me. I think we've gone far enough into this. It's distasteful because of Chapman's attitude. It's distasteful because I had to go against a man I personally liked, and it's distasteful because the organization, the federal Forest Service, was so small-minded in so many matters.

The U.S.F.S. badly needed, in those days, older heads free from emotional spasms. It acted like sophomores. We were all too much of the same age. All of us had to learn not only forestry but how to get along.

Maunder: Well, I think you have spelled out all that we want to know or need to know on the subject, don't you? I think we're ready to go on to other subjects.

Protection of Members

The Cox Case

Fry: I thought we might start in on this other case and then before we get into the Black case, it might be a good idea to look at those letters and files.

Fritz: Do you want to go into the Black case now?

Fry: On Cox.

- Fritz: Take the Cox case first; the Black case will be longer.
- Fry: The Black case is probably something you will want to check your files on too, before we start talking about it.
- Fritz: We can go through the Cox case very quickly because I don't know much about it. That was William T. Cox, wasn't it?
- Maunder: Yes, state forester of Minnesota.
- Fritz: I never knew him very well. At some time, I had chats with him. I regarded him as a man of strong personality, great ability, and one who was trying to do something for American forestry and forest conservation in the way that he thought it should be done.
- Fry: Here are a few notes on it. Here's a letter from Cox to Professor Chapman on February 21, 1933.
- Maunder: I think maybe as an introductory statement to this discussion, it ought to be pointed out that these pieces we are going through now signify the S.A.F. policy question, of whether to support members who were threatened by political displacement, and whether to discipline members whose behavior was considered unprofessional. It's to go into these famous test cases that we want to inquire into these files that you have on them.
- Fry: In other words, the Cox case signifies the first time that the S.A.F. did enter into one of these to try to protect an employee.
- Fritz: I don't recall that I really got into this.
- Maunder: Well, it was in 1933.
- Fritz: Here's something.
- Maunder: This is a letter from you to whom?
- Fry: This is a letter from Fritz to Chapman after the hearing.
- Fritz: I'm going to read over this letter here to acquaint myself with the situation and also the initial letter that was responsible for the controversy concerning W. T. Cox. I received the Cox file because at that time, March, 1933, I must have been a member of the Council.
- Fry: Yes.
- Fritz: Otherwise I would not have been involved in it at all.
- Fry: In fact, we are talking about all of these things because---
- Maunder: You were on the Council.
- Fritz: Apparently, I got a sheaf of documents on the Cox case as a member

Fritz: of the Council at that time and that's why I got it. Here's something of interest: "The situation in Wisconsin and Minnesota will be repeated in other states . . ." This is in my letter of March 29, 1933, to Chapman. "We had the beginning of one in California last fall."

Fry: That was the beginning of the Black case, I guess.

Fritz: "There would not be so likely a repetition if the state boards would learn that behind the state forester is a professional society ready to vigorously back him up when certain principles for which the profession stands are violated, as is the case in Wisconsin and Minnesota. But instead of our professional society being held in respect, it is actually held in contempt by these officials, if they know it exists at all."

Then here's a personal comment that I didn't recall making but I'm pleased I made it because I feel the same way about it right now. "I was attracted to forestry by the courage of such men as Fernow and Pinchot, but I must confess that since I have been a member of the profession, I have suffered disillusionment."

Fry: I think the question in this case was whether Cox really was incompetent or whether he was being fired as a political football. The immediate question before the Council was whether or not to let the executive secretary go up and make an investigation.

Fritz: Well, in the third paragraph of my letter of March 29, 1933, I go into just personal reactions. "Our lack of initiative in carrying out that part of our constitution which reads: 'to advance the science, practice and standards of forestry in America.' This seems to date from 1924, when at the annual meeting the president especially enunciated a hands-off policy." (Oh my god, Mulford was president!) "What's the good of that statement in the constitution if the Society is afraid to act on it? Every member must pause to wonder what the Society really has to offer him and why we have an executive secretary. If that statement of aims means nothing, then I am for devoting ninety percent of the Society's income to the Journal of Forestry for publishing monographs, giving research grants, and so on. At least, they are harmless. Especially when the editor dares act for the profession only after he has pleased the officer."

"I can just picture myself trying to editorialize the Wisconsin and Minnesota situation and trying to point out the position the profession should take without having it reported to the president and (then) thrown out. I have long been convinced that we made a mistake on having a Forest Service officer serve as president. Although Granger tried to act independently at the outset, he seems to have fallen into the safe ways of a federal officer. This is an election year. We have a chance to at least nominate men who have the courage of their convictions. Too many of our past officers have looked upon the election to office as an honor rather

Fritz: than the awarding of a job." Gee whiz, I didn't know I had sense enough to write that.

Maunder: Let me ask you something. Zon and Granger were not especially eager for S.A.F. to take on such cases as this. Is it just what you said in that letter, a reflection of that fact? Why were they not anxious to take on that?

Fritz: 1933. That was a time when Franklin Roosevelt told the federal foresters to lay off public expression on certain policy matters that might react against the Administration. One of them, of course, was reorganization of the federal bureaus.

Fry: Well, this was not so much involved with federal bureaus. This was more a state forestry problem.

Maunder: And Zon was at the Minnesota Experiment Station at this time. What was his relationship to Cox in all of this?

Fritz: Yes. Zon was a federal employee. Zon was the type of man who would shove it off on Chapman, and that was just what Chapman loved, although I don't know that Zon actually did it. Chapman, as I told you earlier, was the hatchet man for the U.S.F.S. Federal officials serving on the S.A.F. Council have to be circumspect in dealing with state officers.

Fry: Do you think that the attitude of people like Zon and Granger and others in the Forest Service could be related to a point made in this preliminary statement of February 15, which must have come from the S.A.F. office? The statement was made that the United States Forest Service first had the role of stabilizing forestry employment and they more or less did this effectively, apparently. But then by the Thirties, there were a number of foresters who were not in federal employment, and it was time to have some wider organization to take over this activity.

So perhaps this Cox case came just at a time when some of you were feeling that the Forest Service was no longer adequate to protect all their jobs and it was time the S.A.F. stepped in. My theory was that Granger and these others in the Forest Service were a little reluctant to relinquish this position.

Fritz: Well, by what right does a federal bureau undertake to be a monitor of the ethics, the thinking, the policies, of state officials and others? It's not their business.

Fry: Were there cases before this where the federal Forest Service had been able to assist state foresters who were beset by state politics?

Fritz: You mean openly on their own letterheads? I doubt it, if it was during the F.D.R. days. They were afraid of F.D.R.

Fry: There's a long summary in this file (and as I read through it, I realized it had been written by Chapman although it's unsigned) of a whole series of state foresters who were replaced in their jobs by others because of a change in the state administration.

Fry: And that was written by Chapman who apparently felt that this shouldn't be undertaken by S.A.F.

Fritz: Now there again, if a certain job is held by appointment of the governor, it certainly is his right to make a change when he takes office, wise or unwise. This happened in our own state just when our own new governor, Reagan, came in. He got a new head of the Resources Agency. I must say he picked a man who has all the qualifications for the job--experience, interest, and high personal qualities.

Maunder: You're talking about whom?

Fritz: Norman B. Livermore, Jr. It was a wonderful appointment. Now sometimes those jobs go to political hacks. That's a risk you have to take in a democracy. Now, Chapman would not recognize such a risk. He figured that that governor would have to do what Chapman wants. It doesn't work out that way. Sometimes you have to take a licking.

Fry: The main issue in this Cox thing is that when Reed did appear before the Minnesota commission on behalf of Cox, he went further than many in S.A.F. felt he should have gone. And in your file here there are comments about Reed not doing adequate research when he went to Minnesota, that he didn't question people on both sides of the issue. Although the Minnesota section of the S.A.F. (and Mr. Shirley was the head of that section at that time) approved his action, later, members complained that they had not seen Reed's statement before the hearing, so they didn't really know what statement Reed was going to read.

Fritz: Is it in here?

Fry: Yes, it is. This statement is in Society Affairs, in the Journal of Forestry. It was one of the spring, 1933, issues.

Fritz: This is a galley proof. Apparently, Reed sent me this to do over.

Fry: "On February 11, Commissioner Cox was suspended by the Conservation Commission on charges of complete lack of executive ability, and March 31 was set as the date for the hearing." The charges are "Studied contempt for and indifference to the Conservation Commission and its policies. This action was taken by the vote of three members of the Commission: Mr. W.A. McQuen, Mr. John Foley and Mr. Richard Bailey, who are the same three that last July attempted to oust Mr. Cox. On the other hand are Mr. Ernest Reed of St. Paul and Mr. James T. Williams of Minneapolis, whose formal refusal to agree to Mr. Cox's dismissal led up to his retention until this time. They refused to vote for his dismissal or approve the suspension. Mr. Reed stated he had lost confidence in some of his colleagues."

This was from the preliminary statement which was sent out to Council members on February 15.

Fritz: So far I don't see anything in Franklin Reed's statement in Minnesota

Fritz: that I would consider out of order.

Fry: The criticisms against Reed were, I think, that he did this on his own; it was a unilateral action. The statement itself was. He was sent up there to investigate but according to Granger's letters here, he was not sent there to make a definite statement.

Fritz: I don't know anything about that, but it might have been an escape hatch for Granger. A man in a secretaryship should know that he should not make statements that would not be approved by his Council unless he makes it clear he is speaking only for himself.

Fry: Well, maybe you could just make some statements on the people who seemed to be in favor of the S.A.F. adopting this policy at this time and those who felt it shouldn't be done. Apparently, the Cox case was a kind of debacle and left a number of people divided on the advisability of doing this with an executive secretary, and whether a secretary should be free to act on his own after he went in and investigated, or whether he had to wait for advice from the Council.

Fritz: Well, I think the executive secretary should first clear it with the Council. Now, as I told you before, I don't remember much about the Cox case except that there was such a case. My part in it was very, very small and only as a member of the Council. And my stand in the situation is not that Cox was right or wrong, or that the governor was right or wrong, but that it is a matter of Society business that if we state in the Constitution that the purpose of the Society is to protect the interest of its members, then it should do something about acting on those interests.

At the same time, not having read these letters through--my letters from March 29, 1933: one to Chapman, one to Ovid Butler and one to Granger as president--I feel first of all that the Society should find out what the situation is, what the actual truth of the allegations and defenses are, instead of going off half-cocked. Please remember also that I have not had occasion to refer to this file since the case. I have forgotten too that Granger was president. He cooled toward me, perhaps because I could not follow him one hundred percent.

Fry: Would you try to place this Cox case in an historical perspective for us? Do you feel that it did set a precedent?

Fritz: It had a bearing because when you have a man like Chapman who loves a fight and has a chance to get into one, it is certain to make headlines. Also it brings out the weakness of the Society. You write a Constitution and you don't abide by it. You don't act on it.

Fry: But in this (Minnesota) case, it was apparently a fairly competent state forester who was about to be let go, and the letters in your file have statements both pro and con on his actions while he was

Fry: state forester. But there are also some statements in here about the other state foresters who have been fired around the country. I'd like to ask you if you agree with this: that while these state foresters lost their jobs in a political turnover or in an issue that was largely political, they were replaced by other graduate foresters. As long as one graduate forester is replaced by another graduate forester, should S.A.F. have any grounds to complain?

Fritz: If the job of state forester is a political one in the sense that the incumbent takes office by the will of the governor, he can't complain if he is displaced. In California, the State Forester is on civil service, but the Director of Natural Resources, and now the Director of Conservation, is a political appointee; and DeWitt Nelson, who was State Forester then, was made Director of Resources by Governor Warren, kept in that office by Governor Knight, both of them Republicans, and retained in that office by the Democratic Governor Brown for two terms. This shows that it wasn't political here in spite of the fact that the governor had the authority to replace the man if he should want to.

It shows that if a man is circumspect in what he does, and does a good job, and doesn't get the governor and his people in a jam, more than likely a sensible governor will keep a professional man like that on the job because he's not harming the governor, he's doing the governor good, he's doing him a favor.

My whole part in this Cox case is set forth in the letters that you have here. They're all dated March 29, 1933, all three of them.

The Black Case

Maunder: Emanuel, in your own life, the S. Rexford Black case began with your being appointed to the State Board of Forestry in 1934 by Governor Merriam. You went to Sacramento to be sworn in to the State Board of Forestry and to attend your first meeting there which the chairman, Rex Black, had called for December 13.

There is, of course, a great deal of material in your files here regarding this particular matter: clippings from the Sacramento Bee of the dates in question and for several days after,* other correspondence, and much other material which covers the subject in detail. But it seems to need a little clarification and it's on that that we would like to talk today.

The first question that comes to mind upon reading this file is simply this: You were, of course, a sensitive participant and

*See Appendices B-I, pp.302-9, Sacramento Bee, 24 October 1932, 25 October 1932, 14 December 1934; San Francisco Chronicle 15 December 1934; Sacramento Bee, 17 December 1934; Sacramento Union, 13 June 1936. See also S. Rexford Black, "Private and State Forestry in California," typed transcript of tape-recorded interview by Amelia Roberts Fry, University of California Bancroft Library Regional Oral History Office, Berkeley, 1968.

Maunder: observer of the forestry scene in the year 1934, a man considered to have a good deal of know-how about the forestry problems of the state, or you wouldn't have been considered for this appointment to the State Board of Forestry. Yet when you got down there, you resigned even before you were sworn in as a member. The declared reason that you gave at that time is that you found to your horror that you were being used in this instance as a cat's paw by the chairman of the State Board of Forestry, Mr. Black, who was making an endeavor to fire the State Forester, who was at that time Mr. M. B. Pratt.

Now the question is, were you totally unaware of any implications of your appointment in this regard? We wonder about this and how you could come to this meeting knowing that there was so much fat in the fire over Pratt continuing. And knowing Black as well as you did at that time, had you had no forewarning whatsoever of what Black was trying to do here?

Fritz: First, you have an advantage over me in that you have read the file very recently while I have not looked it over for thirty years. I had been asked by telephone if I would serve on the Forestry Board, and how I felt about Pratt, the State Forester, as to making a change in the State Division of Forestry.

Fry: Was this Black who telephoned you?

Fritz: I don't recall. It must have been Black.

Maunder: That telephone call came to you where--here on the Berkeley campus?

Fritz: No. At my home.

Maunder: This was shortly before this meeting that was to be held in Sacramento?

Fritz: Yes, within a week.

Maunder: And you were asked by the caller, who probably would have been Black, the chairman?

Fritz: Most likely Black.

Maunder: And he made inquiry of you as to whether you would be a member of the Board and also how you felt about Pratt. Is that right?

Fritz: That's correct.

Maunder: Can you elaborate about that discussion on the telephone further?

Fritz: Well, it wasn't a very long call. As I recall it, he brought up the matter of getting Pratt out of the state forester job and getting someone else in. Who it might have been, I don't recall; I

Fritz: don't think the Board had anyone in mind. I was to go to Sacramento to be sworn in.

Maunder: Then when you went to Sacramento for the December 13 meeting, why did you suddenly turn about and say that you would not serve on the Board?

Fritz: Well, I was up there practically all day, most of it just sitting around in the hotel waiting to be called. I don't know the reason for the delay. I think it was in Governor Merriam's office. He was busy with something and couldn't see me. I believe the governor did the swearing-in.

So it gave me a chance also to talk to some of the other Board members. And right now I recall that we also sat around in a room in the State Forestry building in Sacramento where some of the other members were talking to me about what they planned to do. Black, of course, was very busy keeping in touch with the governor's secretary to see when we could go down. But the more these other Board members spoke, the more I thought that I was being dragged into something that I didn't like or fully understand. First of all, I was agreeable to asking Pratt to resign. I would oppose his being fired. Give him a chance to resign his state forestership and then give him another job in the Division, a job that would have to be created or developed in some other way by a shift in the personnel.

Maunder: You felt, I take it from that statement, that Pratt was not really doing the job as it should be done.

Fritz: Pratt was a very good man for the early days of the State Division of Forestry. But the job grew out of his hands. That's understandable. He was one of the real old-timers. I think he graduated from the forestry school in 1905.

Pratt's great strength lay in his dealing with people. He had a great knack for dealing with women's clubs, lunch clubs, federations of this and that; he was also a good writer and a good speaker. But his administration was very weak and, as I say, the job was growing. There were more and more responsibilities for the State, especially for fire protection. And there was this battle concerning federal regulation of forest practices. Then also there were the C.C.C. and W.P.A. programs involving the employment of hundreds of people.

Maunder: Was there some criticism of Pratt's emphasis on fire prevention in the southern counties of the state as against working more energetically in the northern counties?

Fritz: I don't know about that.

Maunder: But the implication is that the Division of Forestry in those days

Maunder: was putting rather heavy emphasis on its protection in the southern part of the state rather than in the northern.

Fritz: it was sure of support down there.

Maunder: And do I get the impression that there was a feeling of criticism on the part of Rex Black and the northern California industry men over this emphasis? Has that got anything to do with this?

Fritz: If so, I don't recall it. I was not well acquainted with southern California, except that watershed fires down there are extremely destructive.

Maunder: Now we're talking here about the state forestry people, not the U.S. forestry people, and what about the work that was being done by the state forester at this time? Was he putting his emphasis on the southern counties too, or what's at the root of these charges, this effort on the part of Black to get rid of him?

Fritz: I might say that in those days I was just beginning to get interested. I just happened to be shoved into these early day controversies because I happened to have sentiments comparable to those who were talking to me.

The man who could best tell you that, one who was a very, very close friend of Merritt Pratt, was Woodbridge Metcalf. He spent a lot of his time in southern California on fire matters. If Pratt gave any preference to southern California, I think he was justified because there, he was sure of support. What he wanted to accomplish would be what the people down there not only wanted, but what they badly needed. Up here, the further any forester stayed away from the landowners--grazing landowners or timber landowners--the better they liked it. In southern California, there was very strong interest because of watershed protection needs. In the north, the interest was spotty.

Maunder: Dunwoody had, previous to this, organized a lot of local fire protective groups through the Chamber of Commerce in southern counties and towns and had set up volunteer fire groups, all of which were closely related, according to Dunwoody, with the State Forester's Office; so I would assume that there was a great deal of activity on the part of Mr. Pratt and the people in the south. And just as you've indicated, there probably was not nearly as much activity going on in the north. Now, was it Black's intention to get a change in this by getting a change in state forester?

Fritz: Not that I recall. Because northern California was organized also; we had private forest protective agencies. Some of them antedated the California Forest Protective Association.

Maunder: Can you recall what it was that triggered your sudden decision not to be sworn in?

Fritz: Yes. I recall that well. While in Sacramento, I talked to several people about the situation and found that I was not fully informed. I wasn't in on all that went before. I wasn't too close to Pratt; we were friendly but not close

Maunder: Hadn't you been associated with him before here at the School of Forestry?

Fritz: No. I took his job in 1919. He had resigned to go to the state office. I didn't meet him until maybe a year or two after I arrived in 1919. The exact details may have escaped me, but this is the way I recall it: From those I spoke to in Sacramento, I learned more of the situation and felt I let myself into something that I didn't know enough about. Now I don't hold that against Rex Black. Maybe he was misled when I talked to him over the telephone. A telephone is a very unsatisfactory way to carry on a business of that kind, and I probably didn't ask enough questions about what was behind it.

Maunder: Do you remember whether you got this feeling from people in the Forestry Division there in Sacramento, some of Pratt's own people?

Fritz: No. I knew some of them, of course, and I knew also that it was a weak administration. No, I got that feeling from people outside the administration. Ed Kotok came to my office one day and unburdened about Pratt, saying, "I'll get him out."

Pratt had a very strong point for which I admired him: He would not knuckle under for anybody in the Forest Service who was trying to get him to line up with it to strengthen their hands. He knew that, in the end, he would be the loser. What year was that?

Maunder: 1934.

Fritz: He was in office another nine or ten years after this episode.

Maunder: He'd been in the federal Forest Service for about ten years.

Fry: What had Kotok told you?

Fritz: To use his exact words (I remember them distinctly because they made such an impression as coming from a federal man): "I'm going to get him."

Fry: This was when Kotok was head of the Experiment Station?

Fritz: Yes. His office was in our building.

Fry: And was this before you were up as a member of the Board?

Fritz: Yes.

Maunder: I notice here too that the California stockmen, the wool growers,

Maunder: and other associations were rather strongly opposed to ousting Pratt.

Fritz: Opposed to ousting Pratt?

Maunder: That's right. And labeled Black as being the person who was trying to get rid of him. For example, W. P. Wing, secretary of the wool growers group, is quoted as stating here, "Black has been after Pratt for four years. Black is secretary of the California Forest Protective Association, an organization of the private timber interests who are opposed to Pratt."

Fritz: Well, now that you mention Wing, the chances are that I spoke to him at some time earlier. I still know Wing and very favorably, although at that time, he got me a little angry for capitalizing on my action. I did speak to him after I declined being sworn in.

Maunder: I have a clipping here from the Sacramento Bee of December 14, 1934. I think this is such a classic lead for a news story that I'd like to read it into the oral history interview. It's written by George Dean. It begins:

"Professor Emanuel Fritz, newly appointed member to the State Board of Forestry, sat yesterday afternoon in the lobby of the Hotel Senator calmly reading Anthony Adverse and his literary bent blocked a move to oust Merritt B. Pratt as State Forester. As a climax to a tense situation, Fritz today telegraphed his resignation to Governor Frank F. Merriam less than forty-eight hours after his appointment and stranger still, before he had taken the oath of office."

So you resigned from something that you weren't a member of yet.

Fritz: That's a reporter's statement. He wasn't with me very long. It was a very uncomfortable period. It was in December and very rainy and gloomy. I don't think it was too warm in the lobby of the Senator Hotel, and I think I still had on my raincoat.

Well, anyway, Wing was bent on preserving Pratt and I couldn't understand that because Pratt was against the burning being conducted by the grazing men. Pratt probably had the same feeling I had at that time and still have, that it's the stockmen's land and if they think they can get more grass by burning, it's certainly their privilege to try it. I used to tell stockmen that if they let their fire run across their land into land that is dedicated to the growing of timber, then that's where I get into the picture. Three or four years later, I had a part in legislation that set up the cooperative burning, or controlled burning system. It solved many forestry problems.

Maunder: It's a rather interesting thing to note here that the other members

- Maunder: of the Forestry Board were present in Sacramento that day--B. C. McAllaster of Piedmont, H. S. Gilman of Los Angeles, and Ernest G. Dudley of Exeter--and they were meeting in the Board's room in the Division of Forestry, ready to cast their votes for the State Forester if the matter came up. You evidently were there for a short time with them.
- Fritz: Perhaps. I think it was to have been an official Board meeting. The Rex Black group was sincerely trying to get more forestry into the woods, particularly selective cutting. Pratt was for that too, but he lacked the steam.
- Maunder: In other words, what you're saying is that this is an issue in which the industry and the Forest Service were at one with each other and were fighting to get rid of Pratt?
- Fritz: Yes, I think that's true. But it was limited mostly to top men and mainly in the pine industry. I don't think the redwood people took much interest in it. Except for a few, they were very provincial at that time and their problems were different.
- Maunder: What about the membership of the California Forest Protective Association?
- Fritz: That was statewide. Anybody who owned forest land to be protected could be a member, redwood or pine.
- Maunder: But wasn't this the heart of the opposition to Pratt? Wasn't Black the secretary of this Association?
- Fritz: Yes.
- Maunder: And wasn't the man that they had hand picked to take Pratt's place Bill Schofield? Bill was actually sworn in as state forester here briefly for one day, I believe, and then relieved. He was the man that was to be recommended.
- Fritz: I might have known that at the time but I don't recall it now. I know that Schofield had been considered at other times. He would have made an excellent State Forester.
- Fry: I believe this issue came out later in the S.A.F. investigation. There were some letters written on it.
- Fritz: If it came out in the S.A.F. investigation, then I must have known about it at the time because I was still a member of the Council then, wasn't I?
- Fry: Yes, you were. This is your file on the whole thing right here.
- Maunder: Emanuel, as a member of the Council in 1934, you must have been rather intensely aware of the attitude of the hierarchy of S.A.F.

Maunder: with regard to the ethics of the profession. This was a matter of great discussion and interest at that time, was it not?

Fritz: I think that was about the beginning of the many years spent in writing a code of ethics for the Society of American Foresters. But the Society was not involved in this case until its president, Chapman, pushed it in.

Maunder: What I'm trying to get at is this: Were you in any way influenced in your decision to refuse to be a member of the Board by what you felt might be professional considerations? Did you feel perhaps that you were becoming party to something that wasn't ethically sound? I gather that you did because you made rather strong statements in saying that you would not serve.

Fritz: As far as the code of ethics was concerned, I think it was all right; but from the standpoint of fairness to Pratt, I don't think it was right to kick a man out of his job. But to let him stay on in another category would have been a fair thing to do. I was told that they were going to set up a job like that, but when you're dealing with a public agency, whether it's federal or state, you've got to be sure you've got it in your hand before you believe it.

There was talk of setting up a special job for Pratt, one that would include public relations, making addresses, and the like. Pratt would have done an excellent job. He had a real bent for it. I believe he would have advanced forestry better than he was doing as State Forester. Had there been a firm commitment by someone in authority that such a job would be created for Pratt, at no loss in salary, I would have gone to Pratt direct and told him that I favored his resigning and taking the other job. He would have been foolish to resign with the new job only an assumption. I think I could have convinced him he would be better off.

Maunder: Well, was it Chapman who brought the charges against Black, or was it someone else?

Fritz: It was a committee.* No, it must have been the signers of a petition. Wasn't Woodbury one of them?

Maunder: The charges against Black were signed by seven people, the names of whom were withheld.

Fritz: Yes. Unless my memory is incorrect, Kotok and Show and Woodbury were among those who signed.

Maunder: All three were Forest Service men.

Fritz: Yes. The reason that Kotok wanted Pratt out was that the Forest

*See Appendix J, pp.310-13, notes from S.A.F. Affairs, February, 1936.

- Fritz: Service wanted a man in the job it could control, especially when this matter of federal regulation of timber would come up.
- Maunder: That seems a little inconsistent to me. If Kotok was eager to get Pratt out, why would he then be one of those who attacked Black for trying to get him out? That doesn't make sense at all.
- Fritz: No, it doesn't. The Show-Kotok team (brothers-in-law) was an ambitious pair. Don't forget too that anyone who was antifederal regulations was beyond the pale, and Black was certainly against federal regulations as strongly as I was. There was another possible reason. Kotok wanted more state funds to study flood control in southern California. He was in Sacramento a good deal trying to get money from the legislature. Perhaps Pratt felt that Kotok was intruding into state matters. Pratt had appropriations of his own to fight for.
- Fry: I got the impression that Mr. Kotok was brought into this because he was an S.A.F. Council member at the time.
- Fritz: I asked Woodbury, "Why did you sign that petition?" And he said, "Well, here is a complaint being made and I think it ought to come out in the open in the Society." I don't think he cared whether Pratt stayed or got out. He was on the moderate side.
- Maunder: Pratt had faced a possible ouster in 1932, two years before, when the governor was James Rolph. Also again, on charges filed by Rex Black.
- Fritz: What were the charges?
- Maunder: That he is incompetent to handle the forestry camp and unemployment program.
- Fry: I believe that Black was also in some executive capacity in that program, wasn't he?
- Fritz: I think he was, but I don't remember for sure. That was what they called the S.E.R.A. camp before the W.P.A. and C.C.C. Now that you mention it, I think Black was dissatisfied with Pratt's handling of these programs.
- Fry: Yes. Black apparently handled this, and he wrote a report.*
- Fritz: I remember that very well because I wrote a review of the report one man made. I think his name was Cutler. He protested to Black that I made it appear that I was involved in S.E.R.A., taking some glory away from this particular man who protested. Actually, I had no part in S.E.R.A. I was just reviewing a report as a reviewer.

*California State Labor Camps Report, July, 1932. Sacramento, California. For a copy of this report reprinted from the Journal of Forestry, see Appendix K, pp. 314-15.

- Fritz: There were a lot of undercurrents that are rusty in my memory.
- Fry: This is what we're trying to put together.
- Maunder: It's those undercurrents that need to be brought out in this interview if we can.
- Fritz: The California federals were rather boastful, as compared with the northwest. And there was quite a clique in the making. It became very powerful.
- Fry: Do you include Woodbury in the clique? Or do you just mean Show and Kotok primarily?
- Fritz: It was a Kotok and Show team; Woodbury didn't cotton to either one of them. Now how did the Society get interested in this? Who got the Society into this? That is the only part in this case that matters.
- Fry: Do you know?
- Fritz: Yes.
- Fry: Who?
- Fritz: I was in Connecticut for some reason, and naturally I would call on the Yale Forest School and my old professors; and the first crack out of the box after he said Hello, Chapman said, "Tell me all about that situation in California about the state forester and Black."
- Fry: How did he know?
- Maunder: It had been in the press.
- Fry: Oh, this was after it broke.
- Fritz: That was pipelined to him.
- Maunder: Well, that's what I meant. He would have been sent clippings by some of his friends.
- Fritz: Probably. As I characterized Chapman earlier, he was a great one to smell out a battle and get into it. I told him what the situation looked like to me, and I emphasized that Black and the other men who were trying to get the state forestership changed to another man were on the right track. We needed a stronger man there, a man who could cope with the growing importance of the job. But the way they went about it was very tactless and, as it turned out, difficult for them.
- Maunder: Do you think it was also unethical the way they went about it? It was on these grounds that Black was ousted from the Society.

Fritz: He was brought back again too. Don't forget that.

Fry: Black was?

Fritz: Black, yes. He was reinstated. I begged Chapman, knowing how precipitate he was, to stay out of this matter, and that we could handle it in the West. I warned him that he was being used by Black's detractors. I was afraid that Chapman would mess it up, just as he did other disputes, and have a lot of dirt spread out and get the forestry profession again into bad repute. I said, in effect, "For heaven sakes, Chapman, keep out of this. This is a local matter and you have no business in it. We can handle that ourselves."

That didn't appeal to him. Later I learned that he was investigating the matter through his own connections in the West, and of course, Pratt would feed him everything that he could get together. Chapman set up a committee to bring charges formally. I didn't sign that petition.

Maunder: No, but you passed on the charges after they had been made official and sent out. The Council found Black guilty on the 20th of November, 1935.

Fritz: Do you know how they voted?

Maunder: I'm sure it's a matter of record.

Fry: Everybody but one voted to oust Black.

Fritz: Do you know who that one was?

Fry: I think it was Kotok.

Fritz: No sir, it was Fritz. I was the only one who voted No. I voted against ouster. Chapman never forgave me for opposing him.

Maunder: The Council found Black guilty on several counts of the charges presented against him. They found that he was guilty of trying, without sanction of the State Forestry Board, to get Governor Rolph to dismiss Pratt for Incompetency and political activities. In this 1932 attempt, the governor was of the opinion that Black had the full approval of the Board of Forestry when he actually did not.

Then on another charge Black was found guilty. It was that he had discredited Pratt to his supervisors, to the public, and to his subordinates. There was evidence that confirmed that he had done this. He was also found guilty on the fourth charge which was that he, Black, had usurped the authority of the State Forester.

And on the seventh charge, that when the initiative was won to put the State Forester under the protection of civil service, Black tried to get the Board of Forestry to dismiss him in the interim-- which Black could have done with the vote of the new Board member, Fritz. But Fritz caught on and would not accept the appointment.

Maunder: Now, on all of these counts, Black was found guilty and as such, was thrown out of the membership of the S.A.F. In November, 1935, with you as the sole dissenter in that decision. Is that right?

Fritz: Yes. That was November, '35, and in December, '35, only a few weeks later, I was in Portland at a forestry meeting and was approached and asked if I would sign a petition for a rehearing of the case by an independent committee. I replied that I favored the new petition, but could not sign it because I was a Council member. As I look back on it, I think it would have been quite proper for me to sign it because I was a dissenter of the original.

Maunder: Your position does look a little ambiguous from this distance, Emanuel, when it was your action that stopped Black in his attempted action to displace Pratt, and then later when you cast the one vote for him in the Society's Council.

Fritz: The Black case and my declining membership on the Board of Forestry are two different matters. Don't forget you've got seven stipulations here, and I felt that Chapman was extremely unfair in approaching the Council as he did.

Maunder: Were you on the Council then?

Fritz: Yes. It was about the time I was getting badly fed up with the way Chapman was running the S.A.F. As I told you, in Portland I was asked to sign a petition for Black's reinstatement and begged out of it because I was a member of the Council. But I told them I was sympathetic toward their purpose and I think the action should be reviewed.

In a letter to Colonel Greeley, I submitted to him a copy of my letter to Chapman in which I stated that I thought Black acted wrongfully in some of the things but that Black was trying to accomplish something good for California forestry in which Pratt was not cooperative. I think he deserves a slap on the wrist for his actions but that he should not be bilged from the Society. This was a two-or three-page letter. It must be in my files.

Fry: It may be in your file on Greeley.

Fritz: A committee was set up. Greeley was made chairman. Greeley's was the top name in the forestry profession. His committee voted on the Black case exactly the way I had put it in my earlier letter to Chapman regarding Black. I won't say that they were influenced by it, but that was an obvious situation to me and the way it should have been handled. They apparently saw it the same way.

Haven't we given the Black case sufficient time? Your line of questioning indicates a study of my files. I have not referred to them for thirty years, unless it was casual or to look up dates. This episode occurred so long ago that I had forgotten many details,

Fritz: although your questioning brought some back to mind. The important matter, in my opinion, was the way Chapman forced the Society into the case.

It was an interesting period. There was much opposition to federal regulation. Not a few foresters in the U.S.F.S. were cool to it, as shown in a Society-wide ballot several years later. Some of us were doing our best to promote private forestry. To the men in private employ should go much credit for stirring up among important private owners an acceptance of forestry. They had not only apathy on the part of the industry to contend with, but also the ridicule and disparagement from various federal foresters.

Maunder: So you feel that the real issue at stake in this Black case was really federal regulation rather than ethics? Is that what you're trying to say?

Fritz: At the root, it was the private enterprise system. Of course, Chapman made it an issue of personal ethics. Chapman's own ethics were not above reproach.

Maunder: Well, I don't see how you can make it a matter of regulation. That isn't really the point.

Fritz: Well, call it private enterprise.

Maunder: I know that, Emanuel. But what you're dealing with here is a specific case in which a man, in this case a defendant, Black, is accused of doing certain things against a State Forester, Pratt. Now, either he did these things or he didn't do these things. And a jury of his peers on which you sat as a member heard the evidence in this case, and found Black guilty on a number of counts, judging, "Is that right or wrong?"

Now this other matter may have been involved. There is no doubt that there was antagonism and rivalry between different groups at this same time. But that doesn't get away from the fact that the charges in this case had nothing to do with regulation at all. They had to do with Black specifically against Pratt.

Fritz: Yes. You are absolutely correct about that, but Chapman got into it because of Black trying to take Pratt's job away from him. And the Forest Service itself was trying to get Pratt out because he did not do its bidding. It was a helluva mess. The publicity could have been avoided if Chapman had not interfered. We have spent entirely too much time on it in this interview. However, I want to add something about Pratt.

Pratt was still state forester when, in 1943, I had a bill for a state forest system introduced by Senator Biggar, and during the time an interim legislative committee studied the California forest situation, I was that committee's advisor and arranged its field trips. Why should I, an outsider, undertake legislative

Fritz: matters? It should have been done by Pratt as state forester. I received practically no help from him. I could hardly get a civil answer from my questions to him. Yet I had saved him his job when I declined Board membership.

Pratt almost lost us that interim committee by making it appear that the bill was an underhanded scheme to separate him from his job. Assemblyman Gardiner Johnson, in defeating the bill, admitted to me the next day that he was influenced by Pratt's argument. When it was explained to him that the bill did not have, and could not have had, any connection with Pratt or his job, he manfully re-suscitated it and in a few hours, had it passed.

I can see that Pratt was probably miffed that someone else was doing, and succeeding at, what he should have handled himself. We had to go about it as though he did not exist. Rex Black had the same experience with him. I had nothing to gain for myself; in fact, it hurt my status at the University.

If Chapman had been smarter, he would have investigated the administration of state forestry. Because of his interference, we were saddled with a weak State Forester for another eight or ten years.

H. H. Chapman

Fry: Do you remember very much about the way S.A.F. Vice-President Dana handled these charges against Chapman?

Maunder: Let me explain this second investigation. A petition was brought to the Council from several members of the California section in December, 1935--December 12, 1935--and the Council agreed to grant a review of the Rex Black case. And the charges against Chapman in this case were signed by Swift Berry, R. A. Colgan, Clyde S. Martin, T. K. Oliver, and W. R. Schofield.

Fry: The importance of both of these cases, particularly in the Chapman case, is that it was handled on two levels. One was the level of the actual charges and whether or not the party was guilty or not of unethical conduct, and then the other level was working out the procedure with which the Society could deal with problems like this. So you might have some comments on the way these procedures finally were worked out.

Fritz: It certainly points out that the bylaws of the S.A.F. constitution were not fully clear about how these steps should be taken and that this probably had some influence on the amendment to the constitution later on.

Fry: Yes. You notice that the petitioners were never identified in the Black case, and in the Chapman case, they did identify the petitioners,

Fry: so apparently this is one change.

Fritz: (Reading notes from his files.) This isn't right. This says that Chapman "defends countercharge that the U.S.F.S. men wanted Pratt retained since lumbermen wanted him fired." That is not true. Forest Service man Kotok said he was "going to get him," i.e., he was going to get Pratt.

Maunder: Now here is a day telegram from the Forest Service, dated December 17, 1934, addressed to Governor Frank Merriam from S. B. Show, Regional Forester. "Statement at Saturday meeting of forestry board as reported in Sunday San Francisco Examiner that Forest Service believes Pratt unqualified is absolutely untrue. Federal relations with Pratt involving large C.C.C. program and cooperative protection work under Clarke-McNary law are entirely satisfactory." That would seem to refute . . .

Fritz: That's face-saving. I see another sentence here: "Chapman says that Berry intimated the opposite point of view." Well, I think Berry was right.

Fry: I guess the Forest Service men didn't have much love for Black either.

Fritz: No. Now that's what I wanted to come back to--the reason I sympathized with Berry and Colgan and Black and that particular group. My background is altogether different from that of most foresters. Mine was in the physical field and the Forest Service men were mostly in literary and biological fields. And the two were quite different. That is, they did make a man think a little differently, I think. That's the way it appears to me.

As for the investigation, I really don't remember that he was made the subject of an investigation. It's peculiar that I don't remember.

Fry: I think perhaps you went off the Council right at that time, because you and Chapman were having some correspondence about your resignation from the Council then, and Chapman was saying that he wished you wouldn't resign because it would look as if you were resigning in a huff over the Black case. That was about April of 1936.

Fritz: No, my resignation had nothing whatever to do with the Black case, although it just confirmed some of my fears over Chapman's management of the Society. There were two reasons for my resignation. One was Chapman's lavish expenditure of the Society's funds and his domination of the Society's Washington office. And the second was the fact that I was put at a disadvantage at the University by spending so much time on so-called outside activities, desirable as they were in the interest of forestry.

Fry: Well, there are some papers and letters that indicate that your

Fry: participation would be all right as far as Dean Mulford was concerned, and that it would actually be counted and included

Fritz: Perhaps.

Fry: And that later you found out that this wasn't the case somehow.

Fritz: The Dean of the College of Agriculture told me, "You take your chances when you take on a job like that." Yet, Vice-President Deutsch, of the University, one day gave a talk before a group of foresters and singled me out as having done a great deal and mentioned some of the things that I was doing. It struck me as rather odd because he was practically congratulating me for it, while in the School of Forestry, it wasn't accepted.

Fry: So you decided to resign?

Fritz: Membership on the S.A.F. Council, yes.

Fry: If I can ask you one more question about this year of 1936 before we leave it--there was a "Division of Private Foresters" in the process of forming in the S.A.F. You were the chairman of it, and you have an excellent file on it. I'd like to know more about this Division. I think you were the one who was actually doing all the work, the letter writing and so forth, to actually get this started. But apparently it didn't last very long.

Fritz: I don't think I initiated the section, but I was in sympathy with it and helped it along because I was interested in the development of private forestry. I thought it was a good idea. It was in accordance with the S.A.F. constitution.

Fry: Yes. They had another section called the education section.

Fritz: Yes. And they had a grazing section. In a way, I was responsible for that grazing section. I think it was the first subject section. It was, I believe, in the late 1920's or early 1930's that subject sections were authorized. One day at an S.A.F. convention, C. L. Forsling asked me what I thought of setting up a new society for grazing managers. I said, "You shouldn't do that. Why not set up a section?" We had not long before that authorized subject sections.

That's how the grazing section came about. It got so big eventually, and it was indeed such a specialty, that they did form a separate society, the Influential Society of American Range Management. They now have their own magazine.

Fry: So when this was first brought up, you thought that forming a section on private forestry was just another logical step. Do you remember how this first came about? This was in 1936, which appears to have been an extremely tumultuous year for S.A.F.

Fritz: More and more men were going into private employ and they wanted to be sure that their interests were actually preserved or protected by the Society. Also they wanted to be known as private foresters, a distinct kind of a job: first of all, a tremendous selling job, a job of selling not only to the board of directors of the company but to the employees in the woods.

Well, many of the woods employees were against forestry because it meant that they had to change some of their methods. Some of the old-timers didn't like change. They didn't like the idea of foresters on their woods operations, all of them youngsters and college graduates. In those days, there were mighty few college graduates in private forestry work.

And also we had the job of working up the technique of practical forest management. That was true all over the country, the southern pine region, the western Douglas fir, western pine and redwood regions. I was not an employee of a lumber company, but I was interested in getting foresters into the woods and mills of private companies. They now exceed in numbers, or nearly so, the foresters in public forestry.

H. H. Chapman was a strong supporter of having more foresters get into private employ. In the Thirties of course, there was not much room for a forester because none of the companies had money. But the larger companies did employ some. However, after the Second World War, they just flooded in without much help from the outside. The companies looked for woods foresters and for college-trained men interested in the mills, especially the seasoning of lumber.

Fry: Well, you were the chairman of this Division, and it was officially formed in January.

Fritz: Of what year?

Fry: 1936. The same year that everything else happened. You had the Zon petition and a lot of other things.

Fritz: It's a good thing all of them happened during the Depression when many things were much easier.

Fry: Why?

Fritz: For one thing, it was easier to travel around. The highways were almost blank.

Fry: There were sixteen members enrolled when it was formed.

Fritz: And I was the chairman?

Fry: And you were chairman.

Fritz: I don't remember that.

- Fry: I was wondering if the final fizzling out of this--I don't really know what happened because it was after you resigned from the Council. But I was wondering if you had trouble with the Holy Twelve, who were around at the same time.
- Fritz: I would say that they were related. I think they were related because there was that agitation for public regulation; and the private foresters of course thought in terms of private enterprise, and they were going to defend that system. And they wanted people to know that they were just as good foresters as those in public employ, but that the job was different. I don't think that section is alive now, but it served its purpose.
- Fry: No, it didn't live very long. It ended quite soon after.
- Fritz: The western private foresters have the Western Forestry and Conservation Association, a marvelous organization. That is really dirt forestry.
- Fry: And that's completely outside the S.A.F.
- Fritz: Yes, but many western foresters are members of both. Many of its members are not trained foresters but they have strong and active interest in it.
- Fry: There was a lot of question at this time about whether the formation of this section would increase the schism that seemed to be developing within S.A.F. as a whole, and whether the proposed division would be primarily a group for study and discussion or for economic and political purposes.
- Fritz: There was probably a suspicion on the part of the public foresters that this would be used as a sort of political section to work in favor of the private enterprise system and against public ownership. Of course, that would always come up. But the idea was, as I remember now, to let the other foresters know that the private forester has a place and has a different kind of a job, and that more foresters should get into private work.
- Fry: Well, I remember reading the minutes of your first meeting, and I wish you could have read these because it probably would have recalled to you the whole attitude, as it was portrayed at that time, of the private foresters. The first meeting seemed to be very fruitful.
- Fritz: Yes. I'm sorry I did not have a chance to read it.
- Fry: I think you were anxious that it not go off on a tangent just to harangue at public forestry but that it
- Fritz: It's pretty hard to keep that down. Being a member of the faculty, of course I would get calls from many groups and sometimes they were alumni men in private work; or complete outsiders would come

- Fritz: to the office and we'd chat, battle these things out. And sometimes a member of the Forest Service would come in to seek some information.
- Fry: Regarding private forestry.
- Fritz: Yes, and regarding something he might have heard. For example, when the tree farm program was started, about a year after its establishment in 1941, a Forest Service man came to my office and said: What about this tree farm system? Is that really on the up-and-up, or is it window dressing? He might not have used the same terms but that's what he meant. There was always that suspicion. If private industry wanted to do something, the Forest Service itself, its own people, would downgrade it when it should have helped.
- Fry: Well, did you find this suspicion existed about your private forestry section?
- Fritz: Not that I recall. We met only once a year, at the annual convention of the S.A.F. It was a no-nonsense section.
- Fry: The private section met only once a year?
- Fritz: Yes. There was correspondence, of course. The private foresters couldn't sustain that section. There were so many sections that some of the private foresters preferred to attend other section meetings, for example, on the new developments on fire control, the new things on silviculture, new things in economics, and statistics, and so on. And furthermore, private foresters had, in the West, the Western Forestry and Conservation Association, which was oriented toward private operations.
- Fry: On-the-ground techniques.
- Fritz: On the ground, yes. It's a very effective organization. And it's effective not only for their own selfish interests but for interests that affect the public. And to help them do their own jobs better. In the southeast, they have the Pulpwood Conservation Association.
- Maunder: Yes. Henry Malsberger is head of it.
- Fritz: That's right. And then another man at Bogalusa
- Maunder: Bogalusa? Yes, he was the first head of it. You're thinking of Frank Heyward.
- Fritz: Heyward, yes. I think he started it. So the southern pine private foresters had that to attend. And I would say it is as good for the east as Western Forestry is out here.
- Fry: Well, are you saying then that these organizations did exist for

Fry: private foresters outside the S.A.F.?

Fritz: Not as a substitute. These organizations and the S.A.F. supplement one another. Many foresters belong to one of these two and the S.A.F.

Fry: So then, what would have been the purpose of this one inside S.A.F.?

Fritz: We thought the members of the S.A.F. should have a chance to get acquainted with private industry. The Western Forestry and Conservation Association is more than sixty years old. The southern organization is younger. Southern pine forestry boomed so rapidly.

Fry: Could I just put in one more question here to wrap up this S.A.F. discussion, and then we can go into Chapman again. I have a note here that some people feared the schism might be increased by the formation of the Division of Private Foresters, and in particular, E. T. Allen and Philip Coolidge were mentioned. Do you remember them?

Fritz: Yes.

Fry: Well, what was their role there?

Fritz: Coolidge was a private consulting forester.

Fry: And he was helping you form this, I guess?

Fritz: He probably did. He lived in Maine and I lived at the other end of the world. Who was the other?

Fry: E. T. Allen.

Fritz: E. T. Allen. He was not a forestry-trained man but he knew it as well as any of us. He was the first State Forester of California. He really made the Western Forestry and Conservation Association what it was at that time. A very, very able man.

Fry: Do you remember if they were for the formation of this section?

Fritz: Oh, I'm sure they were. And if there's any suspicion about the motives of that section; it was on the part of public people and their cohorts. I think you've got enough on Chapman. Why not let him rest in peace?

Fry: But just as this private forestry section was forming, you felt that you had to resign from the Council because of the press of University duties. However, Chapman says it was such an awkward time for S.A.F. that he hated to see you resign then because the private forestry division was not yet set up, and he said that many would think you had quit in a huff over the way the Black case was being handled. (This was just before Chapman was charged with mishandling that case, and the report was not to be made to the Council

Fry: for two months.)

The state of S.A.F. at that time was that there was a discontented group led by Zon and Kellogg, and Chapman says that in April the private foresters had allowed their feelings to get the best of them at the Atlanta meeting, so he felt he needed you there. He was really trying to get you to postpone your resignation.

Fritz: I was not at the Atlanta meeting.

Maunder: Now about Chapman

Fritz: Well, way back in 1951, Herman Chapman wrote me the nastiest letter I ever have received. It was a typically Chapmanesque, vindictive letter, intemperate and libelous. He sent a copy of that letter to the Forest Service with permission to distribute it. This it did and thereby became a party to the libel.

I wrote a reply at once, but I was advised not to mail it and to let the matter die. I was also told that Chapman is irked more by being ignored than by being answered. Also, I felt that a new Chief Forester was coming on, and I didn't want to embarrass him. However, I did continue to toy with the idea of suing Chapman for libel. He has libeled others but to keep peace in the family, they never did anything about it.

Some time after the statutory time for filing a libel action had expired, I decided that I should answer him just for the record because he made statements which were absolutely untrue. Chapman was the kind of man who accepted the word of the last one who gives him some negative gossip on an individual. Whether it's true or not the purveyor didn't care, but he knew that Chapman loved it and would magnify it. That letter of 1951 was so widely distributed by the Forest Service that I got a number of comments about it from friends who wanted to know why I didn't fight it.

Maunder: Let me just follow this up a little bit. You did in 1951 address a ditto letter to all the regional foresters and directors in the Forest Service in which you said: "Gentlemen, Recently you received from Dana Parkinson reference I. Information Special Articles, I and E #676, copy of a letter written to me on August 20, 1951, by Professor H. H. Chapman severely criticizing me for statements I made in an article in Fortune a year earlier. Mr. Parkinson also attached to his covering letter a copy of a letter Chapman wrote to the editors of Fortune. I had originally intended to ignore Chapman's letter but because of its broadcast distribution I feel I must answer it.

"Out of about ninety received, Chapman's was the only letter to condemn the article or in any way criticize it.

"Therefore I want to know what there is in the article that is not true or what is biased or what may be considered a deliberate effort

Maunder: or attempt to discredit the Forest Service. General statements are not helpful. I need pinpointed specific reference. Accordingly I am enclosing two copies of the article, on one of which I should like to have your comments and marginal notes, interlineation or other form. Merely underlining would give me no idea of whether you agree or disagree. The other copy you may keep as a record of your comments."

Now Emanuel, in response to that letter, which you distributed to the regional foresters and administrators of the U.S. Forest Service, your notes here show that you received eleven replies out of twenty and these all follow pretty much the same tone in their content. And you note on the face of W. G. McGinness' answer (McGinness being then the director of the Rocky Mountain Forest and Range Experiment Station), dated November 30, 1951, "All too much alike not to have been prompted as to tone and content by Washington."

And indeed, all these eleven letters which are addressed to you from McGinness, Philip A. Briegleb, George M. Jemison, J. Robert Done, Edward P. Cliff, Charles A. Connaughton, C. J. Olson, W. F. Swingler, Clare Hendee, and C. R. Lind and P. D. Hanson all make essentially this comment: that they see no purpose in outlining to you their comments on the Fortune article in detail but indicate that they feel that Chapman's criticisms of the article are valid and the inaccuracies that he claims to be in your article are self-evident; that if you will come to visit the forest areas to which you refer in your article (that is, the U.S. Forest Service lands), you will see first hand the conditions on the ground which refute what you say in your article.

Now, what follow-up did you make? I would assume in the face of this, you might have been deterred from following up a course of action to sue for libel in 1951, would you not?

Fritz: No, I think my hand was strengthened. If you read all those letters carefully, you find that almost the same wording is used. I had sent a copy to Dana Parkinson also because he was a party to the libel and I wanted him to know what I was doing, which was a mistake. Apparently, he contacted the men whose names you mentioned as to the manner of reply.

Maunder: Did you ever seek legal advice in this matter?

Fritz: Yes.

Maunder: Who was your legal counsel?

Fritz: I talked it over with several friends in the legal profession.

Maunder: Well, who were they? What were their names?

Fritz: If I remembered it right now, I wouldn't want to divulge it.

Maunder: Why not?

Fritz: There was nothing formal about it.

Maunder: What did they advise you? Did they advise you not to

Fritz: They warned me about the fact that when a man sues for libel, the other side can make him look worse and worse and worse, so he isn't ahead even if he wins the full judgment. It just shows how the people who read the stuff originally are not the ones who are reading it now, so there are no corrections in their minds. When you're dealing with a man as vicious as Chapman--I'm using the term vicious not as my invention but he's been called that a number of times.

Maunder: Well, in any case, you decided at this time not to pursue a course of suing for libel. You did, however, seven years later on December 14, 1958, go back to Chapman with another long letter of four-plus, single-space, typewritten pages, criticizing him point by point and answering his letter that he had sent to you in 1951 after the publication of your article.

Fry: This is the one that you told us about, that you had decided not to mail and then, finally, you decided to.

Fritz: I would like to have ignored it, and I did ignore it for a long time; but at the same time, I thought I had an obligation there to bring this out into the open as to how Chapman tried to assassinate reputations. I wasn't the only one he tried that on. He tried it on some far more important men than I could ever be.

Maunder: Well, you throw some pretty hot shots at Chapman in this particular letter. You will recall that Chapman, in writing to you

Fritz: Before you go any farther, I wish you would inquire or even search for it yourself. See if there is a copy of that letter in Chapman's file in the Yale Forest School library.

Maunder: I'll do that when I go back. But Chapman, in his letter to you of August 20, 1951, criticizing your article, "Winning the Battle of Timber," says in the second paragraph: "Ever since we sat on top of San Francisco peak and you damned the Forest Service and Zon for double-crossing you on promotion, I feel that your attitude has not been what one would exactly describe free from bias. I have occasionally taken a crack at you for this but without much hope of eradicating it. I have however seen distinct signs of improvement with the passing years and which appears in some few spots in this article, but the overlay is still biased in my opinion."

Then seven years later in December, 1958, you make direct reply to

Maunder: that criticism by saying to him, under a paragraph labeled: I. Arizona, "You asked why bring up this ancient history? Certainly I was discouraged but it has no bearing on my action since, and when I decided after World War I to return to forestry, my year at Flagstaff could not have been better as to kind of work, the locality, and the man who was my immediate boss. You have forgotten that it was you who first called my attention to a letter received by the District Office at Washington while you were assistant District Forester at Albuquerque, to the effect that if Fritz does not complain too much he should not be given the promotion.

"As with me, you have stirred up the old feeling among others and you were not innocent of stirring up discord in the entire Southwest District. But now you claim credit for this or that after it was worked out. Even Pearson was dead only a short time when you claimed some credit that was his alone and none of yours."

This raises a lot of questions about the accusations that are hurled back and forth between you two fellows, and perhaps you can clarify a few of these things. Do you want to look at that paragraph in particular that you wrote to Chapman there?

Fritz: I have the whole file there; it's very complete--also an earlier letter that Chapman wrote me which was also on the basis of gossip. He accused me of trying to break down the S.A.F., which was farthest from my thoughts because I was one of those who was helping to build it up and strengthen it. He accused me of being the instigator of the formation of a new forestry society in the Northwest, where a considerable group in Seattle felt it was treated as a stepchild.

I was at that time a member of the Council and Chapman was president. The truth of the matter is that I actually recommended to them not to start a new society (I think they were going to call it the Institute of Professional Foresters) in competition with the S.A.F., but to set up a local section. We are authorized in our constitution to do that, and this dissident group in Seattle did not like to be tied in with the Columbia River Section. They thought they were not given due notice.

So I recommended to them that they set up a section within the Society. As you know, we have twenty or more such sections at the present time. They're an element of strength. (I was one of those who helped launch the idea of the present subject sections. Geographic sections were already provided for.)

Maunder: Who made up this dissident group in Seattle?

Fritz: I'd rather not say. It's all on record; it's in my correspondence and also in correspondence with Chapman. You can look it up there.

Maunder: Was it to be called a Seattle Section, or what?

- Fritz: The society they wanted to set up was to be called the Institute of Professional Foresters, as I recall it.
- Maunder: The concept was that this was not to be Independent of the Society of American Foresters?
- Fritz: Oh yes, it was to be independent of the S.A.F., and a competitor. They felt that the Society was not giving due attention to practicing foresters in private employ. They were doing a great job of promoting forestry right on the ground. I don't know that Colonel Greeley had a hand in it, but I think he would have supported those men--not in setting up a new society but certainly for setting up a new section. And they did set up such a section.
- Maunder: And Chapman accused you of being the instigator of this movement?
- Fritz: I must say that Chapman, when he finally got the truth of it, sent me a letter in which he said he was incorrectly informed. Now that's evidence that Chapman is easily influenced by gossip. It was another instance of gossip that sparked his letter of August 20, 1951, which pertained to the Fortune article. Chapman accused me of trying to break down the U.S. Forest Service when actually, I had defended the Forest Service whenever private lumbermen attacked it. They had plenty of good grounds but they also had some poor grounds for attacks.
- Chapman was a peculiar person. He breathed fire and brimstone. He loved a fight and was easily duped into one. I had been critical of the U.S.F.S. when it was so heavily charged with socialism. The Forest Service, in those days, could not stomach anyone who was critical of it. They were a law unto themselves and they were hell-bent to assert their power some day and didn't want to be interfered with. My sentiments were probably influenced by the high-handed top brass in San Francisco and Washington.
- Maunder: It's quite obvious that there's a good deal of politics within professional forestry, as there is within all other professions and their official groups.
- Fritz: Yes, and I don't think you'll ever be free of it. It's just human nature.
- Maunder: Do you think this situation has improved any in recent years? Is there greater harmony now than before in the ranks of foresters, or does the dissent still go on?
- Fritz: I think the dissent is much milder and on a more informed basis, but it's still there. Private foresters are multiplying. The younger foresters are not interested in the polemics of the Chapman and Pinchot era.

The Society has set up a new magazine known as Forest Science.

Fritz: This has very definitely, I think, weakened the Journal of Forestry, although it has strengthened the Society itself. The new magazine offers an outlet for the writings of the new breed of investigators and scientists. Then of course, the formation of the Forest Products Research Society had an enlightening influence on the Society of American Foresters for having ignored a very important branch of the American foresters' field.

Maunder: Has this Research Society in a sense provided the answer to the feeling of the dissident group up in Seattle of which you spoke earlier?

Fritz: The problem you are referring to was resolved by setting up the Seattle Section. There was no relation to the F.P.R.S. This Society came later and has done amazingly well. It is concerned only with wood and not the forests. I am a charter member but have never taken an active part in it, even though it was right in my teaching field--wood technology and products manufacturing. It is still young and vigorous.

Its success I think is due to the fact that wood is something one can touch and handle. One doesn't pontificate about it. The prime mover in setting up the F.P.R.S. was Bror Grondal, of the University of Washington, and one of the top men in wood technology.

I don't know why the average forester sticks to the trees and leaves consideration of wood to wood technologists, lumbermen, and wood products men. The great Forest Products Laboratory at Madison, Wisconsin, pioneered wood research on a comprehensive scale. Fortunately, some of our students develop a preference for work on wood while others prefer the forest. The work of the Madison Lab has been so helpful to the wood industries that a demand for trained men developed. One now finds a forest school graduate who majored in wood technology in many wood products factories, from lead pencils to pianos, furniture, and timber structures.

Coming back to your question: I think it was timely and very necessary to set up the F.P.R.S. The Journal of Forestry couldn't begin to handle the torrent of reports, and such, coming from the wood men.

IX THE DEPARTMENT OF THE INTERIOR

Maunder: Emanuel, you had a lot of interesting experiences in your life with the Society of American Foresters and at lunch you were telling me a few of these. I wish you'd just kind of review in particular when you were working for the Department of the Interior. When was this?

Fritz: That was in 1938, October 1 to December 31.

Maunder: Tell us a little bit about how you came to that job and what were some of the experiences you had in it.

Fritz: I knew nothing about it until I received the invitation. It came at a time when I was incapacitated because of a broken leg. I was in a cast and couldn't go out in the woods. At the time, I was getting things in shape for installing the selective cutting system in the redwoods.

At the Department of Interior in Washington, D.C., I was to assemble what information I could find in the files or in the library, on the early days of the Interior Department, facts that concerned forestry, timber management, give-away programs and so on.

Maunder: And who in the Interior Department called upon you to do this?

Fritz: Lee S. Muck. He was the Washington Chief of the Indian forests and the Oregon and California land grant properties that were repossessed by the government.

Maunder: I see, but you were going to do this history not just for the Indian Service but for the whole Department of the Interior?

Fritz: Right.

Maunder: So it must have had the blessing of the Secretary of the Interior, who was then Harold Ickes, right?

Fritz: It did. Ickes wanted it to be known that the Interior Department wasn't just a lot of chair-warmers doing nothing, that they had a conservation job also, and that while some of the history of the past may have been bad, it wasn't all bad. He directed Lee Muck to head up the study of what had happened in the past and what the O & C (Oregon and California controverted railroad lands) people, the Indian Service, and the other branches of the Interior Department that deal with timber, ~~were~~ were doing as to conservation.

Lee asked me if I would come to Washington for three months to help on that. He had already had John Illick of Syracuse do one chapter. I think the Illick chapter was on the O & C administration. I worked

- Fritz: three months and then was ready to go home. During that time, I was on the payroll as a consultant to the Secretary, Harold Ickes. All the time I was there, I never met the man. I never even saw him, but I heard a lot of tales that trickled down through the Department of the day's events in his office.
- Maunder: What for example do you recall of that?
- Fritz: Well, for instance, a lawn in front of his new Interior building was freshly seeded and the grass was coming up nicely. One day he saw a man walk diagonally across that newly seeded plot. He telephoned the Interior police department downstairs in the basement and ordered them to arrest the man. Small stuff.
- Maunder: Well, how was your appointment to a job in Interior looked upon by some of your cohorts out here who were highly anti-Interior in their orientation? After all, the Forest Service was having a knockdown-dragout battle with the Interior Department over being transferred from the Department of Agriculture to the Department of Interior, weren't they?
- Fritz: The reorganization--F.D.R. carried it on, or tried to. There was no transfer.
- Maunder: And Secretaries Ickes and Wallace (of Agriculture) had quite a battle on that.
- Fritz: Yes, I believe they did.
- Maunder: There were still rather some sore heads for years after that, and I wonder how was your working for Interior looked upon by your colleagues in forestry out here.
- Fritz: Well, I personally didn't like the idea of working for Interior because I knew it would classify me as having turned face, which I didn't. I could talk freely because I figured, hell, they could fire me and it wouldn't make any difference.

I had it from several good friends in the Forest Service who asked, "How are you getting along with reorganization?" Questions like that. They assumed we were working on a plan of reorganization, but it had absolutely nothing to do with my job. And that wasn't the only case.

While I was there, some few papers were shown me by Lee Muck to look over for comments. One was a manuscript of a proposed pamphlet written by a professional writer. I can't think of his name now, and I don't even remember the title of the publication when it was finally printed. But it was a damnation of the Forest Service and a glorification of the Interior Department. I spent several days on it. I wrote comments which, in my longhand, covered more than eight pages. The manuscript was full of errors and poor generalizations. I remember on the first page there was a statement

Fritz: in which the word hate was used. I think it was "Inordinate hate" between the U.S.F.S. and N.P.S. I didn't like it because there was no hate among the foresters of the two departments down in the ranks. They got along in a friendly way. If there was any, it was at the top. However, there was plenty of disagreement and distrust.

I don't know what Licks' personal plan was, or Roosevelt's, but I felt that there should be a brand new department, one to be called the Department of Natural Resources, or some similar title, and that the Forest Service would be the principal bureau, the Oregon and California Land Grant Administration would be merged with the U.S.F.S., and the Park Service would keep its name. There would be a combination of those units that belonged together and needed the same kind of management.

The bookkeeping, of course, would be more complicated because of the different setups as to in-lieu payments to the counties. Anyone who did not support a one hundred percent retention of the Forest Service in the Agriculture Department was an enemy and naturally, I was treated as such. One has to expect that.

S.A.F. Revolt: Chapman vs. Interior Foresters

Fritz: It happened about that time that things got pretty warm, especially in the S.A.F. offices and apparently also in the Forest Service offices. H. H. Chapman, who was generally looked upon as the hatchet man for the Forest Service, started a new attack on the Interior Department. This time, he ridiculed the Department's foresters and accused them of disloyalty to the forestry profession, such accusations, as I recall them, that they are "gutless," and "won't stand up for their personnel," and so on.

The letter (I think there's a copy in my Interior file) in some way got to the Interior Department. Lee Muck came into my office and threw it on my desk. He was probably still quite angry when he said, "Read that." As I read it, I was astounded at the viciousness of Chapman's attack. So I thought to myself that it's just about time that Chapman be brought to book.

I don't know whether you ever met Chapman, but he was suspicious of everyone else. He loved to fight and it was very easy to plant a rumor in his mind where it would grow. I think that whatever it was that caused him to write such a letter, it was started off as a rumor.

Anyway, I asked Lee Muck if he's going to take it lying down. And he said something like, "Well, what can I do." I said, "I think there's one thing you can do. Call Chapman's bluff. You can threaten to resign from the S.A.F., not you alone, but everybody in your local office and out in the field who is a member of the

Fritz: S.A.F."

He finally suggested that I write a petition. I wrote something like this: that we foresters in the Interior Department had the same kind of training as the foresters in the Forest Service; some of us came from the same schools, had the same curriculum, same professors. We had the same principles, we had the same ideas of what forestry should be in the field, and we were getting awfully tired of being criticized at every turn because the top men hate each other.

If you found a file on this in my file cases, you can read the exact wording. That petition was mailed out at Lee's expense and my expense to all the men in the field who had a forestry training and who were members of the S.A.F. Out of the seventy-five or eighty such men, about sixty-five or seventy returned their petitions signed with some additional comments.

Mauder: Was this reported in the Journal?

Fritz: I don't recall. It should have been if it wasn't.

Mauder: Do you have a copy of that in your files? Well, what was the upshot of this petition?

Fritz: Consult my Interior file. The men in the field were pretty angry over the charges and signed the petition very promptly, whereupon Lee Muck submitted it to the Society. Then things began to pop. Chapman very suddenly got very, very quiet; he was quite disturbed. The S.A.F. couldn't afford in the Thirties to lose sixty-five or seventy members, even though at that time I think the fee was only five dollars a head. And it would smell bad outside.

It was getting late and the Society was to have its convention in Columbus, Ohio, Christmas week. My tour of duty in the Interior Department would be over then. I discovered that I was due, I think, a week's vacation for the three months I spent in Washington, which I never had expected because I was there only for three months. So then I asked Lee Muck if he thought it would do any good if I should stop in Columbus on my way home. (I probably would have done it anyway because I always attended meetings of S.A.F. when I possibly could.) He agreed and added he would try to get an N.P.S. forester there to help. (I'm speaking to you only from memory. Some of the details may not be quite right but in general I think it is the correct history of the whole thing.)

I told Lee that I couldn't represent the Interior Department because I was not a regular payroll member. He said, "All right. We'll have somebody represent us." He got a National Park Service man, a very good man, to represent the Interior Department foresters. There were a couple of other Interior Department men at the convention.

Fritz: In Columbus, Korstian, the S.A.F. president, came to me and said, "Fritz, the Council is going to meet at a certain hour to discuss this Chapman letter and the Interior foresters' petition. I'd like to have you come up because you were there in the office, and you must know something about it."

They were aware that I must know something about it by that time, but not that I'd initiated it. I was going on the premise that when you have a good case, you don't have to make a lot of excuses for it and argue a lot.

At the Council meeting, they really took the matter seriously. The president opened the discussion. He asked if I wouldn't say something about it as far as I knew it. I tried to tell the Council as briefly as I could that the Interior men are good men and they're just as good men as there are in the Forest Service. They have the same kind of training, the same kind of principles, and the same kind of attitude toward forestry. They're not being treated accordingly, and I know how they feel about it. They really mean to resign from the Society if something isn't done to correct it.

Then the N.P.S. man was asked to speak. I had never met him before but I knew about him. The Council members then agreed something had to be done. The president thereupon wrote a letter to Lee Muck to pass the word out to those members who were threatening to resign. I hope my recollection is correct on this. It has been a long time ago.

Maunder: You were not then a member of the Council?

Fritz: No.

Pinchot's Tour in the West During the Transfer Controversy

Fry: Speaking of the transfer controversy, in which Harold Ickes wanted to create a federal department of conservation and transfer the Forest Service to it, you mentioned to me--when the tape recorder was turned off--that you managed to join a tour that Gifford Pinchot was making in the West, as a part of the transfer controversy. How did you get wind of the fact that Pinchot was coming out here and get in on the tour?

Fritz: Yes, I did join such a tour in Humboldt County. A Forest Service party was escorting Gifford Pinchot through the redwoods. I knew that G. P. was on a national tour, escorted by U.S.F.S. men, but did not know his California schedule. I learned about it while I was in Eureka as advisor to the redwood industry to find out how redwood logging could be improved as to preserving a residual stand. That must have been in the summer of 1934. I always suspected such tours. They generally foretold a new blast of publicity favoring

Fritz: federal regulation, through the U.S.F.S., of private logging methods, and opposing reorganization of federal land management bureaus.

The personnel of the Forest Service and several Interior Department bureaus had been ordered to refrain from taking sides in public. But there are ways of circumventing such an order. President Roosevelt was intent on joining in some way the national forest, park, and some other bureaus in one new department. Secretary Harold Ickes wanted the national forests transferred to his Interior Department. The U.S.F.S. of course opposed it and needed outside help, inasmuch as its voice was sealed by the presidential order. At the same time, the U.S.F.S. was battling for legislation giving it power to regulate private logging.

In some way, Gifford Pinchot was inveigled to carry the burden of enlisting public support for regulation and in opposition to the transfer of national forests to Interior.

I had interested myself in both matters. I favored the establishment of an entirely new department, to be known as the Department of Natural Resources, and to be the management agency for the protection and business aspects of public lands, grazing, logging, recreation and wildlife. I wrote two articles for the Journal of Forestry on reorganization.* Incidentally, the 1946 article won me a prize of \$100 for the best article of the year in the Journal of Forestry. It also won me the accusation of trying to wreck the U.S.F.S.

I believe reorganization must come some day. It is not logical for two separate departments to be engaged in forest management on adjoining lands. Furthermore, the sale of stumpage is a business undertaking and should be handled on a strictly business basis. The new department, I felt, should be a business management agency rather than a service agency as is the Department of Agriculture in large part.

It is unfortunate that the two departments should be fighting one another. I think the U.S.F.S. muffed a grand opportunity to be in a new department. Its strong unity and high standards could have led and made a model new federal department. As long as the same activities are spread over two departments, there will continue to be jealousies and strife. The Interior Department, after its forest, grazing and wildlife bureaus were transferred to the new Department of Natural Resources, would continue in charge of the other bureaus not concerned with replaceable natural resources.

*"A Plea For a Fair Appraisal of Federal Forestry Reorganization," Vol. 36, pp. 271-275, March, 1938; and later, "A Proposal For Reorganizing and Realigning Federal Forest, Park and Game Lands," Vol. 44, pp. 278-281, April, 1946.

Fritz: Well, returning to your question: Having heard of the U.S.F.S.-escorted Pinchot tour, I decided to try to join it, but no outsiders were wanted. However, it was a public party, complete with its own press agent, and it is hard to keep out anyone with legitimate business in a locality. I met the party in or near Crescent City on its way south from Portland.

In the past, there was a pattern to these U.S.F.S.-escorted tours. This present tour followed the pattern. Pinchot was given the usual treatment--a schedule of stops wherever a logging job looked bad so one might deduce the need for federal (U.S.F.S.) regulation of private lumbering. No attention was paid to natural reforestation.

It happened that at one stop a slackline yarding job was viewed. Being fairly fresh, it did indeed look bad, very bad. All logging jobs look bad for a few years. At this spot, the manager had ordered his logging boss to carry out some suggestions I had made by which a number of seed trees would be left in spite of the slackline system. The foreman did a good job. But to Pinchot it was explained that this was an example of the redwood industry having no intention of improving its logging methods or abiding by Article X. It was very unfair and my effort to interrupt with an explanation of the experiment (over one hundred acres) was cut short. The ubiquitous public relations officers saw to it at the end of the day that the local press got a good story on the Pinchot visit.

It was quite clear that public ownership, or public regulation, or both, and opposition to reorganization were paramount, the former being the ostensible purpose of the tour and the latter, the main reason. The method of logging they viewed and the natural regeneration that followed without aid was secondary to giving a bureau more power.

Fry: Were those who opposed reorganization in the Forest Service?

Fritz: Most of them were. But there were many outside the Service, too. Even some lumbermen opposed reorganization, believing it to be good to have two federal agencies competing with one another.

The U.S.F.S. personnel was quieted by "presidential" order, but it had followers who could be depended on to "carry a spear." One in particular was H. H. Chapman, of Yale University. He was the hatchet man for the U.S.F.S. He would go into action on the slightest suggestion. Even a rumor would take root quickly and be proliferated into an issue.

Fry: Was Chapman close to Assistant Chief Earle Clapp, or Chief F. A. Silcox, or someone like that who headed up the fight for the Forest Service?

Fritz: Chapman was close to each one as long as he held the same views as Chapman. He could support a man vigorously on an issue one day and attack him viciously the next day on another issue.

Fritz: Clapp was not popular as Acting Chief of the U.S.F.S. after Silcox' death. Clapp might not be a socialist in the pattern of Norman Thomas, the perennial candidate for president, but he believed all forest lands should be owned by the federal government, or else that the U.S.F.S. should have power to dictate matters of policy and methods for private lands. He tried at one time (1940) to dictate policy to the forestry school faculties. Chapman attacked him on this.

Clapp was also suspected in rewriting parts of the Copeland Report, to make it agree with his own views. Several of the chapter authors were indignant over this, but could not publicly attack their chief.

Fry: I gather someone must have complained about this to you.

Fritz: I often learned about some things from others who felt that, being a professor, I had more liberty and privilege than they had. But sometimes someone tried to make me the goat. That was easily detected.

X THE CALIFORNIA FOREST PRACTICE ACT

Legislation Attempts For Acquisition of Cutover Lands (1943)

Fry: If you are ready to discuss the California Forest Practice Act, you can start by telling how you first got interested in legislation for a forest practice act.

Fritz: Actually, it started with an idea about state forests. In November of 1942, I attended a meeting of the State Board of Forestry held on the campus in Giannini Hall. I was there only as an observer and because it was so handy, being right in the same building in which I had my office. I attended more or less out of curiosity. But I was thoroughly disgusted with the way the Board ran its meeting, or I should say, the way the State Board, the State Division of Forestry Office and the Department of Natural Resources operated.

The Deputy Director of Natural Resources was present, to talk to the Forestry Board on what had been accomplished and what was being planned. This man--I think it was Mr. Marsh--upon being questioned on a certain topic, replied, "We're going to do this and do that." I don't recall the subject or its nature or his exact words.

One of the Board members, Rod MacArthur, a rancher from Modoc County and a direct and very forthright sort of a man, asked the Deputy Director a question something like this: "Suppose the Board doesn't approve of what you're going to do, what will you do then?" He said, "We'll do it anyway."

Rod MacArthur bristled at that and threatened to resign. It was plain that the Board was being side-tracked.

So I decided that I would take an interest hereafter in the State Board of Forestry and in the State Forester's office. Theretofore, I had had only a casual interest in it because my university work was not directly in forestry but in the engineering phase of the manufacture of lumber and lumber products, plus wood technology. Nevertheless, I had a deep interest in forestry and its profession.

At the same meeting, as I recall it, there was a discussion of the cutover lands not being as productive as they should be, and I conceived the idea that we ought to have a system of state forests for the purpose of trying out reforestation methods and restoring productivity on the several million acres of non-reproducing cutover lands.

Fry: After this discussion then of cutover lands, you got the idea of

Fry: the state buying up cutover lands for state forests?

Fritz: Yes. To bring it to a head, I decided that the thing to do was to offer a bill providing for the acquisition of cutover lands and the reforestation of these lands by the state.

At that time, some of my friends, when they heard about it, thought it was queer that I, as a supporter of the private enterprise system, would even initiate or support anything like state ownership of land for the practice of forestry. It was indeed contrary to my philosophy of government.

But my reason was this: The owners had little or no interest in these lands for timber growing. They felt that when they were cut over they were through with them, but that they would hold onto them as long as they were in business. They felt, and I think they were honest about it, that one couldn't keep the lumber industry alive perpetually by the practice of forestry.

In the case of redwood, they felt that--and they said it many times--it takes one thousand years to mature a redwood. At that time, there still were very few lumbermen who believed it possible to handle forest trees as a crop. We foresters were not very smart salesmen of our product--forestry. We antagonized forest land owners with ill-advised public utterances.

Also, they were, nearly all of them, heavily in debt to mortgage and bond holders. They had to liquidate their forests to raise money to meet their debts. On the other hand, they could at least have investigated more thoroughly the possibility of operating on a sustained yield basis. As it was, they knew really very little about forests except how many board feet of old growth each acre would yield.

In a very few years, however, there came complete reversal. The World War II years pulled them out of debt and doubtless contributed to the change. As you know, today they are committed to the practice of forestry, if it is only the planting and reseeding of cutover lands and letting nature take her course, or leaving seed trees. Some have, indeed, gone so far as to hire foresters. At present, they have many forestry school graduates on their payrolls.

I wrote the bill soon after that Board meeting, and in December, 1942, I inquired among friends as to which one of the senators or assemblymen I could interest to introduce the bill. The consensus was that Senator George Biggar of Covelo would be the man. Biggar had the reputation of being the "fall guy," you might say, for bills that the others didn't want to introduce.

Fry: I wonder why that was?

Fritz: Purely political. Forestry was not as popular as it might have

Fritz: been. A legislator shuns bills that might bring him opposition.

Fry: So you went to see George Biggar. And we might point out that he was from a forest county, wasn't he? Mendocino?

Fritz: Mendocino County, yes. He was born in the redwoods, although his home later was in Covelo out in Round Valley, where he had a considerable pear orchard.

Fry: What did he say?

Fritz: I talked it over with him and showed him my bill. He read it and he said, "That's fine. I'll be very glad to introduce it and I'll get some of the others to join me as co-sponsors."

He suggested that I show the bill to the legislative counsel. I can't think of his name but I found him to be a very fine man. He read the bill at once, was very complimentary about its purpose and style, and said, "It can be introduced just as it is." That gave me quite a lift.

Fry: Had you managed to get the legal terminology in there properly?

Fritz: I had read a lot of bills for style and form.

Fry: I see. [Laughter]

Fritz: Senator Biggar introduced the bill when the Legislature convened in January, '43. He had gotten Senators Edward Fletcher and Oliver Carter as co-sponsors. And then George Biggar got several assemblymen, among them Jacob M. Leonard of Hollister and Paul Denny of Shasta County, to introduce a companion bill. So at least we had the bill in the hopper and designated S.B. 509, and became Chap. 1086, Statutes of 1943.

Fry: Do you remember any of the men in the Assembly who handled it?

Fritz: I'm not sure of all, but there were Paul Denny and Jake Leonard who showed much interest. It went before the usual committees and was treated very nicely. They made some suggestions for changes, and some changes I had suggested. It was wartime and my classes were very small. I was permitted to go to Sacramento whenever they requested me to be on hand.

While it was under discussion, I could see where there were some failings in the bill, some omissions. When the lobbyists learned who was behind the bill, they would come to me and say, "How about this? Why don't you put that in?" For example, the hunters, the sportsmen, they wanted to be sure that the state forests would not be closed to hunting. That was not mentioned in the bill, but it was historical that state forests and federal forests were always open to hunting and fishing. So it didn't hurt to put it in.

Fritz: Then someone else had suggested that we'd never get this past the county supervisors because it would mean the withdrawal of tax-paying land. But I had been considering that and wondering how to handle it, and then decided that this was a good time to introduce a provision which I long felt should have been in all federal legislation when the U.S. or state took over land. The provision would make the state forests acquired under this act pay taxes exactly the same and at the same rates as private owners. The actual wording was ". . . an amount equivalent to taxes levied by the county on similar lands similarly situated.

So that at once wiped out a lot of opposition, as did the hunting paragraph. The act set a precedent applicable to lands taken over by the U.S. for forestry purposes.

Fry: I assume that this was the Association of County Supervisors lobbyist who had talked to you about this.

Fritz: Yes. Maybe I got the phraseology from him.

Fry: They're a very strong lobby, one of the strongest in Sacramento.

Fritz: I think the organization acts as a good brake, at other times, as a stimulus. The county supervisors are closest to the people.

There was one other source of possible opposition--that of the lumber industry. But I felt personally that they weren't going to oppose it.

Fry: Would this have been the California Forest Protective Association?

Fritz: It would have been through that Association. I had frequent conversations with its manager, who served also as lobbyist.

Fry: And the California Redwoods Association? Was the C.F.P.A. lobbyist William R. Schofield?

Fritz: No, Schofield came in later that year. It was Rex Black. The C.R.A. people learned about it through the C.F.P.A. Of course, having had a lot of contact with the lumber people because of my sawmill teaching and my private consulting work, I felt I knew exactly how they felt. So I decided there was no likelihood of difficulty from them.

And furthermore, I had consulted each one as to what his company's plans were as to the use or disposition of the cutovers. With a few exceptions, they stated they would sell to the State. (Later I made this into a supplement to the report to the Legislature, The Forest Situation in California, printed in 1945.)

Unquestionably, Rex Black would report to his own people in C.F.P.A. which met regularly in San Francisco as to what's going on in

Fritz: Sacramento. I was never told and I never asked what their discussions were about, but I gathered that they would not oppose it. That meant there would be no opposition.

When it came to the voting in the Legislature, there were many questions as to the real need and the cost, and rightly so. Frankly, I personally never expected them to pass the bill the first year of its introduction. And if they had passed it, I would have thought that they had acted too precipitately, that they should study it because it would eventually amount to a very sizable sum of money.

Fry: Did your bill carry an appropriation for the acquisition of the land?

Fritz: Yes, for at least \$1,000,000. The bill covered about three or four pages and stated the purpose, how it would be executed and what would be done with the lands once they were acquired. The purpose was to set up some research on reforestation and then restore the lands to full production.

There was something in the back of my head which doesn't appear in the bill, but which I often talked about. It was my thought that once the State has these lands reforested and a new crop underway, that they would then be resold to private ownership with suitable safeguards, that they would be handled on the basis of continuity of production.

Fry: But you didn't write this into the bill?

Fritz: No. The bill wouldn't have gotten to first base if I had done that. I learned early that if you want to introduce a bill, first of all decide where your opposition will be, that is, after you have decided what you want accomplished; and then face that opposition at once and directly, face to face, rather than through the newspapers or through plastering the public with a lot of inflammatory propaganda. That makes the opposition mad.

I talked with a number of people I just happened to be acquainted with and who I thought might oppose the bill--representatives, assemblymen, and senators--because they represented all the lumber industry, both pine region and redwood region. (At that time, I wasn't particularly interested in redwood alone as a specialty.)

Fry: Did you talk with the California Redwood Association on this?

Fritz: As a group, no. Only through Rex Black of C.F.P.A., who helped as much as he possibly could.

I said earlier that I didn't expect them to pass this bill, but I expected them to show an interest in it so that the next time it would be introduced, it would have clear sailing. I did expect that one

Fritz: paragraph would be preserved, a paragraph which provided for setting up an interim legislative committee for the study of the forest situation in California. That carried originally an appropriation of, I think, \$50,000 for making this 2-year study. The Legislature met only every other year in those days. When finally passed, the figure was reduced to \$15,000.

I could see that they were wiping out one paragraph after another until they got down to this one paragraph and that paragraph was actually preserved. But I learned something else from that as to how the Legislature operates. They had already stopped the clock--they were running past their regular time--and on a Friday morning I was up there and everything looked all right to me.

I think it was that same evening I saw Rex Black in San Francisco at a meeting of private foresters, interested in cutting practices. And I asked Rex, "What do you think of the chance of passage of the paragraph that provides for a sum of money for the interim study?" And he said, "It's sure, it's definite, it'll be passed." He had come down from Sacramento feeling that everything that he was doing up there was all hunky dory.

It was just like being out in the woods--you can never tell if or when a limb will fall on you, or the cliché about the slip between the cup and the lip.

Early Saturday morning I returned to Sacramento by train, and my first port of call was the Director of Natural Resources, Mr. Bill Moore, who was an interim man at the time, merely acting. As I entered his office, he laughed and said, "You're coming at a bad time. Your bill was killed last night."

I was overcome by surprise because I was sure that they would pass it. They had already whittled it down to \$25,000 and there was also a move to whittle it down still farther to \$15,000. So I asked who the Assemblyman was who killed it. (The Senate had already passed it; it was killed in the Assembly.) And he said it was Gardiner Johnson of my own district right here in Berkeley.

I never talked very much with him when I was up there talking with legislators, but I thought he would be on my side. But he was the one who started the drive to kill the whole thing. So I called on him and he was very forthright and honest about it. He said, "Yes, I did it. I was assured by the State Forester that this was another scheme to get him out of his job."

Fry: This was M. B. Pratt?

Fritz: Pratt. Then I worked on Johnson. I said, "That's impossible. Pratt and I are good friends, even though I don't think he's the man for this job. He has not grown with it."

We talked it over quite a bit and he said, "You come back at two,

Fritz: and I'll see that you can talk to other Assemblymen who are interested in this bill."

One was Mike Burns of Eureka, and Mike was all for it anyway. Mike was a rough old Irishman but he made a very good legislator. So we talked and they decided that they didn't understand the background. I had no thought of any action on my part to get the State Forester out. I thought that he was a weak man for the job as it grew larger. But he was the State Forester, and we had to deal with him, although he gave me no support at all during all this work that I was doing.

So at 2 PM, the Assembly reconvened, and the first man to get up was Gardiner Johnson, who asked that the vote to kill this bill of yesterday or the day before be expunged from the record and that the bill be reconsidered. They did that, and the mechanics of bringing a bill back began to rewind, but it was cumbersome. If you've changed a single word, it has to go back to the printer, then he prints it with a corrected word, then it has to go back to the floor and through the whole routine again.

It was getting late in the day and everything was going smoothly-- it was always aye, aye, aye, in the voting. They were to adjourn finally at 7 PM, and the last few hours, of course, things go very fast. So, a few hours before final adjournment for 1943, they passed that bill, S.B. 509.

Fry: Had it already gone back again to the printer?

Fritz: It had already gone back and forth several times, and then of course it's cumbersome and it takes a little time, but they work fast in the printer's office, so it wasn't more than an hour each time. The bill had been so often amended that only the paragraph providing for an interim study survived.

That meant that we would have an interim committee made up of Senators and Assemblymen to go out and study the forest situation directly and report back to the Legislature in 1945. There was nobody in the Legislature who knew anything at all about forestry or had any idea that lumbering in California could be made a permanent business. But some had real interest. The Committee included Senators George Biggar and Oliver Carter and Assemblymen Jacob M. Leonard and Paul Denny. The chairman of the State Board of Forestry was made a member also, William S. Rosecrans.

Fry: And the Director of Natural Resources, General Warren T. Hannum?

Fritz: He was an ex officio member, because of his job, but was regarded as a member. He made some wise suggestions.

Fry: I have a note here that Carter and Denny were both from forest districts.

Fritz: Yes. They were both good men; Leonard was rather weak. He appeared to be under the thumb of political bosses in his county.

Fry: What county was he?

Fritz: He was from Hollister, San Benito County. The others were independent men; Senator Biggar had independent ideas but he could easily be changed. I soon learned that I had to keep my eye on him to see who was talking to him, because the last man to talk with him was the one who got his ear and whose statements sank in.

Fry: I have a note here that Jacob Leonard of Hollister wanted a cut-over land acquisition program of one million dollars.

Fritz: Yes, that was during the early discussions.

Fry: That was during the discussions of this bill at this session you were talking about. So at any rate, he was a supporter of your bill.

Fritz: Yes. There was no reason why he should be against it. He saw a chance of selling the state a property that he was interested in.

Fry: That he was interested in?

Fritz: Through a realtor in Santa Cruz. The Committee had to have a man to head up the study, that is, a technical man. He would serve as a secretary or as a consultant. I learned that Jake Leonard had the realtor from Santa Cruz County in mind. There were some lands down there that he, the realtor, wanted to peddle. They were lands of the kind that foresters would consider last because they were such poor lands.

Senator Biggar, the Committee chairman, had already asked me if I would serve as the consultant of the Committee and to direct it. I said, "No, I can't do that. It will take too much time from the University." Also, I felt I could do more by being on the outside.

But when I learned that Leonard wanted his own realtor friend in there as secretary or consultant, I could see at once that the purpose of the bill would be badly wounded. So I promptly drove out to Covelo and called on George Biggar and told him that I had changed my mind about being consultant to this Committee. I could arrange my time in such a way that neither the University would suffer nor the Committee. I had already gotten approval from the dean to do the job.

I told him that I not only would let the Committee reconsider me, but I now actually wanted the job, so that the purpose of the bill would always be kept uppermost through all the discussions. He bought that, and he put it over with the Committee; and I was made the forestry consultant of the Committee. From that point on, I

Fritz: arranged field trips for the Committee, wrote the chairman's speeches, kept notes, wrote reports, handled the correspondence, and so forth.

Fry: This would have been in the spring of '43, is that right?

Fritz: Yes. Let's back up a little. There was a delay. The bill was not signed until June 8, 1943. Then it was some more months before they appointed the Committee I mentioned earlier and organized it. And it was during that organizational period that I said that I wanted to be the consultant.

Consultant to the Legislative Forestry Study Committee (The Biggar Committee)

Fritz: It was not until 1944 that we got underway. We had a number of indoor meetings; and we had I think as many as nine field trips, beginning in April until November, 1944, with a few sessions with Biggar in February and March.

Fry: Yes, I believe there were nine or ten. That was a lot of field trips. Why were there so many?

Fritz: The conditions vary a great deal, from pine to redwood and to Douglas fir. There also was talk about watershed protection and providing for recreation. They always sound good in the newspapers. As a matter of fact, I still maintain (and write about it) that if you practice good forestry, you can't do more for watershed protection and recreation than just that.

Fry: In other words, you felt that these two issues were covered by the definition of good forestry.

Fritz: Yes. Good forestry takes into consideration recreation and soil erosion and things of that kind, including provisions for camp site facilities.

Fry: What did you do in the indoor meetings?

Fritz: We held hearings. We had a meeting with the pine industry; we had another meeting for the redwood industry. These meetings were held, not in Sacramento or San Francisco, but out in the resource centers, like Eureka or Fresno or Oroville. We would have a field trip and an evening indoor hearing for local chambers of commerce, interested citizens and public officials.

Then there was the political aspect. So we felt we had to meet also down in southern California. They have very few forests, but they have a real watershed and fire problem. So we met in Santa Barbara and also San Diego. Sometimes these field trips and the inside meetings would be on consecutive days.

Fritz: Altogether we held seventeen public hearings and the Committee itself made four additional field trips. These trips were so organized that the Committee would see good practices and bad practices, and they would see especially the cutover lands that were logged many years ago, which were not now productive. We had to have a lot of meetings in Sacramento, of course, too, as we'd get more and more data and were preparing the report for publication in 1945. (There had been a big change in logging. In the pine region, the change came in the early 1920's. In the redwoods, it came in the middle 1930's.)

The Committee enjoyed these field trips, not only because they liked to get out in the open in different places, but because they learned more about the state's problems. We had good support from federal and state forestry offices and chambers of commerce. All helped to make hotel and meal reservations. For a wartime period, the trips went remarkably well, smoothly and pleasantly.

Fry: And trip logistics were part of your job?

Fritz: I had to make it my job. Our "secretary," stationed in Sacramento and a political employee, was of very little help until the report was ready for typing. The other typing was done by the Forestry School girls. All the trip arrangements were made by me, except the southern California tours which they felt were necessary for political reasons.

Fry: In other words, you were free to decide on where they went and what forests they saw.

Fritz: They could have checked me any time they wanted. But they were satisfied that what I was doing would be proper to carry out the purposes of the bill.

Fry: What was your criterion for setting these up and selecting various sites for observation by the Committee?

Fritz: I had seen much of California away from the public roads, so knew what was going on in the woods. The bill provided for the acquisition of cutover lands and their reforestation. We saw lands that were not reforesting because of past fires or the method of logging that was practiced at that time.

I took them also to places like Big River in Mendocino County where there was a magnificent stand of second growth. That second growth was there because of good fire protection and the method of logging practiced in the early days. We also visited the fine second-growth pine areas in the Mother Lode country.

Fry: This was redwood?

Fritz: Redwood on Big River, and pine elsewhere. Many seed trees had

- Fritz: been left, and the area logged by each company each year was small. This permitted excellent natural reforestation. The same was true in the pine region areas logged in the early days.
- Fry: Your main purpose then was to give them an indication of what kinds of logging were actually going on, and then, in the case of the ones like Big River, what could be done with proper forestry techniques.
- Fritz: Not exactly. The main purpose was to show that there was a forest situation that needed recognition and action. We also had the human relations problem--education of local officials and business people. We held one meeting for county supervisors of the redwood and pine regions. Most of them had only the most meager concept of the possibilities of forest management for permanence.
- Fry: The county supervisors?
- Fritz: Yes. And I'll never forget what a rancher in Mendocino County said: "You're all wrong; cutover land should be converted into grazing land."
- Fry: You mean that this was more or less the consensus of all the supervisors in the redwood and pine counties?
- Fritz: Not only most of the supervisors but the general public. I had the privilege of asking questions at these hearings.
- Fry: Before we go on, what was the reaction of your Committee to the suggestion that this be turned into grazing land?
- Fritz: The Committee would ask questions to bring out certain points. They had very little or no understanding at all except for two men perhaps: Rosecrans, who knew something about conservation in general, although he was not a forester, and the other was a resident of Shasta pine country.

Someone asked a pine county tax assessor who was there for the meeting, "Aren't you interested in this land being kept productive?" His answer was, "It'll take about a hundred years before you can get a crop, and I'm not going to live that long, so why should I worry about it?" Those are not his exact words but that's the sense of his answer. He was interested only in today and his term in office.

The redwood supervisor was, I think, quite honest in this belief that he did not believe that you could raise tree crops like you do grain crops, crop after crop. So I asked him, "Mr. X, how do you think the redwood lands should be handled?" And I'll give you his exact words: "I would cut them clean and then I would burn hell out of them and I'd sow them to grass."

Lambs and calves can be harvested every year, but the forest is

Fritz: handicapped because of the long rotation.

Fry: This was a different supervisor from the first one you told me about?

Fritz: Yes, a different man, a redwood county supervisor; the pine man was an assessor.

There is no quarrel with converting to grass but one should first assure himself that it can be done profitably and permanently. A lot of our pasture land in the United States was developed that way in the eastern, southern, and middle states. And some natural prairie land has been converted to grain land. Even some of our cities and truck farms are on what at one time was forest. But we also need lumber, veneer logs and pulpwood, and wooded parks.

Fry: At any rate, this didn't create any serious problem with the Committee, I take it. The Committee wasn't swayed by this sort of talk?

Fritz: No. All these meetings were held in 1944. Times were changing. Since then a great change, all for the better, has come about in the personnel of our county officials. Incidentally, about two months after our supervisors' hearing, I met the redwood sheepman on the street. We were good friends. After a little bantering, he volunteered that he learned a lot at the hearing and that he was changing his attitude.

We came to the end of the year '44, and the Legislature would go into session in January of 1945, so I had to have a report. I nearly dropped dead when I discovered that all the notes that I had kept on three-by-five cards had been mislaid.

Fry: This was your card file of the hearings?

Fritz: Yes, all the ideas that I had been going to put in the report. I just couldn't find them. So I locked myself into one of the vacant rooms on the campus in the forestry building, and got myself a tablet and started to write from memory. The legislators were already arriving so I wrote the report "backwards." I wrote first of all a "thumbnail" sketch, which would be a sort of summary, a very skimpy summary, of the findings and recommendations. It covers less than one page in the report. About a week later, I wrote an "extended" summary of the report. Each summary was printed and distributed to all the legislators. Each of them had a copy on his desk. Both are in the final report,* the thumbnail

*The Forest Situation in California, Report to the Legislature by California Forestry Study, created by Chapter 1086, Statutes of 1943, State Printing Office, Sacramento, 1945. 189 pages.

Fritz: sketch on page nine, and the extended summary on pages nine to eighteen. Then I wrote every day from morning till night with a lead pencil (I'm not good on the typewriter) and completed it in about two weeks.

On the report you'll find the name of Marguerite Bridges, as secretary. Senator Biggar authorized her to come down to Berkeley to take dictation and do the typing on the report. I'm no good at dictating, so I would dictate only ideas and elaborations and she would type the report as I finished the pages. In that way, we finished the report.

Then of course, we had to hold meetings of the Committee right away to go over the report. The Committee really studied every word. We often sat up late. My personal annotated copy of the report will be turned over to the Bancroft Library.

Fry: Is the map in all the copies of the report?

Fritz: The map of certain solid blocks of cutover lands appears only in a separate printed supplement to the report, titled Forest Purchase Areas: Recommended For Further Investigation by the State Division of Forestry. It was distributed only to the Committee members and some state officials. There were two printings. The first was hurried to the legislators without an index. The second had an extensive index bound in.

Fry: Did you do the indexing?

Fritz: Yes, all but the typing. I had a simple method that I used to use when I was editing the Journal of Forestry. This calls for indexing not only titles of paragraphs but significant words. The Table of Contents itself requires nearly three pages, the Index, ten pages. The extra labor of providing a good index is small compared with that on the main report, and it makes any book more useful. A book with a skimpy index is an abomination.

Fry: What did the report recommend?

Fritz: The principal recommendations were for establishing a system of state forests, passing a forest practices act, provision for staggered terms of Board of Forestry members, and others. They appear on pages seventeen and eighteen of the report.

Fry: Did you ever find your card file?

Fritz: Not until after I was retired in 1954, nine years later. I was cleaning out some files and there, hidden in the back of a drawer, I found them. It was some time after I had noticed my files had been tampered with, I don't know why. But I did not want to take a chance on losing my card file. Hence, their hiding.

In those days, I had a very good memory and could remember even

Fritz: small details. Comparing my card file with the text of the report, I found that I had missed very little.

The report, although I wrote it, must be regarded as the report of the Committee and is so described on the title page. It would carry more weight with the legislators.

Fry: It's the report that you and Marguerite Bridges hammered out?

Fritz: She had nothing to do with it except the typing. She was a public employee hanger-on. No doubt there is a lot of that in every capital city. She went along on some trips but I couldn't get her to keep a note.

Fry: Then the report was submitted to the Legislature.

Fritz: Yes. Remember that the original bill of January, 1943, was solely for the purpose of acquiring lands for state forests. California was one of the few forestry states that had no state forest system at that time. But in '45, as a result of this study, we did a lot of other things. We provided for a Forest Practices Act, we provided for insect control, better fire protection. We also recommended that the Committee be continued another two years.

Of course, all of these recommendations had to be put in separate bills in '45. The governor signed them all. But no money for setting up the state forest system was provided, only the authorization.

Fry: You went on further study excursions the following interim year, didn't you?

Fritz: Not I, the Committee did. The war was over and my campus duties increased as the enrollment boomed.

Fry: Were you with the Committee then?

Fritz: Sometimes, but I had accomplished my original purpose. George Craig became the consultant then. There were certain matters that warranted its continuance. These were pointed out in the 1945 report.

The Committee's report started the ball rolling for all the legislation passed in '45. It included the resolution for the Interim Committee for '46.

Fry: Yes, which had, I think, \$5,000 less than your Committee had to work with, but they did essentially the same thing. They held hearings and they went around and visited various forest areas.

Fritz: The first Biggar Committee had \$15,000 for the study and printing. Its interests were directed mainly in other channels. I was one

- Fritz: of several who recommended George Craig to follow me; he was a very able young man, a graduate of U.C. in forestry. He did a very good job. They got out a printed report also, a very good one.
- Fry: George Craig is now head of the . . . ?
- Fritz: He's the executive head of Western Lumber Manufacturers, Inc., in San Francisco.
- Fry: What was George Craig at that time?
- Fritz: George was a wartime officer in the navy. I think he was discharged in late 1945. The Committee job itself was a temporary one. These jobs are never permanent.
- Fry: You wrote your report in December of 1944 and early January, 1945, and it was presented to the Legislature in 1945. Did you have any personal contact with the Legislature then, or did you not go to Sacramento very much after that?
- Fritz: Yes, I did, mainly to go over the report with the Committee. After that, I was no longer the consultant of the Committee, but George Biggar or somebody else would ask me to come up.
- Fry: He would just ask you to come up to testify?
- Fritz: At committee hearings, yes, I attended those. You see, a University faculty member is not supposed to go to Sacramento at all, except if he is requested by an assemblyman or a senator. I was requested to go up there. (Of course, while I was working on this, I was the consultant; and that was cleared with the President's office. So I was in the clear in all that.).
- Fry: We haven't really rounded out that story. It sounds as if you turned in your report and then sort of vanished. I don't think that was true.
- Fritz: After this report was submitted, I was still asked to come to Sacramento to discuss certain points with this or that man, I've forgotten who, but quite a number all together. They were a large group except for special committees.

During that time of course, this bill and others were in the lap of the Legislature. Bill Schofield*, manager of the California Forest Protective Association, handled the several bills pertaining to forestry. Rex Black had resigned his job.

*See William R. Schofield, Forestry, Lobbying, and Resource Legislation, typed transcript of a tape-recorded interview conducted by Amelia Fry, University of California Bancroft Library, Oral History Office, (Berkeley, 1968).

Fry: Schofield was the new lobbyist for the California Forest Protective Association?

Fritz: Yes. Schofield looked after the bill whenever it was necessary. I would say that Schofield kept it alive. Schofield was not a newcomer to Sacramento. He had had a lot of experience with the Legislature because he had been with the State Board of Equalization; his specialty there was forest taxation. He was a good selection for the C.F.P.A. job.

Fry: What was the general reaction of these various groups we had talked about?

Fritz: All favorable.

The Legislation

Fritz: I might have misled you that I was through with the Committee in early '45. Actually, I was with it through the entire term of the Legislature in '45. Here's something you mustn't forget: I was one of the authors of the Forest Practice Act, aside from the State Forest Acquisition Act. It happened this way.

I was still working with the Committee, and we had to have a bill for forest practices; and I had heard that the state of Maryland had written one which was considered by the U.S. Forest Service as a good one. So I felt that if the U.S.F.S. thought it a good bill and if it fits our situation here, why not pattern ours after the Maryland bill?

That would do two things: it would give us a running start on a good bill, and it would also obviate criticism from the U.S. Forest Service, which is very good at looking down the necks of foresters and lumbermen not in its own employ. It was very alert to any move that might rob it of a chance to control or regulate private lumbering and influence any activity by foresters not in its own employ.

There were also those of us in forestry who believed in the private enterprise system. The U.S. Forest Service in those days was very socialistic, at least for forestry. Some were real socialists.

Fry: So you felt that this would be good strategy and that you would have the support of the Forest Service?

Fritz: Yes, so that if any legislator went to the Forest Service and asked about it, they'd say, "Yes, it was patterned after the Maryland Act." That was just a following out of my philosophy that on matters like this, you'd better find out where your opposition is going to be.

Fritz: The lumber industry, as far as I was concerned, was not consulted. I didn't consult the Industry for the bill, even though I was on a retainer with the California Redwood Association, hoping to get forestry out of the swivel chair and into the woods. It was an entirely different venture from my forestry endeavor. It had nothing to do with the legislation. In fact, I think the lumber industry would have objected strenuously if I had engaged in influencing legislation under their name. I was not on their payroll but just on a retainer or per diem basis. So I could be independent.

Fry: I understand from Schofield that the lumber industry felt that some kind of forest practice legislation was inevitable, and they'd better get the kind they wanted or they might have complete government control of their operations.

Fritz: He is probably correct. Like myself, Schofield was one of the foresters who was also a private enterpriser, and we couldn't see that the Forest Service should own and direct everything.

If the Forest Service could dictate how a lumberman is going to cut his lands, when and where and how, then the government could also dictate to a farmer what crop he's going to plant and how he's going to do it and when he's going to harvest it, and so on. And that could lead to how we comb our hair and what kind of clothes we wear, and so on. I was against it. If any cutting laws are needed, they should be state laws.

So I wrote to Maryland for several copies of the bill. After study, it looked to me like it would fit our situation, and I sent a copy to Bill Schofield.

Incidentally, the Chief Forester of the United States had already written an article which was published in the Journal of Forestry, touting the Maryland Act as being a very good one, so it gave us something to hang our hats on.

Fry: This would have been Lyle Watts, right? What do you think of him?

Fritz: One of the weakest chief foresters we ever had and the most socialistic.

When I got this copy, I had been working on a bill to fit the details of our situation here, using the Maryland law as a pattern. I was pleased that before I had finished mine, Schofield had at the same time written a bill patterned after the Maryland Act. Of course, that was his job. Our bills were very much alike because both were patterned after the Maryland bill. It was fortuitous because Schofield, being the lobbyist for the lumber industry, could go to the pine and redwood people through the C.F.P.A. and have his bill cleared. They accepted his bill.

We all felt that if the lumber industry didn't do something about

Fritz: it, they'd have something rammed down their throats, which none of us would like. Also I felt that somebody should take the initiative, and I felt also that the bill should contain nothing which would develop opposition in some corner where we wouldn't expect it. And Schofield would naturally do that because he knew what the timber industry would take or not take. It made me write into that bill only those things which I thought we could pass or have passed, but would improve cutting practices.

So that's the way the two bills were written. Had Schofield or I followed a different course, the Legislature would have thrown the whole thing out.

You have to remember this: that the lumber industry is very large as to the number of people in it. You have very large companies and you have a multiplicity of small ones. The large companies were doing some things they could have improved. In fact, that's what my job was for, as an advisor to the redwood industry: "What can we do to improve our logging, to make our plants permanent?"

Now that's a pretty broad statement. And when you come down to the details, it has every kind of ramification. I knew what they were doing in the woods. In the ten years since Article X of the N.R.A., a decided change had been made in the woods. The good companies were already doing more than was required in a Maryland-type law.

We were trying to catch the horde of fast-buck operators who invaded the state during the war and were creating havoc in the woods. They also got into trouble with the Fish and Game Commission for blocking the streams. The Commission would attack not only these operators but the industry as a whole. Public agencies often "paint with a wide brush." It was a case of a blunderbuss instead of a rifle. Everybody got hit, the good and the bad.

I didn't think that was fair to make big noises to the public where a reasonable operator was involved, when the cooperative approach would have done better. Also, I felt it was hurting my own efforts to get certain forestry practices into the woods. I was trying to get the selective cutting method established on a larger and more intensive scale. We couldn't write a specific silvicultural method into the law because conditions varied from company to company and from region to region, because of terrain, site factors, conditions of the old growth, and even markets and equipment. The latter control how intensively one can utilize a tree once it is felled.

So the bill was presented to the Biggar Committee, which was still in force. Then the Committee would go over the bill and would say, "The Legislature will never buy this," or "They'll never buy that." The result was that we had a Forest Practice Act which had the basic principles in it.

After some small changes back and forth, the Biggar Committee

Fritz: approved it, and it was introduced and became S.B. 637, bearing the names of Senators Biggar, Carter, and Fletcher. It was introduced January 25, 1945.

Fry: Why don't we insert right here what the major provisions were. I think I have them noted down here.

The bill provided for a rules committee of timber owners and operators in each region, one in the redwood region, one in the pine region, and so on.

Fritz: The Forest Practice Act, as passed, was in large part a self-policing law. It recognized the differences in forest conditions and therefore divided the state into four districts. Each district was given a committee of timberland owners and operators to write the rules of practices regarding cutting, protection, erosion control, reforestation, and so forth.

It recognized the right of an owner to convert his land to another legitimate use, like grazing. (This part of the law was badly abused by the fast-buck operators and owners of small areas. Many owned only a quarter section, an effect of the old Homestead and the Timber and Stone Acts.)

Also provided for was the privilege of alternative forestry practices to meet certain local conditions. All the rules of practice and their amendments, including variances, must be approved by the State Board of Forestry.

Fry: I have here that "there were four major merchantable timber regions in the Forest Practice Act as it was delineated in 1945."

Fritz: Yes, you're right. It's four.

Fry: "... and a forest practice committee of five, of which four were appointed by the governor. One was from the Division of Forestry. These men developed rules for logging, protection and regeneration. After the two-thirds vote approval of rules by the timber operators, they were then submitted for approval by the Board of Forestry and put into effect."

Fry: Why was there no way to enforce any of this until later on, when it was amended and violation of the rules was made a misdemeanor in the mid-1950's?

Fritz: That's an interesting point. We had a meeting in 1945 of our interim or Biggar Committee, and we were going over this bill. Schofield's bill and my bill were gone over thoroughly. They were very similar, but there were some differences. One was the penalty in mine, while there was none in Schofield's.

Fry: What was your penalty? Do you remember?

Fritz: It was very, very small.

Fry: A fine, or ?

Fritz: It was a fine. In some versions of the original bill--oh, here it is right here: \$500.

Fry: But Schofield's bill didn't have any method of enforcement?

Fritz: Actually, a fine of \$500 doesn't mean anything. Some disinterested logger could afford to pay the fine and keep going until another inspector happened by. There never have been enough inspectors.

The Committee asked that the fine be taken out, believing that the important thing was the registration. That is, a man cannot operate unless he's registered. Withdrawal of registration is a very serious penalty. If you stop his logging operations for only one day, he loses much more than \$500.

The bill reads: "All timber operators engaged in cutting or removal of timber or other forest products from forest lands for commercial purposes shall register with the State Forester to perform such operations. The fee for such registration shall be one dollar."

Fry: But then, if registration carried no threat

Fritz: Here it is: "Every timber operator who fails to register as provided for in this section shall be prohibited from cutting or removing timber or other forest products for commercial purposes from forest lands."

Fry: Yes. That's from S.B. 637.

Fritz: Actually, that's a very serious penalty. He could be stopped by an injunction.

Fry: It would require a court injunction; that is cumbersome.

Fritz: Yes. Unfortunately, the courts are slow.

You might be interested in how the two versions of a forest practice bill were resolved. As I said earlier, Schofield's bill and mine were very much alike but mine contained some ideas not in Schofield's and vice versa. The hour was getting late, 10 or 11 PM, so we adjourned the formal meeting, but Senator Biggar, Schofield and I were asked to go to the hotel and resolve the differences. By 1 or 2 AM, we had the differences ironed out to Biggar's satisfaction. Schofield's bill had all the changes entered, and having already been cleared by the possible opponents, the industry, it was accepted and mine was tabled.

The next day the Committee okayed the revised text. Biggar later

Fritz: had it drafted as a bill, and it became S.B. 637. The Legislature approved it and Governor Warren signed it on April 23, 1945. Thus it became Chapter 85, Statute 1945, and part of the Resources Code. Early in 1947, after the regional committees had completed drafting the rules, the State Board of Forestry, upon due study, approved them and the law became effective.

Fry: And then in the three-man meeting, what you did was adjust any differences and put them in Schofield's bill?

Fritz: We were directed by the Committee, and all we had to do was add the verbiage. We made some other changes in English, of course, to make it read well. Schofield was satisfied and I was satisfied and Biggar was satisfied, so when we went back to the Committee the next day, they approved it and Biggar then introduced it to the Legislature. He had others sponsor the bill with him, Senators Oliver Carter and Ed Fletcher.

There was always a certain trio in forestry legislation--Biggar, Carter and Fletcher. Fletcher came from San Diego and though not on the Committee, had some contact with timber through representing owners who were in financial difficulty, like the Ward Estate. Carter was an attorney in the pine region and Biggar came from the redwoods. All of them were quite interested in forestry.

Oliver Carter was a senator for several terms. Then he was made a federal judge with headquarters in San Francisco.

Ed Fletcher was a realtor in San Diego. He got in very early and made some of the biggest deals in southern California. In some way, he also got interested in the Ward Estate of Michigan, which owned extensive tracts of redwood in Del Norte County. They were unable to pay county taxes in the 1930's. To raise the necessary money, the Wards decided to sell part of their timber to the U.S. (This is now in the Redwood National Park controversy.) Uncle Sam is "broke" and he is doing, or would like to do, what the Wards did: trade their redwood forest to one of the owners in exchange for his timber which lies within the proposed park area.

Fry: When this bill was introduced, was there much opposition from any quarter?

Fritz: Very, very little.

Fry: We haven't discussed the provision in the bill to allow for converting the specified land use of a tract from timber production to something else, such as grazing or agriculture. I understand that later on this was one of the loopholes that the State Board of Forestry was trying to plug up because timber operators could use it to enable them to clear-cut their property. Was this provision in your bill?

Fritz: It probably was in both of our bills, my bill and Schofield's,

Fritz: since they were both taken from the Maryland bill, and because Maryland as a state had a lot of forests which were scattered and in small units, land which couldn't be cultivated or used for some other purpose except housing developments. And I think it should be in there. I don't think you could get any kind of a forest practice bill passed without that provision because we have a lot of forest land in California which is being crowded by rural development; also, more land is required for grazing.

For example, there are many livestock ranchers in the state that own anywhere from twenty to fifty thousand acres apiece. Part of their land is timbered and part is grass; and sometimes the timber encroaches on the grass, or has in the past, and they want that timber cut. They want and need grass. They certainly have the right to raise grass for their livestock.

That has been a great fight in the past, but I think it's pretty well resolved now, or understood. Many small owners and contract loggers took unfair advantage of it, and the state I think was too wishy-washy about it; the state had not enough inspectors. The law should have provided for a time limit and a penalty that, if the logged area was not actually devoted to the new land use--if he could not show proof that he actually seeded grass on it at so many pounds per acre, or that he put houses on it, or put the land to some higher use--he would then have to reforest it at his own cost, or the state would do it and bill it to him.

The omission of such a quid pro quo was a big mistake. But it is doubtful that the bill would have passed without the provision permitting logged land put to another use. In fact, Senator Swift Berry, a forester and former lumber company manager, told me a few years later that, "If you had not put that into the original bill, the Legislature would never have passed it." That doesn't mean that he would have voted against it, but that the Legislature would never have accepted it.

Fry: I have some suggestions here that you made in 1952, in a kind of Forest Practice Act review that was held before the State Board of Forestry. There are nine suggestions that you make here for improving the Forest Practice Act at that point.

Fritz: It included a performance bond, didn't it? I don't remember all the details in that statement. I tried several times to have the law strengthened but got snowed under each time.

Fry: Yes. In fact, you say here that the first thing that should be added to the Act at that point is the actual licensing of loggers and that these licenses could be revoked, if necessary.

Fritz: That was accepted later.

Fry: And second was the licensing of foresters, and third was the bonding of owners and operators and in case of violation, costly court proceedings could be avoided. You said, "Greater care will be used to prevent damage to residual trees. And those who build up a good performance record could have the bond requirement abolished."

You also suggest that land clearers be bonded, and you suggested a system of land classification with benefits for those who hurry up reforestation on forest land faster than natural regeneration.

You asked, in 1952, for more personnel for enforcement. I think this had always been a complaint, hadn't it, that they just didn't have enough personnel from the State Division of Forestry to actually do all the inspections and the follow-ups that needed to be done?

Fritz: That is true, but the State Division of Forestry also had a theory that they had to go through the "educational" process first with the operators. I bought that idea for the first few years, but education is--like it is at the University--a never-ending job. You have a new crop of students coming on every year and you have a new crop of loggers coming on too. So it didn't work out. They had one man there, a law enforcement man, that I thought was sabotaging the whole thing, but I couldn't prove it.

I had forgotten that I had made so many recommendations. I got badly beaten on the bonding.

Fry: That never came about?

Fritz: No, I was beaten on that. I can tell you this also. Some of these 1952 points were objected to by the lumber industry. I don't think they would object to them now. The permanent operators had nothing to fear and much public good will to gain. At that time, all the principal pine and redwood operators practiced selective cutting.

Fry: On what grounds did they object to the bonding of land clearers?

Fritz: They were not too certain forestry would work out well. They were not sure that they could reforest it in the definite number of years that would have been specified. Looking back, their pessimism was better grounded than my optimism. Nature is still against us. In fact, many foresters are not sure. So I was on weak ground, but bonding could have been taken care of, at least to require that they fire the slash and drop seeds on the ashes.

None of these items that you have read to me did I take up with the redwood industry, for which I was an advisor; I never considered it necessary. The redwood people were exceeding the law anyway. The principal violators were the many small fast-buck operators

Fritz: that flooded the region during and after the war. Very few of these operated on redwood land, but their logs had to be trucked through the redwoods to the small mills on the Redwood Highway. I am grateful to the redwood industry for letting me go on as a free agent, while continuing as their advisor.

The Douglas Fir Region

Fry: After this Act was passed, the Douglas fir industry more or less came into its own in California, didn't it?

Fritz: It started in 1940 and was already on its own. I must make it clear that the Douglas fir region--most of it--lies east of the redwood region, but the mills were on the Redwood Highway and most of these mills have melted away. It was the Douglas fir operations that needed policing. There were very few small redwood mills. The Douglas fir operations were on scattered small properties. That's a hangover from the days of the Homestead Act and the Timber and Stone Act, under which you could take up 160 acres for a small fee. It made logical logging impossible for sustained yield.

On the other hand, the redwood lands had been re-consolidated seventy to eighty years ago. The Douglas fir region, lying alongside the redwood region to the east, was not considered accessible until the war years. It was never re-consolidated after the U.S. mistakenly broke it into 160-acre units. They were good laws for Nebraska and Kansas, but not for mountainous country or for timber country. It was the worst thing that could have happened.

It is the basis of so much mismanagement. Some people were jailed in the 1890's and the early 1900's for fraudulent use of the laws, included were a few congressmen and U.S. land agents. I refer you to Wallace Stegner's book on the western lands, and his reference to Major Powell of the U.S. Geological Survey, one of the first and most vocal critics of the two laws, Homestead and the Timber and Stone Acts.

Many of the newcomers were fast-buck operators. They would log off a quarter section and move on. The state had a hard time keeping up with them. These little operators came down from Oregon, Washington, and from the southeast. Some of them had never operated before, although they might have worked for a logger in some minor capacity. They couldn't lose. Here was Douglas fir timber at a dollar a thousand board feet when it was worth ten dollars a thousand.

Most of this timber was on ranches, or the owner was the descendant of a family that located 160 acres and paid taxes on it of only a few dollars per year. So they kept the land, believing that someday it might be worth something. But along comes a little gyppo

Fritz: logger, and he asks the rancher what he wants for it. He'd say, "I don't know. What's it worth?" The logger might say one or two dollars. The rancher would make a quick multiplication and the total would look very good.

Fry: So the ranchers were selling the Douglas fir off their lands?

Fritz: Ranchers, yes, and other small holders, city people--people scattered all over the U.S. because the descendants of the original homesteaders had scattered to many parts of the country. I had letters from a lot of them. A consultant could have done a lot of business with them for managing their properties. I wasn't interested in liquidation, which most of them had in mind.

Fry: They were all selling their timber very, very cheaply?

Fritz: Yes. The logger couldn't lose. The logger bought the timber cheap. He could go to an equipment man and say, "I'm buying this timber over here and I'm going to pay for it as I cut it." And the equipment man would say, "How much are you paying for it?"

He'd say, "One dollar a thousand." "Hell, you can't lose at that price. How much equipment do you want to buy on credit?"

Fry: So he could borrow from the equipment man and get a tractor.

Fritz: Yes. He bought the equipment and paid for it as he got the money back from selling the logs to the sawmills. Many of the Douglas fir sawmills were separate ownerships from the logging at that time, although some mill men financed the loggers.

In the redwood areas, in contrast, the milling and the logging were done predominantly by one company. It was completely integrated because years ago the small lands had been consolidated, blocked out by watersheds, as I said.

The Douglas fir was in the inner coast range, between the Central Valley and the coastal redwoods. These men couldn't lose, and they figured that they'd just chop down the best trees and take the best logs out of the best trees. They cleaned up. Many of those lands were logged three and four times. There would always be somebody coming back to get what the preceding logger had left.

Fry: So this was eventually clear-cutting going on. Do you feel then that the Forest Practice Act really was effective in dealing with the Douglas fir problem?

Fritz: No, not with that type of operator. He could cut 160 acres in a very short time, before an inspector would get a chance to get out there. And there were so many operators, more than a thousand in one district, that one inspector for a county couldn't cover them all; so the logger could be back in Oregon or Washington where he came from by the time the inspector came around.

Fry: The State Division of Forestry wouldn't have a chance then to get a court Injunction to stop him.

Fritz: No. There are a lot of things one sees in hindsight, of course. With postwar urgencies for catching up on peacetime building, many things are overlooked. One small operator told me, "This is pioneer country and anything goes." He not only made a mess of his logging and gypped the owner of stumpage payments, but was actually trespassing on neighboring lands.

Fry: Have the rules changed much in the Douglas fir region regarding cutting practices? In the northwest, it has long been the practice to cut Douglas fir forests in blocks. Is this true in California?

Fritz: Most Douglas fir stands have to be clear-cut. Even the Forest Service does it on national forest lands bordering the redwood region. But the U.S.F.S. follows up with slash disposal by burning, followed by planting or seeding. If you look through the Sierra Club's pictures, you'll find some pictures showing clear-cutting. If you know the stumps and if you know the area, you'd know whether it was redwood or Douglas fir, but too often a Douglas fir area of stumps was labeled redwood. It's a misrepresentation that has caused many readers to believe it to be redwood.

Fry: Are Douglas fir forests even-aged in California as they are in Oregon?

Fritz: Not so much as in Oregon and Washington.

Fry: Did the Forest Rules Committee consider block cutting an acceptable practice for Douglas fir?

Fritz: Yes, indeed. It is not so much the method, but how the method is applied that is important, and what is done to keep the land productive.

Fry: There was no change in rules then for Douglas fir, it was block cutting from the first? And all the other areas had selective cutting rules.

Fritz: In Douglas fir there was some selective cutting from the start. But there was generally another logger who took out some of the residual trees, and he was followed by still another until nothing was left but debris. A few owners did do some reforestation but it was small.

One owner who took great pains to hold loggers to their contracts was Dr. William Kerr, owner of a large ranch east of Korbelt in Humboldt County. He resorted to seeding and planting after the loggers were finished and the slash was disposed of or protected against fire. He also saw to it that seed trees were left.

Fritz: I don't know of any block cutting (in which alternate blocks are left standing) in the Douglas fir area by small operators. They couldn't afford it and the owner wanted the land cleared. Don't forget that a large part of the Douglas fir region in northwest California is also ranch country--sheep and cattle. The north-facing slopes are forested with Douglas fir, while the south and west slopes are fields of grass. Obviously, the ranch owner wanted more grassland.

Even before World War II, he tried to eliminate the Douglas fir by girdling or burning. When the war demand for lumber developed, the rancher was elated that now he could get his land cleared and be paid for it. That's why some of the stumpage was sold so cheaply in the first half of the 1940's, but eventually the more progressive ranchers learned that it is difficult to maintain grass on former Douglas fir land.

There is an important feature that should be mentioned here. The stockmen, having great faith in their local farm advisor, W. Douglas Pine, got him to make a study of the ranch-timber problem. Are the owners getting enough for their stumpage from the loggers? Is it true that the owner is better off to leave his north and east slopes in timber production, or can they be converted to grass?

Douglas Pine's study had the blessing and support of the Humboldt County Supervisors. His report makes interesting reading. What he reported was what foresters had been recommending for many years. But this time the story came from a farm advisor who was born in the county, was known and highly regarded by everyone, and who knew the ranch owners' problems, as well as those of stock raising.

The impact of his report was surprising. The county appointed a County Forestry Department with a trained forester in charge and set up a County Forestry Committee of about twenty local people. The county no longer has a forester. He is now a member of the County Farm Advisor's department, a more effective way to handle the job. The Committee is operating and holding almost monthly meetings.

Fry: We might back up and ask you to tell what brought on this migration of loggers from Oregon and Washington in about 1940.

Fritz: It was brought on by the war. The war started in '39. You may not know that wars are fought with lumber, as much as with steel. There's more tonnage of lumber used than steel.

Fry: Why did they come down from such heavily forested states as Oregon and Washington?

Fritz: That's a good question. The Oregon and Washington people had adopted the forestry tree-farming idea ten years before the Californians--not quite ten years.

Fry: Yes, but they didn't have their Conservation Act until about 1941, did they?

Fritz: I believe so. There was also the [non-governmental] tree-farm program, which was started by the Weyerhaeusers in 1941. It was a private undertaking to draw attention to the fact that a lumber company, to remain in business after their old growth is gone, must be protected against fire, insects, and disease and that the public has a stake in sustained-yield management.

It takes a lot of acres to keep a well-equipped company in a never-ending supply of trees. So they bought as much of the loosely-held second growth of small and medium-sized owners as they could. Since the gyppo operators were already cutting second growth here and there, they found it more and more difficult to buy more second growth as they needed it.

Two benefits were early realized from the tree-farm program: It prevented not only premature cutting without provision for continuity, but it made it possible for the more strongly financed and more efficient operators to realize their hope for perpetual timber crops (sustained-yield management).

So the gyppo operators looked far afield for timber and found it in Humboldt and Del Norte Counties in California, in an area theretofore considered inaccessible.

Fry: At any rate, consolidation of lands in Oregon and Washington forced the small loggers out.

Fritz: Yes, that is the point. They learned there was a lot of old-growth Douglas fir available for logging in California, and they came down. There were few roads. How did they get into it? They flew over it. "We can handle this timber," they said.

Down here it was considered so inaccessible that even the federal government didn't inventory it closely. The gyppos came down and looked over the timber and the terrain. They found they could buy Douglas fir stumpage so cheaply that they could afford to build roads into the forest despite the rough steep terrain. You can do an awful lot with timber that's worth more than ten dollars if you pay only one dollar for it. That's how they got by.

Of course, once that rush got underway, it boomed. The lobby of the Eureka Inn, which I had known ever since the hotel was built in 1922, was crowded more than ever--timber cruisers, loggers, sawmill men, speculators, investors, brokers, and so forth. One prospective logger asked me, "What's wrong with this Douglas fir timber?" My reply was, "Nothing. It was considered to be too inaccessible for the time. Why do you ask?" "Well, it is so dirt cheap." That was in 1944.

Fry: And I guess the wartime demand for timber added to this.

Fritz: You could sell any board that would be suitable for dunnage on shipboard.

Fry: So this influx of successful gyppos was probably one factor then that encouraged your large timber owners not to buck a Forest Practice Act.

Fritz: No. The old-line companies had not waked up to what they were missing. As to the wartime influx of loggers, this was believed to end with the war. The Forest Practice Law was largely my own idea at the time. It was hard to stomach what the "temporary" loggers were doing to the forest.

Fry: The large timber owners supported it though later?

Fritz: They were doing better then, in the logging part anyway.

Fry: Do you feel that the Forest Practice Act was as effective as it could be at first, under the circumstances?

Fritz: Through hindsight, we could have done many things that we didn't do. As soon as the law was passed, I stepped out of it. I figured I'd done my job; let them do theirs now. I used to attend meetings where the rules were discussed, but not regularly.

Fry: This was a Forest Practice Rules Committee?

Fritz: Yes. I was never on one; I used to sit in with them as an auditor and to some extent as a commentator.

I'd like to make one closing statement on this subject. The present [1967] agitation in Sacramento by the Sierra Club to rewrite the Forest Practice Act is motivated less by a desire to improve the cutting practices than to harass the larger operators. At nearly every session of the Legislature since 1945, there have been amendments to the Act, and this bill from which I read you a part, is now much different than the 1945 version.

The Sierra Club is especially agitating against the present permissible clear-cutting. They'll never kick that out of the law. It should be retained but it does need safeguards. They want to make the whole situation look bad for lumbermen and foresters. It's just another gimmick to enhance their status as saviours. When the bill was under discussion in 1945, there was not a peep out of the Sierra Club that I know of.

Can we drop the Forest Practice matter now and go to your next subject? We have given it too much space already.

The Redwood Region

Fry: I'd like to ask you about the feasibility of clear-cutting in the

- Fry: redwoods. There's been a great deal of controversy raised by what was done in the Arcata Redwood Company lands, the clear-cutting there in Humboldt County.
- Fritz: What is your thought there? That clear-cutting is a general practice? Or that it is not proper?
- Fry: Well, neither. I think that is what the preservationists like the Sierra Club are trying to say. But my question is: Do you still think that selective cutting is good practice, or that clear-cutting is sometimes advisable where you have windblow problems? I understand that you recommended clear-cutting the Arcata Company redwoods there.
- Fritz: Selective cutting has a number of advantages but it is not always applicable. Sometimes selective cutting won't work but clear-cutting, of course, will work anywhere. Arcata Redwood Company tried selective cutting for about ten years. They did an excellent job and I used to show pictures of it to doubters. But then we learned that the residual trees are easily felled by wind and because the gravelly soil gave only a weak foothold.
- In new country you never know how a method will work out until you have given it a thorough trial. In the Arcata case, the Company was forced into clear-cutting because of the heavy annual blowdown.
- Fry: Clear-cutting always works for regeneration too?
- Fritz: No. You can't wait for nature to do it; you have to do it yourself. You either plant or seed. In northern Humboldt and Del Norte, you have a better chance for success by seeding than you have farther south. I can't see where so-called block cutting has answered the regeneration problem. The openings are too large. If the openings (blocks) are small, there should be a good response from natural seeding.
- Reforestation, even natural seeding in the case of selective cutting, is difficult almost anywhere in California. I wish that economic conditions were such that we dared spend seventy-five dollars per acre. That day may come; it isn't here yet.
- Fry: Is the high cost due to the lower rainfall?
- Fritz: Yes. The selective cutting that you were speaking of is not the selective cutting that I had recommended. It's a little heavier. It's more like what is called the shelter wood system used in Europe. I think it's too heavy. The Sierra Club, of course, calls it clear-cutting, even if ten trees per acre are saved. There should be a minimum of five trees to the acre, and these trees must be selected for their seed-bearing capacity.
- Fry: Five seed trees per acre. This always confuses me in redwoods,

Fry: because I thought redwoods reproduce most easily by sprouting.

Fritz: Of course, the stumps do sprout. That's very fortunate. But with only thirty-five or forty trees per acre to start with, the stumps are too widely spread. Natural or artificial seeding is required to assure a fully-stocked stand. Otherwise you will have, say, thirty-five clumps of sprouts per acre with too much open space between. We ought to have a minimum of five hundred trees per acre in addition to the sprout clumps to start with after cutting. Each stump, if it sprouts, can be counted as several in the five hundred.

You are not alone in being confused about sprouting. Redwood forestry, like all western forestry, calls for a lot of pioneering by each company. At one time, we were satisfied with the sprouts alone. We know now that that is not enough.

Many people regard the redwood region as so wet that reforestation should be easy. It is indeed wet in the winter. But from June to October, occasionally to November or December, we get so little rain as to make it correct to describe the region as semiarid. In some years, the ground is full of seedlings until May or June. By July, it is often difficult to find one seedling. The rest have succumbed to soil dessication.

Were it not for the frequent fogs and overcast days, the situation would be impossible for reforestation except by such heroic measures as planting seedlings grown in large pots, irrigating, or by providing numerous windbreaks. Fog is not necessary for redwood but soil water is. Fog reduces or inhibits evaporation, and it no doubt supplies considerable moisture through the leaves. But fog is not dependable.

In the Arcata case, the residual stand, left after logging for making further growth and for reseeding the blanks between sprouting stumps, must remain standing. If it blows down, as it did in the Arcata case, the loss is not only a loss of seed trees and the growth in volume of these seed trees, but an absolute loss of their original volume through shattering as the trees fall across. I saw the wreckage after one wind and was saddened as I have never been before in forestry work. Salvage was costly and the splintered logs left quite a mess. That was the end of selective cutting on Arcata's property.

I might add another factor: Several trees fell across the highway. I was told that one fell right after a loaded school bus passed. The logging foreman was quite alarmed over the danger and cut all the trees in the strip bordering the highway. This strip had been left a few years earlier to preserve the general scene.

Maunder: When did you first become interested in the California Redwood Association work?

Fritz: One who, like myself, taught sawmilling and wood technology had many contacts with lumber associations. C.R.A. handled all the statistics, conducted the lumber grading committees or bureaus, and dealt with the Forest Products Laboratory (at Madison, Wisconsin) on study projects concerned with mechanical and other properties. So it was natural that I should be known to the staff. It was a mutual benefit.

I have done work for the Douglas fir and western pine associations as well as the redwood group. I was never on the payroll of the Redwood Association. Being on academic status, I was privileged to do consulting work. Most of this, for the redwood group, was in the forestry field, beginning in 1934 as a result of the N.R.A. Article X. When the N.R.A. was knocked out by the Supreme Court, Article Ten provisions were continued voluntarily. But I was completely independent, as an advisor.

Maunder: Did this come out of your first work with Mr. C. R. Johnson of the Union Lumber Company?

Fritz: Indirectly. When I went across the river and laid out the "wonder plot," I thought, after having measured it and marked it for permanent consolidation later, I would never see it again because I didn't expect to be in California that long. I hoped others would follow through.

But as it turned out, I've stayed here almost forty years now and I've remeasured that plot in three different decades. There's one coming up in 1963, and I hope I live long enough to measure it again because the data will be very interesting.

May I add at this point that the forestry work I did for the redwood people was what the University should have done anyway. Without the additional compensation, I could not remain at the University of California.

Maunder: Have they been following your original plan for cutting?

Fritz: For second growth?

Maunder: Yes.

Fritz: Second growth was not in operation until the past few years. Those few who are cutting second growth are doing it only experimentally, following my original suggestion; but most of it, being in small unstable ownerships, is being cut on a quick cut-out-and-get-out basis. In my opinion, that's a grave mistake. The larger companies are holding to it for the future.

XI THE FOREST PRODUCTS LABORATORY

Fry: Do you want to go back to a 1943 report of yours on the Forest Products Laboratory for the California Assembly?*

Fritz: If you wish. We have a forestry alumnus named Wendell Roble, of Auburn, California. He's one of those dynamic men who has a wide range of interests. Being a retail lumber dealer, he saw the products phase of lumbering, although he was very much interested in woods forestry and civic matters in general. He was one of the founders of the Forestry Club at the University before we had a forestry school.

Fry: Back in the early Nineteen . . . ?

Fritz: 1912. He and I would meet once in a while and discuss the state's forest future. I told him about having been disappointed when I came to the University in 1919 to teach lumbering and forest products, but found no equipment. "What we need," I said, "is a Forest Products Laboratory. A university of this size and standing could do a great deal of good with such a laboratory." Other universities had small to large forest products laboratories.

He thought well of the idea and without my knowing it, he got his own assemblyman to introduce a bill calling for the establishment of a Forest Products Laboratory at the University of California.

Fry: He was from where?

Fritz: From Auburn.

Fry: Do you remember making a report to the Assembly for a Forest Products Lab? According to my notes, the Assembly, in 1943, passed a resolution calling for a report on the need for a laboratory, what it would do, what it would cost, and so forth.

Fritz: Yes, I remember it very well. By the way, here's something that affects what I said about George Craig. This is our recommendation that the California Forest Study Committee be continued for another two years [reading from report] "for a study of certain aspects of the forestry situation which could not be gone into in the time available."

Fry: That's on page eighteen of your report?

Fritz: Yes. "That the proposed Forest Products Laboratory at the University of California be established as soon as war conditions permit."

*Resolution Chapter 121, May 8, 1943, California State Assembly.

Fry: So it was already proposed by the time your report came out. I guess that was referring to the '43 proposal?

Fritz: Was there a bill?

Fry: I think it was just a resolution.

Fritz: It was a bill originally, but they changed it to a resolution in '43. Robie got his assemblyman to introduce the bill for a Forest Products Laboratory. It was a very short bill. I don't think it had more than eight or ten lines. I felt at the time it had no chance at all of passing.

In fact, when there was a ripe moment, I mentioned that it was not the time to talk about that because we were in World War II. Whereas the acquisition of cutover lands was something that would require funds over a long period of time, the laboratory would require money right away.

In 1943, there was introduced a bill, but changed to a resolution, asking the University of California to write a report on why it should have a Forest Products Laboratory. I was detailed to write it by the head of our school, Walter Mulford. The report was to have been presented to the 1945 Legislature. It did not get that far. I wrote the report, and we had a lot of copies mimeographed.

Fry: Perhaps I should insert here that there's a copy of it in the University of California Library under what's called "Pamphlets." Its number is SD 359.

Fritz: My memory now gets clearer on this matter. The war was over as far as Germany was concerned in April, '45. So the Legislature was already thinking about postwar problems. We had a very large state committee on reconstruction and unemployment. I was on one of the subcommittees of which Walter Johnson of San Francisco was chairman.

Fry: You were on that committee as a representative of the University or representing forestry?

Fritz: The University. You don't represent the University; you're asked, you're picked out of the University, by somebody from the outside who thinks you ought to be on the committee.

Fry: In 1945 then, you think that this committee to tackle postwar problems might have had something to do with--might have included the Forest Products Lab?

Fritz: I was on Johnson's committee, not for the laboratory as such, but for what the lumber industry could do to make employment for the war veterans who might need jobs upon their discharge. We used to laugh about it because we felt there'd be no unemployment at

Fritz: all in California, because although most of these people all wanted to stay in our state, it was a matter of relocation and reemployment. We'd have plenty of work to catch up with this great backlog of things that were held in abeyance until war's end.

Fry: You thought that a housing boom would ensue.

Fritz: Yes. No one could tell what else might increase the demand for lumber and thus make jobs.

Walter Johnson was on the main relocation and rehabilitation committee and was the chairman of the subcommittee I was on. That committee did a great deal of work and made a lot of reports. But as it turned out, we developed no unemployment. Unemployment was the thing that had worried everybody.

Instead of submitting my report on the laboratory, the University decided to hold it and to put the laboratory in a long list of buildings it felt were needed to catch up on the wartime postponements.

Fry: I see. And that's how it became a part of the postwar program.

Fritz: That's just about the way it happened. I finished the report and was ready to give it to the Legislature when I was told it would not be necessary because the laboratory proposal had been accepted as a desirable building by the University. But it was given a rather low priority. I was glad that my report was not presented, because there were several things in it which even today make my face red.

Fry: How's that?

Fritz: It was brief and too modest. One thing was, I asked for only \$100,000 to run the laboratory. If I remember correctly, the original bill (1943) called for \$250,000 for the building alone.

Fry: \$100,000 annually, you mean?

Fritz: Yes. My idea was to start small and build up. But I put \$100,000 down because I figured we'd need only a few people to start out on some of the products problems I knew were aching to be solved. Furthermore, with only \$250,000 one could not build and equip much of a lab. But the University felt differently and made a bigger thing out of it. Before the war, we were on a starvation diet in contrast.

Every time I heard of the status of the Forest Products Laboratory, the amount of money that the University was asking for was increased. The building cost, estimated in Robie's 1943 bill at \$250,000, climbed to one million and then to two million, according to my recollection. Anyway, no special legislation was needed. The University of California is no plker when it comes to asking

Fritz: for funds.

Later, I helped again in a small way. The dean of the school asked me to draw up general plans for the guidance of the architects. In order to do so, I made trips to various very modern laboratories to see how they were arranged and equipped.

Fry: What laboratories did you visit?

Fritz: One up in the state of Washington, the Weyerhaeuser's laboratory; also Standard Oil's laboratory, and several others.

Fry: You mean their petroleum laboratory?

Fritz: It was a chemical laboratory, yes. We had to have a chemical laboratory too, because the chemistry of wood is very important.

Fry: This was at the request of Dean Mulford?

Fritz: Yes. He approved my suggestions.

Fry: How did we finally get the Forest Products Lab at U.C.?

Fritz: It was on that big building program which included several kinds of U.C. buildings--a large chemistry lab, mathematics building, music building, and a new forestry classroom building, all of these on the campus.

Fry: This was in the Fifties, just as you retired?

Fritz: This was in the late Forties. But the laboratory had a very low priority. The forestry classroom building had a high priority. It was a badly needed academic building to be shared with other departments. It was one of the first ones to be finished after the war, 1948. The products laboratory was still on the list, but low down. I think we got that somewhere in the early Fifties.

Fry: Before you retired, as you remember it.

Fritz: Yes, just before I retired.

Fry: How much did you do in the actual drawing up of the plans?

Fritz: They were plans as to what was needed--a wood chemistry laboratory, a testing laboratory, a dry kiln, and so forth, and a list of rooms and equipment.

Fry: A list of the functions the lab should provide for?

Fritz: Yes; I did not even finish that.

Fry: I wonder if this is in your papers anywhere. I don't remember seeing it.

Fritz: No, there was no correspondence about it. It was just myself and Mulford and Professor Cockrell who followed me.

Fry: And where would your suggestions and plans be?

Fritz: I don't know where they are. I had the official drawings of the Weyerhaeuser laboratory. They sent me copies and I made sketches. By plans, I mean only the general idea of space, functional rooms like a small dry kiln, and floor plans or layouts. The file was still small and didn't amount to much anyway. There was mainly telephoning and visiting. At that time, everything was in its preliminary stage. The real plans would be drawn by the University architect.

When the war ended, Professor Cockrell returned to U.C. from war-time duties at the great U.S. Forest Products Laboratory, at Madison, Wisconsin. I soon discovered to my surprise that Mulford had assigned the job he had given me to Professor Cockrell without informing me. I was still on the committee and I would see the plans, by that time drawn by the architect, but I had nothing more to do with it except as a member of the committee.

I'm very happy as to how the laboratory worked out. It is a much bigger thing than I thought we could get approved in 1943, and I had done so little on it, that I think my part in it was just practically nothing, except for the Sacramento part. It looked like the penurious days at the University were over. We no longer talked of mere hundreds of dollars.

I was a little peeved that Mulford would do such a thing, but it was characteristic of the man to assign something to one member of the faculty and then that member would suddenly discover that somebody else was working on it. So I dropped it like a hot potato. I was due for retirement anyway.

But everything came out well. The selection of Fred Dickinson to be the laboratory's director was a happy choice. He took over while the architects were still drawing up the plans in the early 1950's. The laboratory is now a real organization, thanks to Fred Dickinson, and has already won considerable renown. It is something that the University can always be proud of. Dickinson is a good administrator and a good researcher.

One day the head of the school was interviewing candidates. I had heard that Frank Kaufert, who I thought was a very good man for the job, had decided not to accept it. I was very regretful of it because he was a very able man. It was not the University's fault; the man himself made that decision.

Then one day I was in the office, and I noticed Fred Dickinson sitting in the dean's office--the doors were open. I decided in my own mind there was only one reason why he should be there--I knew

Fritz: his history. I went to my office and telephoned to the Dean of the College of Agriculture, and told him that I had noticed that Fred Dickinson was in the forestry dean's office--does that mean he's being considered for the headship of this laboratory? He said, yes. The Dean of Agriculture was an old friend of mine, Knowles Ryerson. I told him, "Knowles, for God's sake, don't let this man get away from you. This man is tops. He has something the other men didn't have."

He said, "I'm awfully glad you telephoned me about it because we were in a quandary about him." I don't know whether what I said about him had any influence but anyway he got the job, which was a satisfaction.

Fry: Why did you not seek the directorship for yourself?

Fritz: I have been asked why I did not seek the job. In the first place, I was so near retirement that it would not have been offered me. Then also, after declining consideration for deanships at Syracuse, Idaho, and Michigan State, and noting many times how deanships deprive a man of time to do things in his direct profession, I felt certain that administrative work was not for me. I have enough difficulty organizing my own life without trying to direct an organization. Having started a successful move for a laboratory at U.C. is enough satisfaction.

Fry: Your move for a laboratory was initiated in 1943, twenty-four years after you came to the University of California. Were there any earlier efforts?

Fritz: Yes. In 1925, there appeared to be an opportunity to make a bid for a forest products laboratory. It came about thus: The University had earlier acquired a tract of land in west Berkeley for agricultural experiments. Professor William Cruess, of the Fruit Products Division of the College of Agriculture, came to me one day to suggest that if we worked jointly, there would be a better chance for a successful bid. He was to have one half for his fruit products experiments and I was to have the other half for a forest products lab.

I took it up with Professor Mulford who thought well of the idea and approved my spending some time on rough plans for display to the administration. Some months later, he came to my office and told me to discontinue my "planning" because the administration had decreed that it was "not the function of the forestry school to make money for the lumber industry"! That stopped me. No one had previously brought up that view.

Any improvements the Forest Products Laboratory could develop would promote the practice of forestry. It was up to the others how they used our data for a more profitable business. Apparently, Bill Cruess got a similar instruction. His fruit products laboratory idea also died.

Fritz: When we were moved to Giannini Hall, one basement room was assigned to forest products studies. I requested Mulford's approval for the purchase of a testing machine. It was denied with the comment: "We should not duplicate equipment already available in the University's Engineering Lab."

Some years later, after our removal in 1948 to what later became Mulford Hall, Professor Bob Cockrell was successful in getting approval for a testing machine. Maybe I didn't punch the right buttons. Also, Fred Baker had become dean after Mulford's retirement.

After the Forest Products Laboratory was completed (in Richmond), I never visited it. My part in it was finished. The director, Fred Dickinson, is such a competent man that he doesn't need the advice of a retiree. My main interest was to have such a lab authorized, built, and staffed. Also, my interests changed somewhat, away from products. Actually they didn't change but returned to my original interest: getting forestry out of the talking stage and into the woods.

XII FOUNDATION FOR AMERICAN RESOURCE MANAGEMENT (FARM)

- Fry: When you retired in 1954, my notes say that you became an advisor to F.A.R.M., which spelled out is what?
- Fritz: Foundation for American Resource Management. It was incorporated in 1955.
- Fry: How did you find out about this?
- Fritz: I met Mr. Carl F. Rehnberg in 1950, at the dedication of a redwood grove.
- Fry: I understand from talking to you previously that it was a relative of Carl Schenck who introduced you. Is that right?
- Fritz: Yes. I was introduced to him by the late George Merck who was at that time the chairman of the board of Merck and Company. George Merck was a sincere conservationist, especially interested in the promotion of forestry.
- Fry: Is that the pharmaceutical company Merck?
- Fritz: Yes.
- Fry: And Merck was a relative of Schenck?
- Fritz: A distant cousin.
- Fry: Was it at this meeting that Rehnberg said he was interested in conservation and was considering setting up a foundation to promote it?
- Fritz: Yes. Rehnberg had put up some money for a redwood grove in honor of his wife. The dedication we were participating in, however, was that of the Schenck grove, named for Carl Schenck, a German forester who came to the United States in the middle 1890's. He founded Biltmore Forest School. Schenck himself had come from Germany for the dedication. Rehnberg told me about his plans and asked if I would be willing to help him out.
- Fry: To organize a conservation foundation?
- Fritz: Yes, and I agreed that I would. And I did become one of the incorporators of the foundation five years later. Mr. Rehnberg had earlier asked me to take charge of the foundation, including soliciting additional funds. I declined with thanks but agreed to act as an advisor on projects. This I expected to do without compensation. I had other plans for my retired years.
- Fry: So you started this about 1955, is that right?

- Fritz: Right. Between 1950 and 1954, I saw little of Mr. Rehnborg. He had become acquainted with Luther Hester of the Isaac Walton League and hired him to run the foundation and, of course, the preliminaries to incorporation.
- Fry: And is that when you began to be formally connected with it?
- Fritz: Yes, first as an incorporator, and then as a trustee and vice-president. Mr. Rehnborg was made president.
- Fry: The purpose of this was what, specifically?
- Fritz: As Rehnborg described it to me, he wanted to start a foundation which would encourage forestry practices, and the preservation of forests, scenery, local customs, and so on. He talked about buying up all of the cutover lands in the redwood region and then reforesting them! That was a huge order. When he talked to me in those days, he said little about saving more redwoods but expounded on forestry.
- Fry: What kind of a man was Mr. Rehnborg?
- Fritz: Rehnborg was a very interesting character, very intelligent, very active, but also precipitate. He and I were almost the same age. He apparently had had a rough early life, but since World War II, he made too much money too fast in his food supplement business. He wanted to spend some of it for good purposes. Of course, there was a tax gimmick too. He preferred to see his money spent rather than leaving it to Congress.

Just how deep his interest in conservation was at that time or whether it was just the idea of being a prominent man in the conservation field, I could not fathom at the time. At any rate, when he started F.A.R.M. he agreed to support it for five years. In that time, we sponsored the forestry studies of various people who couldn't finance their own research.

To start the ball rolling and to have an early product, the foundation got out a printed bibliography on coast redwood.* (He had a great love for the redwoods.) He thought that would be a good way to start, after which we should have made a lot of contacts with people who are researchers and who need funds to conduct their studies. But after about three years, it was very evident that his interest had changed and that he had become enamored of Tahiti. He told me he wanted to help preserve the old way of life of the Tahitians.

*Emanuel Fritz, California Coast Redwood, an Annotated Bibliography Including 1955, published by Foundation for American Resource Management, San Francisco, California, 1957.

- Fry: Was this in connection with his Nutrilite Products, Inc. business?
- Fritz: No, it was entirely separate. Our funds came via Nutrilite Foundation, which Mr. Rehnberg had organized for supporting boys' camps.
- Fry: What had you done by the time you saw his interest beginning to flag?
- Fritz: We had given money to study the influence of soil fungi on the health and vigor of tree seedlings and their establishment, a book for guiding conservation teachers in the north coast counties of California, and a book on California lands by Dana and Krueger, and so forth.
- Fry: And had you actually bought up lands and made any plantations?
- Fritz: Not an acre.
- Fry: Did you never buy any lands?
- Fritz: No. I explained to him what it would mean. It would take several hundred million dollars to buy up all the cutover lands in the redwood region and reforest them. He was told of the difficulties attending reforestation and that considerable research is needed to study effective reforestation methods.
- Fry: And I understand you had \$100,000 to work with, is that right?
- Fritz: You mean to start with? No, we had \$50,000 to start with. He put a total of nearly \$500,000 into the Foundation. That included costs of running the office, which cost did not come from Nutrilite Foundation's treasury but out of his personal pocket.
- At the end of the five-year period, he was so involved in Tahiti that he decided to dissolve F.A.R.M. We had also learned that his understanding of conservation was preservation. Forestry to him, I learned, was not conservation.
- Fry: Was this money that he put into F.A.R.M. Nutrilite money or his own money?
- Fritz: The money to F.A.R.M. came directly from the Nutrilite Foundation. Nutrilite Foundation owned a large share of Nutrilite Products, Inc., of Buena Park, California.
- Fry: So I suppose the money for the Nutrilite Foundation in turn came from Nutrilite Products, Inc.?
- Fritz: Yes. Nutrilite Foundation was eventually to own ninety percent of the producing company. I don't know if they ever got up that high or not. It was a very profitable thing. His product at that time was sold as a food supplement--vitamin and mineral tablets and capsules, distributed direct to the house by agents through a private

Fritz: sales company. It was a very interesting marketing practice, and it was separate from Nutrilite Products, Inc. We had nothing to do with that, of course. Later on, he developed a line of cosmetics. At the present time, I don't know what they're doing, except for the food supplement and the cosmetics. His interest has changed again. He's now absorbed in astronomy and has his own observatory.

Fry: Where's that?

Fritz: Near Hemet.

Fry: What was he doing in Tahiti then, that began to take money from your . . . ?

Fritz: I don't know. He went down there I think just on a visit and loved the spot and soon felt that that particular kind of life should be preserved, along with local traditions and customs. Then he bought the hotel, and a year later, it burned down. I think he has rebuilt it. It cost him a big wad of money and was a great disappointment to him.

Of course, he had to work with a government that took Americans for suckers, the French government, and just what the status is at the present time, I don't know. He was justifiably very angry over having been so badly used.

Fry: How did you find out that you were supposed to dissolve F.A.R.M.? Did this come as a surprise to you?

Fritz: No. He was one of the trustees. Kenneth Smith was president at that time. I was surprised that his interest in it lasted that long.

Fry: So you saw this developing then, through your board meetings and so forth?

Fritz: In fact, I was in Europe in 1960, away for three months. I was told about it before I left. When I came back, all I had time for was to gather up my own stuff and see that the remainder was packed and shipped to Buena Park.

Fry: Can you give us a description of what you did for these five years that you were with F.A.R.M.?

Fritz: The amount of money he gave us wouldn't go very far. Three applicants were for money for studying mycorrhiza, publishing a redwood bibliography (completing one I had started), and sponsoring a Douglas fir insect study. We sponsored preparation of a book by Dana and Krueger, provided funds for a guide book for redwood region conservation teachers, and supported a teacher to work for his Ph.D. degree and thesis on redwood.

Fritz: We gave one man about \$7,500, as I recall it, to get a Ph.D. at Oregon State College and to write a dissertation on the management of old-growth redwood.

Fry: Who was that?

Fritz: Professor Ed Pierson of Humboldt State College. We had many applications, we turned down some, and we learned how many people wanted a cut of the pie. Some projects didn't qualify at all. Of course, actions were taken not only on my recommendation but by the trustees themselves.

We had somewhat over \$100,000 left when we closed shop in 1960. This the trustees voted to spend directly on a study of methods of reforesting old redwood cutover lands, a method which would give a higher percentage of survival than was being obtained.

Fry: This sounds like one of your ideas.

Fritz: It was the original idea of 1950, the one I'd told Mr. Rehnborg about when he first asked me about projects. He bought the idea but later he didn't regard it as germane to conservation.

The trustees voted the money to be spent on this reforestation study. I was the trustee to oversee it. We hired a forester as a field man who, with periodic help, would do all the work--the planting, look out for the protection, keep the records, keep up the fences, and make periodic studies of the survivals. And whenever possible try to figure out why some plants died.

We thought that the man should put his full time in on that, not as a side issue, and that he should live near the project. So the man had to live in Fort Bragg, nine miles east of the project area. Too many times, projects like that are started, and the plants are put in the ground in the spring and are not looked at again until the following year; and it was impossible to pinpoint causes. But our man was out there all the time so he could detect if anything was wrong. The project was begun in 1961 and finished in '66.

Fry: Who was this man? Was he a forester?

Fritz: We had three of them in succession. One unfortunate thing was we didn't have the same man the whole time. The first was Henry Houghton, a Syracuse graduate but not in that particular field. His experience was mostly in forest engineering work. He had to quit us because he was losing his eyesight.

So we got another man, a graduate of Humboldt State College in forestry, Fred Glus, who was very good and tremendously interested. But he was killed one night in a highway accident. So then I got another man, James Rydelius, and by chance, he also was a graduate

Fritz: of Humboldt State College and also had a master's degree from Yale University Forestry School. (Fred Gius had a master's from the University of California.)

Fry: And how did your third man work out then?

Fritz: Excellent. He was coauthor of the final report.* Like Fred Gius, he was tremendously interested. So interested that as long as he lives, I imagine he'll be going back there to see how his plantings are getting along.

The project was to run only about five years because the first two years of a plantation in this region are critical. If the seedlings survived them, one could say that it was established. So we started a series of experiments the first year and duplicated them the second year and added some new ones the third year and so on. We even started some in our last year. I've been up there once since, to see how they're getting along.

The report is finished and the Foundation is now being dissolved; and the residual money is being returned to the Nutrilite Foundation, which in turn will use it for its boys' clubs. Mr. Rehnborg had a great interest in that.

Fry: Boys' Clubs of America?

Fritz: I don't know if they were purely local or affiliated with the Boys' Clubs of America.

Fry: How much money did you have to return?

Fritz: Something like \$20,000. So the project cost us about \$80,000.

Fry: Were you able to carry on this project long enough to bring any conclusions to light?

Fritz: Yes, we found some very important things. One of them was that most of the mortality of seedlings begins right away, right after planting, and continues through the next two or three months. I think it's important because that gives an idea of what one must do to get a better record of survival.

We know that we have to have good stock, we know that we must have good soil, we know that the soil must be moist all through the summer, moist enough for the plant. It's a question of seeing that a good plant is properly planted in the first place, to see to it that whatever moisture is in the soil from the winter rains is

*Emanuel Fritz and James A. Rydelius, Redwood Reforestation Problems: An Experimental Approach to Their Solution, Foundation for American Resource Management, 1966. 500 copies.

Fritz: conserved or made to last through the summer. We tried putting down sheets of building paper on the ground, with the plants coming up through holes. (The same scheme is common in the great pineapple fields in Hawaii.)

Fry: To conserve moisture?

Fritz: Yes, to conserve moisture by preventing evaporation. There were many other things that were recommended that didn't work, for example, treating a plant with a coating that would cover all the leaves and stems and in that way cut down transpiration. It didn't work well enough. We also pruned the twigs to restore a balance between roots and needles. Some roots are lost in lifting the seedling from the nursery and transplanting it. It's a good idea but not practical enough.

Most of the methods helped, but they didn't justify the extra cost. Of course, our project was on a very uncongenial site. We took it because we felt it to be a good growing site once the new forest was established.

Fry: You didn't plant plots then on different terrain, different soil conditions?

Fritz: It was all more or less the same soil, thirty acres of it. On such an area, there are bound to be some differences, even between each planting hole. We talked about having a soil analysis made early--one of the first things--then decided not to because we wouldn't know any more at the end than we did before, for this reason: when you make a soil analysis, you do it by sampling. That doesn't mean that you're going to put a plant where you got this sample. And it doesn't mean that the plant that you put there will either grow or die.

So I preferred to do all the planting first and continue the project to some logical end, and then make our soil examination, concentrating on only the spots on which the trees died. We were less interested in the ones where the seedling survived.

Fry: In other words, you were aiming at seedling mortality and the causes of that, not especially on comparative growth rates under varying conditions.

Fritz: No. We used both Douglas fir and redwood, more Douglas fir than redwood.

Fry: So this was more than just a redwood study?

Fritz: You know, when a farmer plows a field, what he plants is determined not only by what the soil will grow but what the market will buy. At present, the market will buy Douglas fir on a larger scale than it will redwood, of the same age--under one hundred years.

- Fry: Were you concerned also with the relationship of redwood growth among Douglas fir, and the relative mortality?
- Fritz: Yes, when they're mixed up; that would work out that way anyway because we have the rows together, they alternate.
- Fry: You might tell us the size in acres of this study and from whom you borrowed the land.
- Fritz: The fenced area was thirty acres. We didn't use quite all of it. The Union Lumber Company, of Fort Bragg, gave permission for its use.
- Fry: And this meant you had about how many thousands of seedlings to look after?
- Fritz: I never added them up. Every year we'd buy more than ten thousand.
- Fry: What happened when you had to close this down? Do you think anybody's going to be around to do the soil tests?
- Fritz: The company has a forestry department.
- Fry: And you think Union will continue this?
- Fritz: Oh yes, they go out there once in a while to check up on the plants and to see what they look like. And also to check on the fences. We had to put a fence around the whole property to keep the deer out because next to fire, the deer are the worst handicaps we have.
- Fry: Yes, the deer keep nipping off the tips of the seedlings.
- Fritz: That's a very discouraging thing. They take more than the tip.
- Fry: You could study the silvicultural aspects of growing redwood seedlings, but you'd still have the deer to contend with.
- Fritz: Of course, we don't know how many the deer got that we attributed to other causes, although I don't think they'd amount to anything because our fence was tight at that time. Later on, we noticed the deer started breaking through the fence, and we put up fences inside the main fence. Every time we planted something, each year's planting was then fenced separately.
- Fry: Do you think that this is going to be something that can be used by the industry?
- Fritz: Unquestionably. The forestry department of each company got a copy of the report, also each redwood region library, and each local high school and college.
- Fry: Are you going to follow up personally just on an informal basis what the seedlings do?

- Fritz: I'll be going up there once in a while. Of course, I can't walk very much any more and have to depend on others who might be with me. Jim Rydelius will follow through also, if only for his own benefit.
- Fry: During these five years, did you spend any time out there on the ground going over things?
- Fritz: I went up there occasionally, not as much as I would have liked, but enough to keep in touch with the men. We had frequent telephone conversations. I got a weekly report of what was being done.
- Fry: Was this a full-time job that you had?
- Fritz: I got no compensation out of it. The local field man was the only salaried employee. Occasionally, he had to hire others for help.
- Fry: So this wasn't some kind of postretirement employment that you had?
- Fritz: No. I did get part of my expenses. The money all went into the project and to the man we hired. We had to buy a truck, a chain saw, and a lot of small tools. The chain saw we needed for cutting down some of the interfering trees that occupied part of the area.
- Fry: I see that your report is 128 pages. This is available, I guess, in the Forestry Library, at U.C.
- Fritz: There are no copies to be bought now. We had only five hundred printed.
- Fry: How do you feel about this whole F.A.R.M. project? Are you sorry that it ended?
- Fritz: I wish the Foundation could have had a more substantial base. It was very difficult for me and other trustees to understand just what Mr. Rehnberg had in mind, how he interpreted conservation or forestry. I don't know today just what he means by conservation, except that he does not regard reforestation as conservation!
- Fry: What's an example of what he thought conservation was?
- Fritz: Buying a piece of land and calling it a park, not cutting anything.
- Fry: More a preservationist?
- Fritz: Yes.
- Fry: Have you received any response from your report yet on the part of foresters in Industry?
- Fritz: Oh yes.

Fry: What's some of the feedback that you've gotten?

Fritz: They're all delighted to have a copy, and they complimented us on the amount of work that went into it.

Fry: You have a feeling then that this will be incorporated into forest management plans, where redwood reforestation needs to be done?

Fritz: No, that is not something that you can incorporate, but it can give you a lead as to how to do the planning. At least the foresters will know the experience we had so that they are on their guard. I understand it's to be reviewed somewhere. Maybe it will be "panned."

Fry: Who did the editing on the report? Did you do it?

Fritz: Yes. I wrote maybe ninety percent of the first drafts. I would write, and Jim would go over it. Jim would make a lot of changes and I would rewrite it. In some cases he wrote the original and then I would edit his. So I think you could say that it was a fifty-fifty job. How the contents will be used is up to others.

Jim, I am happy to say, got a job in Simpson Timber Company's research department before the report was finished. So he put in a lot of time on his own.

Fry: What do you think of your work with F.A.R.M.?

Fritz: I never wanted a job from F.A.R.M., but I succumbed to Mr. Rehnborg's initial enthusiasm. I had much different plans for my time after retirement from the University in 1954. Before I could get my breath, the simple office space I had recommended grew to four rooms. Had Luther Hester been kept in F.A.R.M. as its administrative head instead of being taken into the company, where he rapidly became its president for a short time, F.A.R.M. might have survived the changes in interest. In its short life, F.A.R.M. did do considerable good at a low cost.

XIII GENERAL COMMENTS

- Maunder: Do you see any long-term diminution of the influence of one or the other type of forester, as the field develops?
- Fritz: I believe you refer to the employment of forest school graduates by private industry. The number in private employ is already exerting a strong influence.
- Maunder: Is the proportion of foresters in private employ going to continue to increase?
- Fritz: Oh yes, it's bound to happen. You just can't hold forestry back on private land. It's impossible because of the inexorable laws of economics and the desire of the timber investors and the manufacturers to stay in business. It's the only business they know, and they are bound, without the help of any foresters, to give thought to the perpetuation of their industry.
- When a sawmill is out of logs, it has nothing but scrap value, while if it has a continuous supply of logs and if it is properly maintained, it's better than a brand new mill.
- Maunder: You were over at the Fort Valley celebration, and you heard some of the talks and speeches that were given there. You heard Dr. Richard McArdle's talk that night in which he dealt to a very considerable degree with the history of forestry and the progress, or lack of progress, which he felt was being made in comparison with, let's say, developments in other fields. What might you say of this expression of opinion from the top echelon of government forestry?
- Fritz: I have a high regard for Dick McArdle, both as a man and as a forester. He came up through the ranks during the days of turmoil. He has a better bunch of men under him than did his predecessors, better trained and better outlook. There are, however, several on his staff who absorbed some of the socialistic views of the Thirties and Forties.
- It is hard for a man in public service to fight off the temptation to lord it over others. Mac is not of that breed. I don't think he was pessimistic over the lack of progress. He has seen much progress in his own time. There could have been more, of course.
- Maunder: What would you say about McArdle's statement that progress in forestry has been slower than that in the fields of medicine, transportation or communication? Does his analogy bear up under careful scrutiny?
- Fritz: The progress of forestry, I think, has been good when you analyze the handicaps. The handicaps were men like Gifford Pinchot, Herman

Fritz: Chapman, Earle Clapp, Chris Granger, and several others who kept the pot of antagonism constantly stirred.

Forestry would have come to the lumber industry if there had never been a forester in this country or a forestry school, but it would have been slower and it would not have been launched as well as it is being launched now, because foresters in the past--in federal service, in the state service, and in the forestry schools--have all contributed a great deal to the knowledge of forestry. A lot of it is purely academic, but on the other hand, a lot of it is very useful and it has made people think. However, I think the progress of forestry would have been better and faster if Pinchot had set the stage for a friendly cooperation, the kind of cooperation that Greeley was trying to work out.

I think it's a great tribute, a monument, to Colonel Greeley that he was able to do so much in such a short time in the Northwest. His influence has spread over the entire United States. He was severely criticized for his stand but it has been proved quite correct at the present time.

I think from here on out, forestry is going to develop so rapidly that it will outdistance the academic foresters, and I think that in the future, the Forest Service will be just one more bureau. Leadership will come from the foresters in private employ as to the progress being made. The comparison between forestry and medicine is well made. Medicine is much older, its men have had better training, and the economic aspects were quite different.

I don't think that a man can do as good a job in public service as one in private employ, where somebody is watching him all the time to see that he spends every dollar and every hour economically and that he produces something for it. There isn't that supervision in public employ, whether city, state or federal.

Let us not forget that our public foresters have not yet learned to their own satisfaction that they are managing the forest correctly. Certainly the national forests are not managed as economically as they could be.

Maunder: That would seem to imply that a greater and greater proportion of the original and field research in forestry is going to be sponsored and carried out from the private side rather than the public. Is that the course that you expect to see develop?

Fritz: I do, and it's been true of all professions and industries. Much of it is experimentation rather than research but just as important. Take the steel industry--you can't say that its progress was due to federal activity. It was done by men who saw the value of research, and I would single out two men: Andrew Carnegie and Charles M. Schwab. They saw the drawbacks of the steel they were making at the time, they needed better steel, and they got it by turning researchers loose. My very first job of any consequence

Fritz: was from the president of the Maryland Steel Company. When I went into his office, he was sitting at his desk with a compound microscope studying a piece of polished steel. That was all brand new at that time. When I got into forestry, a lumberman wouldn't know which end of the microscope to look through and probably thought you were foolish to look at wood so minutely.

The story is different today. At least, such study is now respected. But don't ridicule American forestry. I think the American foresters are way ahead of the European foresters when you consider the economic conditions and the short time they've been at it. We'll probably be a long time reaching the intensity of European forestry. I hope we never have to come to it. We might have to if our population is permitted to boom along as it has, but it is not good for the country.

Mauder: Emanuel, all through your professional career you have been, I think, noted as a letter writer, article writer, and a public speaker at important meetings of conservation groups and the forestry profession. Can you tell us a little bit about that part of your career?

Fritz: I don't know that it's so very important. I wrote a lot of papers, but they were mostly of the argumentative type, or in the form of argument--more of that than technical, although a few of the articles I have written are technical and some were never published. I probably did more of that than some other teachers, but there were many teachers who did a great deal more than I did and did it much more effectively.

I have always fought shy of the platform and still get scared when I do mount it. I am not a good speaker and can make an awful mess if I try to speak extemporaneously. You probably noticed at the recent S.A.F. and A.F.A. meetings, I kept myself in the background. I follow the practice that if anybody else is doing the job I'm thinking about, let him carry the ball; and if he gets into trouble, I'll help him out. But as long as he's doing a good job and is accomplishing something, I won't interfere with him. There's enough glory for all.

Mauder: I've noticed that in recent years you've been a rather frequent contributor to discussion in the pages of American Forests magazine. When did you get interested in the American Forestry Association? Can you tell us a little about your participation in its affairs and in its publication?

Fritz: I've been a member of the A.F.A. as long as I've been a member of the S.A.F., and I've always taken a strong interest in it, but the A.F.A. has been up and down. For many years, it was considered to be the mouthpiece of the Forest Service, and then when it accepted advertising from the lumber industry and ran an occasional lumbering article, it was accused of being under the thumb of the lumber industry. I think if either was a fact, it was bad, but

Fritz: in general, the A.F.A. was rather independent.

The fact that I didn't write much for the American Forests magazine in the past was due to my feeling of obligation to the Journal of Forestry. In more recent years, because the American Forests magazine has a different audience than the Journal of Forestry, I thought my articles on certain subjects should go in there. They were not articles, incidentally, but letters.

Maunder: You look upon the American Forests magazine as one of the principal means of reaching the public in matters of conservation and forestry?

Fritz: Yes. Just because a person is not directly involved in natural resources doesn't mean he is not interested. Its audience is not trained in general conservation or forestry, or mining or watershed protection, but they're all fine people, they're well-meaning people. They get only one side of the story from the propaganda that the press publishes. Sometimes the magazine itself is somewhat one-sided. The most recent example, I think, is the issue of this past spring which goes overboard accepting the interpretation of the Forest Service in the Timber Resources Review data. The data is probably all right but the interpretation has gone wild, I think.

Maunder: In other words, you feel that Jim Craig and his staff have missed the point on that particular issue?

Fritz: Yes. The editor is not a forester, he's not a conservationist, but he's definitely interested. He is a journalist, and a journalist's job is to print articles in his magazine that will be read. Like many editors, he has to depend on what is sent to him, and it takes a keen nose to detect the possibility of the stuff being slanted. Agencies sending out news releases don't do it to help the press, but to do one of two things: to do genuine educational work, or to soften the public on some action the sender hopes to take against possible opposition.

Press releases need careful scrutiny. Then there are the free lance writers who have a flair for writing but not the will or training to investigate facts.

Maunder: Emanuel, looking back over your career in this field, how would you evaluate your contribution to the field of forestry?

Fritz: Well, compared to that of many other foresters, my contribution is miniscule. When I switched to forestry, I felt that it was not only a desirable profession with a constructive objective, but nothing seemed to be done about it except talking and writing. So I decided early to make my own activity the transfer of the talk into action: putting forestry into the woods. At the University, I taught lumbering and wood technology, not forestry.

Fritz: But the vacuum in forestry drew me in and ever since then, my own concern and activity is related to getting forestry into the woods. I think I have been at least partially successful. Perhaps I also helped defeat the trend toward socialism in forestry.

I felt that if I stuck to forestry, I wouldn't be scattering my shots. Furthermore, I don't think I would have had the capacity to take care of them all. I notice among those foresters who shifted over into watershed protection and wildlife management that they haven't done forestry very much service by leaving it, or they haven't done very much for the other fields by going into them because they certainly were not trained for them.

Maunder: Recreation seems to be getting more and more attention these days. Have you anything to tell us about the history of the development of that concept of forest use?

Fritz: Recreation was always a part of forestry. Its increase was inevitable. The American people have always loved the outdoors. There was so much woods and forest to go to close to the towns, big and little towns, that the people got an idea that all the wild country was theirs to enjoy.

As a teenager, I was out in the woods a great deal, and particularly in the beautiful Druid Hill Park, on the edge of Baltimore. On Saturdays, my classmates and I used to take a lot of hikes, or we'd bicycle out on the country roads, such as they were in those days--hard on tires.

Recreation must be made a part of land management. Forestry, recreation, and wild life management must be made congruent elements of forest land management or there will be interminable conflict. But private owners who are opening their lands to recreation and fixing up overnight camps should familiarize themselves with legal aspects. They are setting up what the public will demand as a continuing right. Entrance fees should be required when feasible. I've noticed that wherever a recreationist is charged for a picnic table, he is always a better citizen, a better housekeeper, than if it's all free and he thinks that there'll be a ranger around to pick up after him.

Maunder: What do you think lies behind this temporary trend of making private lands freely available for the recreationist? Why don't they charge for it?

Fritz: Unless a caretaker is always in attendance, entrance fees are hard to collect. The cost will have to be charged to the public relations account. Prepared camp sites help concentrate the people, so they can be observed, to prevent mischief, and to facilitate sanitation and fire protection.

Maunder: What do you think of the wilderness proposition that's so much before us these days? What do you know about the history of the

Maunder: wilderness idea?

Fritz: The wilderness area is just, you might say, an extension of public parks, but it has that name because it's not in park status and it is certainly wild; yet it is actually park land when you come right down to it. The present controversy over the Wilderness Bill, Senate Bill 4807, would not have occurred at all if it had not been for some so-called professional conservationists who are making jobs for themselves in demanding that the already existing wilderness areas be given legal status.

They have legal status now, in a way, but it's flexible. But they want it surrounded, you might say, by a fence of law and then have their own supervision. I think that's very bad management because you superimpose on the National Park Service and the U.S. Forest Service another authority. They claim that they won't exercise any authority or interfere with the National Forest and National Park people. Well, you never heard of a bureau being set up, or even an office, that remained stationary. They will have to have supervisory personnel, rangers, and fire protection. The present publicity will cause so many people to visit the wilderness that it will not long remain wild.

Maunder: Tell us about your affiliation with the Sierra Club. When did you join that group?

Fritz: Well, I would have joined it immediately on my arrival in California, but being in forestry work, I would get plenty of hiking on the job. Before the University had automobiles and before I had one, I would walk many, many miles in the woods, and I'm glad it was necessary to do so because in my opinion, that is the only way to learn something about the forests. You can't travel as fast and you have to stop and rest and look around. If there is a better way, it's from the back of a horse where the horse watches the trail and your eyes can roam around at will.

Maunder: When did you get into the Sierra Club?

Fritz: About twelve years ago. One of its officials, a good friend of mine, thought I should be a member, so I signed up.

Maunder: Have you ever taken part in their affairs?

Fritz: No. I don't care much for their kind of hiking and big parties; it's more of a mob. I prefer a more leisurely hike so I can learn something about the vegetation, rocks and general terrain.

Maunder: This Club draws to a considerable extent for its membership from businessmen and professional people, doesn't it?

Fritz: Yes. That's the logical membership because they don't have as much opportunity as a field forester has, to be in the woods, and

Fritz: in order to save time, they join the Club and have organized hikes.

Maunder: You've observed a lot of groups of this kind during the years. Have you developed any insight into the mentality of people who make up these very vocal conservation groups?

Fritz: Yes, I have. In general, they are a fine class. Some join to enjoy the outdoors with others of the same interest. Some join to help the Club promote its projects, such as saving the dinosaur area, a part of Grand Canyon, and the wilderness. Just to be hiking is good fun and healthful exercise. A few, interested in plants, animals or insects, get much more out of a good hike. A Club hike is a good medium for making friends--and also converts for the Club's projects.

Maunder: Do you think this is a generalization you can make about the rank and file of the members of such groups?

Fritz: One gets the impression from the Club's pronouncements on causes that it regards itself as the only simon-pure conservationist. The idea of putting a resource like a stream or forest to some use is abhorrent to the extremists. Nature must be left alone. The wilderness must not be touched. The "ecology must be left complete," whatever that means.

Well, conservation is indeed important. It should start at home. Many of our loudest conservationists direct conservation only to the other fellow's property. To really enjoy the wilderness, one must be the first one there after the snows have melted. When the hikers have come and gone it is too late. The vegetation really takes a beating. Having said all this, let me hasten to say that we should preserve reasonable-sized areas in their primeval conditions except for trails to which visitors must be constrained.

Maunder: What other groups or organizations fall into this same general category, which you define as "professional conservationist"?

Fritz: There are now a number of resource conservation associations. All have a good purpose. How they go about achieving their objective depends on the executive head. Very few are trained for the job. To keep the organizations alive, the executive must be adept at keeping his members stirred up over causes, issues, and projects, much like a trade union boss.

I fail to see why there is so much agitation to set up a council for support to the heads of the National Park Service and the U.S. Forest Service. The wilderness has been protected for many years by the National Park Service and U.S. Forest Service. Even if a council is set up, the protection job will remain within these bureaus. But once a council is set up, it will soon grow into a large bureau. Bureaus are never static. They grow and grow. The public will be invited to visit its wilderness estate. Nothing

- Fritz: could be worse than to have the wilderness overrun by people. Soon they will demand roads and buildings and that will be the end of the wilderness.
- Maunder: Do these conservationists stand opposed even to trails in this wilderness area?
- Fritz: Not so much trails as jeep trails and roads. They don't want any vehicles out there. Horses and mules are permitted, but they have to eat and they certainly aren't going to carry hay for them. Except perhaps for oats, they're going to have to live off the country. If twenty-five parties go over the same trail, the last party is going to have a hard time finding feed for the horses. So there goes your meadow and there goes your prairie and all the wild flowers we came to see.
- Fry: This has been a big recording project for you, often with many long intervals between sessions. It is time we signed off, though I would guess that you are accustomed to such assiduous work. Thank you very much for your labor.

APPENDICES

Recommendations for Accelerating
the Acquisition of Redwood lands for State Parks.

In my opinion, the acquisition of superlative stands of redwood for reservation as state parks is not progressing rapidly enough. We now have about 73,000 acres in federal, state, county and private parks of which all but about 10,000 acres is old growth timber.

We should have an additional 30,000 acres to give us a total of about 100,000 acres in parks. This would amount to more than 10% of the area of remaining stands of old growth. The volume of old growth timber in the parks is not known. If similar superlative timber is added to round out the 100,000 acres the volume could be as high as 25% of the remaining stands.

The addition of 30,000 acres becomes more remote and more unlikely, each year unless the acquisition program is stepped up quickly. The reasons follow.

We used to be able to buy the best timber for \$2.50 per M. Similar timber today will cost 10 to 15 times as much. Old growth timber is no longer in surplus. This fact and the decreased purchasing power of the dollar operates against us.

It is more difficult today to obtain large donations. Any monies donated today will buy only a small part of what they would have purchased only a few years ago. If we wait for donations at the rate they are coming in the 30,000 acres will never be acquired. No timber owner will wait so long. He will cut his timber or have it cut by someone else.

The matching principle, under which private donations are matched by State money, is good as a principle, but as long as State money is not available until an equal amount of other money is contributed the State's dollar is worthless.

The longer we wait to complete the purchase program the more money will be needed and the less likely will it be forthcoming. The day of ridiculously cheap stumpage is over. The current price is not yet at its upper limit. Certainly it is not yet as high as the price of less superb Douglasfir, sugar pine and ponderosa pine.

Remedies

To accelerate the purchase program I suggest thorough consideration of the following:

1. Explain to the Legislature the situation as it is and that it would be cheaper for the State to scrap the matching principle, pass a bond issue of \$30,000,000 at once, and complete the purchase of the necessary tracts as quickly as surveys.

appraisals and negotiations can be completed. (For every \$1000 the State contributes today to match \$1000 of private money - were the private \$1000 available - the State will have to contribute \$2000 or more when private money does become available some years hence. And at that time the private contribution will have to be doubled also. Consequently the State would be out not one penny by appropriating \$2000 now to make purchases outright and without private help).

2. Make our money go farther by a change in the League's basic principle under which purchases must be untouched old growth. We already have enough primeval park land for scientific purposes. A large part of the 30,000 still needed would be injured very little, and only temporarily, if, prior to acquisition and under League supervision, light selective cutting is arranged for. In this way we would lose some of the largest trees but the areas could be acquired much more cheaply and, by the time they are really needed for public use, the residual trees would be grown to greater size and all gaps would be filled in. Timber so thinned grows at an accelerated rate. Highway strips would be left intact except for dangerous trees.

The figure of 100,000 acres is my own estimate of a desirable completed total program. As far as I know the Save-the-Redwoods League has no written program for its guidance or for the enlightenment of County officers and private owners who want to know and should be told what the League's plans are. The Olmsted data should be worked up without delay and made available, even if it requires the employment of a full-time assistant.

The Save-the-Redwoods League has done an outstanding job in acquiring about 60,000 acres of redwoods for state parks over a period of 30 years. The rate of acquisition has slowed down significantly. The League cannot maintain its prestige if it falls down on the job of completing the acquisition.

I ask that the President be directed to appoint a committee to investigate this matter without delay and report within 3 months on the advisability and desirability of the recommendations made above.

Emanuel Fritz
University of California

Presented to the Save-the-Redwoods League Council
October 23, 1952

Oct. 24

1932 OCT 24

GOVERNOR IS PLANNING TO OUST STATE FORESTER

M. B. Pratt, On Job Fifteen Years, Likely To Go In "Cleaning"

LUMBER INTEREST MAN STARTS MOVE

Rolph Says Firing Will Get Rid Of Official Disloyal To Him

STATE FORESTER M. B. PRATT

is facing ouster by Governor James Rolph on complaints filed by Rex Black of San Francisco, chairman of the state board of forestry, executive secretary of the California Forest Protective Association and legislative lobbyist for the larger lumber interests.

The governor admitted to-day that Black has recommended that Pratt, who has been forester for fifteen years, be ousted on the ground that he "is incompetent to handle the forestry camp unemployment program."

Resignation Asked

While the governor said he will talk with Black and Pratt before acting on the former's ouster recommendation, Rolph's secretary wrote a letter to the director of natural resources last week requesting that Pratt be removed.

The ouster of Pratt, if it transpires, Rolph said, will be "just the beginning of the cleaning out of those officials who have been held in fat jobs from the previous administration but who are said to be disloyal to me."

Promises Cleaning

"It has taken two years," said Rolph, "to find out who these disloyal guys are, and mark my word I'm going to clean 'em out or they will have to run to cover. I'm going to break up this ring."

The governor fairly shouted in thus declaring himself in newspapersmen who had gathered in his office to inquire about the progress of the investigations being made in three deputations as an aftermath of the discharge of Walter B. Garrison and James L. Hara, director and deputy director of the department of public works.

complaints against Pratt and then he proposes to find out whether there is any truth to them and if so to take appropriate action.

"During my trip through the nine northern counties the last four days," said the governor, "many protests were made to me against Pratt.

"He is charged with playing politics, of having done everything possible to defeat Justice Hugh L. Preston for the appellate court, and with incompetence in fighting forest fires in the coast counties.

"I never heard anything but protests against Pratt on the trip, although I have received some telegrams urging that he be retained.

"Black has informed me that Pratt is incompetent to handle the establishment and supervision of the forestry unemployment camps this winter and has asked that he be removed."

Candidate In View

It is reported Black has a candidate for Pratt's position, which pays \$5,000 a year, but the governor denied knowledge of this. He is due to have a conference with Black to-day.

Raising his voice to a high pitch, the governor declared he is determined to have a showdown on "those who have accepted favors from me in state positions but who are now knifing me in the back."

Will Be Boss

"I'm going to be the head of this administration," asserted Rolph with emphasis, "and if the evidence proves Pratt should be fired he will be fired. And I will start in on others, too.

"I'm disgusted with these psalm singers who praise me to my face, accept favors in the form of fat state jobs they held under former administrations and then knife me.

"Appointive state officials are going to be loyal to me or I'm going to kick them out of their fat jobs. Surely I am entitled to loyalty from all who hold office at my pleasure. Everybody will agree to that.

"I have been told that a lot of officials are disloyal to me and I'm on their trail. If I find out these reports are true, they will be ousted without ceremony."

Blames Black

Pratt laid the entire movement to bring about his removal to Black. He said Black has been "gunning" for him since the Richardson administration.

"He attempted," said Pratt, "to have me removed during the Young administration. He even went so far as to go to the rangers and attempt to break down my organization. He became particularly obnoxious at the beginning of the present administration and began snooping around trying to get something on me.

Hears Ouster Talk

Black succeeded on getting on the board of forestry and got the governor's car on the organization of the unemployment camps. When I returned from the East in January after attending a convention of the National Association of State Foresters, of which I am a past president, I heard that I was to be ousted and transferred to run the state nursery at Davis.

"I found out that Black was the man who was making these statements. I got hold of Black and he told me he felt I wasn't the man for the position of state forester. He said that he had been authorized to make me the proposition of

taking over the operations of the state nursery.

OFFERS PRATT JOB

"Black told me he thought he could get me \$5,000 a year for the job. He said that if the money could not be found in the funds of the state division of forestry, that he would make up the difference out of his own funds. I presume he meant the funds of the California Forest Protective Association, of which he is secretary."

Pratt said that on October 6th Dan H. Blood, state director of natural resources, received a letter from William A. Smith, private secretary to Governor Rolph, stating that arrangements were being made with the state board of forestry to give him another position. This was followed by a second letter from Smith on October 10th, instructing Blood to remove Pratt from office. Blood at that time is stated to have asked for a personal letter from the governor embodying those instructions. This letter has not been written so far as is known.

MAN NAMED

William Scofield, a timber appraiser for the state board of equalization, is stated to be the man that Black wants to have appointed as state forester. Scofield was formerly secretary of the Humboldt Redwood Association and city planner of Eureka.

Pratt denied he had engaged in any politics against Judge Preston, and added that he had actually worked for Judge Preston during the campaign and had suggested to the men in the organization that they vote for Preston. He added the governor's charge of doing politics against Preston was rather amazing in view of the facts.

Accusation Denied

One accusation against Pratt is that he went into Mendocino County in the same automobile with Justice John F. Pullen. He vigorously denied this report and said that the men on this trip into Mendocino County were a representative of the division of parks and a representative of the housing commission.

"I have extended every co-operation to Black," said Pratt, "in the operation of the unemployment relief camps.

"When I returned from the East in January, I found that the operation of these camps under Black had gotten into a mess. I instructed the men in my organization to extend every co-operation possible to making these camps a success and it was through the efforts of the members of my organization that the unemployment camps were put over.

"I think that I can run this job as state forester as well as anybody else in California and I intend to put up a fight for it. The governor has given me personal assurance on at least three occasions that my work is and has been satisfactory."

Sacramento Bee

25 October 1932

GOVERNOR ABOUT FACES ON FORESTER FIRING MOVE

All A "Mistake" Says Rolph As Storm Against Proposed Action Takes Shape

WRATH COOLS QUICKLY AS STRENGTH REVEALED

"Must Have Been Another Man" Is Explanation Of Sudden Change

WELL, it was a mistake after all, this thing about Governor Rolph going to "fire" State Forester M. B. Pratt.

"A case of mistaken identity," said the governor. "It must have been somebody who looked like Pratt who campaigned in the northern part of the state knocking Justice Hugh L. Preston.

"You know, I've always liked Mr. Pratt. He will stay on the job."

Starting Change.

Yesterday morning, returning from a trip through nine northern counties, the governor pounded his desk and fairly shouted his denunciation of the veteran state forester before the press. He charged him with "disloyalty" to the Rolph administration, and inefficiency as head of the division of forestry.

Yesterday afternoon, the governor's wrath cooled quickly. The "disloyalty" charged to Pratt was found to be based upon the activities of "someone who looked like Pratt." It was suggested it might have been Charles B. Bills, campaign manager for Judge John F. Pullen.

Strength Revealed.

And the inefficiency charge dissolved into thin air when Charles J. Dunwoody, director of the conservation department of the state chamber of commerce, gave the governor some idea of the storm which would break over his administration if he removed the state forester.

"I can produce representatives of 200 organizations who will testify that Pratt must be retained for the protection of the state's forests," said Dunwoody.

Black Holding Bag.

The governor's sudden decision to retain Pratt after his vigorous and vociferous denunciation of a few hours earlier figuratively left Rexford Black, chairman of the state board of forestry and a lumber company lobbyist, "holding the sack."

Governor Rolph based his attack on the state forester upon complaints lodged with him by Black, and upon rumors he had heard on his northern trip. Pratt threw the "bomb" into Black's lap as the culmination of a persistent attempt by Black to get him out as state forester.

Ends in "Lovefest."

late yesterday, the governor settled in Pratt and Black for a "round by round" affair, which finally developed into a "lovefest," the conclusion of which he announced.

"Mr. Pratt has convinced me of his loyalty to my administration, and I have found upon investigation that charges of disloyalty made against him are unfounded. It was probably a case of mistaken identity.

"There is no need for further action because I am assured that the state labor camp program for the coming Winter will proceed. No inefficiency was proven to me. I like Mr. Pratt. He was recommended to me by John McLaren, superintendent of Golden Gate Park in San Francisco."

Threatened Storm.

Reports that Pratt was to "go on his way" from the Rolph official family stirred up a "hornet's nest" in favor of the man who had been the state forester for fifteen years. It recalled the time when

(Continued On Page Two)

GOVERNOR ABOUT FACES ON PRATT

(Continued From Page One)

Governor Friend W. Richardson attempted to remove him several years ago.

"I can produce 1,500 witnesses, who will testify to Pratt's efficiency to every one that Black can produce to say he is inefficient," said Dunwoody. He mentioned several state-wide organizations.

The governor said he had received numerous telegrams urging Pratt's retention, among them being one from Ernest G. Dudley, Exeter, a member of the board of forestry.

Letter Disappear.

One angle of the Pratt case was the mysterious disappearance of the two letters sent by William A. Smith, secretary to Governor Rolph, to Dan H. Blood, director of natural resources, one instructing Blood to "fire" Pratt, and the other stating arrangements were being made to place Pratt in another state position.

Blood said "The letters aren't before me now." Secretary Smith said: "Blood hasn't the letters, has he?"

Believes Other Rumors.

The storm around Pratt's head revived rumors of certain interests "gunning" for James M. Bennett, oil and gas conservation attorney for the department of natural resources.

Oil companies have not been in agreement with Bennett's method of enforcing the act. Governor Rolph instructed Earl Gilmore, head of the Gilmore Oil Company, to investigate the matter again.

Governor Rolph does much of his flying in the Gilmore Oil Company plane, piloted by Roscoe Turner, California's "Kentucky colonel."

Pratt Power Boosted.

As an aftermath of yesterday's activities, Black announced to-day he would pass to Pratt all control of the state labor camp program.

Black headed the state labor camp program last Winter and was to do so again this year, but after Governor Rolph said yesterday that Black's inefficiency charges against Pratt were not proven Black made the following statement:

"Although I will remain chairman of the California labor camp committee and will handle whatever business comes before the committee, I shall turn over to Mr. Pratt the complete operation, administration, supply purchasing and location of the camps.

\$400,000 Turned Over.

"Since \$400,000 has been made available by the committee and a general plan of operation has been set forth, it is not probable that the committee will meet again before January 1st, when the committee may wish to present emergency legislation to the legislature."

Pratt said the division of forestry is willing to assume the burden of the entire program and that a program of procedure will be announced later.

New Member Resigns As Forestry Board Frets In Deadlock On Pratt Ouster

By GEORGE DEAN.

Professor Emanuel Fritz, newly-appointed member of the state board of forestry, sat yesterday afternoon in the lobby of the Hotel Senator, calmly reading Anthony Adverse, and his literary bent blocked a move to oust Merritt B. Pratt, state forester.

As a climax to a tense situation, Fritz today telegraphed his resignation to Governor Frank P. Merriam, less than forty-eight hours after his appointment—and, stranger still, before he had taken the oath of office.

While Fritz was reading yesterday three members of the board, headed by Chairman S. Rexford Black, and flanked by Swift Berry of Camino and E. Walton Hedges of San Juan Bautista, met in the governor's office, futilely trying to muster a majority, supposedly to remove Pratt.

At the same time B. C. McAllister of Piedmont, H. S. Gilman of Los Angeles and Ernest G. Dudley of Exeter were meeting in the board's room in the division of forestry, ready to cast their votes for the state forester if the matter came up.

And Professor Fritz was reading Anthony Adverse.

Intention Is Marsh.

Appointed only Wednesday night, Fritz, a professor at the University of California, intimated he found his initiation into practical politics quite a bit different than he had expected from the quiet of his classroom.

To inquiries whether he thought he was appointed for the purpose of giving the Pratt ouster forces a majority on the board, Professor Fritz replied, with a wry smile: "I'm beginning to think so."

Friends Rally.

Efforts by Black to oust Pratt aroused friends of conservation all over the state to rally to the support of the state forester.

They have besieged the governor to take steps to prevent the removal of the man who organized the division of forestry seventeen years ago and has served as its head ever since.

Cattlemen Back Pratt.

California livestock men came strongly to the defense of the state forester, charging the ouster movement is fostered by the private timber interests.

The California Cattlemen's Association and the California Wool Growers Association forwarded to the governor a resolution of protest adopted yesterday in San Francisco.

"Black has been after Pratt for four years," said W. P. Wing, secretary of the wool growers' group. "Black is secretary of the California Forest Protective Association, an organization of the private timber interests who are opposed to Pratt."

"We have every confidence in the governor and do not believe he would permit selfish interests to dictate his action."

Another Meeting.

If it is Black's intention to remove Pratt, he is undiscouraged, for he summoned another meeting of the board at 1 P. M. to-morrow.

Governor Merriam said he will appoint a new board member to-

to-day or to-morrow, in advance of the board's scheduled meeting. The question of whether Pratt will be removed depends upon this appointment.

Yesterday's session was called for 2 P. M. and for three hours the three-to-three deadlock persisted. At 5 o'clock, Chairman Black telephoned from the governor's office to the three members in the board room across the street that the meeting which never materialized had been adjourned.

The cost of bringing the board members here was computed at \$200.

Merriam's Shillalah.

The governor took cognizance of the controversy last night, by declaring:

"I have told my boards and commissions they must settle their administrative problems themselves. If these difficulties become so involved they can't transact business, I'll make some new appointments. You can say I'll use a shillalah."

He made it clear his remarks were not directed specifically at the forestry board, but at all state boards and commissions in general.

Merriam said as far as he knows Pratt is satisfactory. The governor denied charges similar to those filed against Pratt by Black two years ago have been received by him.

Nordenholt Leaves.

To complicate things even further, George D. Nordenholt, state director of natural resources, who has the final appointing power over the state forester, left Sacramento a short time before the scheduled forestry board session, and was reported by his office to be enroute to Los Angeles.

During the board room vigil, the lights suddenly went out.

"You can put in your papers," said Member Gilman, "that, as usual, we are in the dark."

Professor Fritz, who teaches forestry at the University of California, showed up first at the forestry board offices for the meeting.

Many Phone Calls.

Then he began receiving telephone calls. One came from the governor's office.

Professor Fritz then buttoned his raincoat tight around his neck, picked up his brief case and hiked to the Hotel Senator lobby.

Asked what his future was, Professor Fritz remarked:

Anthony Adverse is a very big book and I'm only on Page 76.

San Francisco Chronicle December 15, 1934

State Forest Board Votes Pratt Ouster

Asks Appointment of W.
R. Schofield as His
Successor; Climax
of Long Battle

SACRAMENTO, Dec. 15 — The State Board of Forestry, with four of its seven members in attendance, today voted to remove Merritt B. Pratt as State Forester and to appoint William R. Schofield of Sacramento in his place.

This action is in the form of a recommendation, which now goes to George D. Nordenholt, as Director of Natural Resources, who has the final power in dismissing the present State Forester or hiring a new one.

ENDS LONG BATTLE

The board's action today climaxes a long battle between Pratt and S. Revford Black, the chairman of the board, which had its inception four years ago. Pratt had served for 17 years.

Had Pratt remained as State Forester until December 20, he would have gained permanent civil service status under the new civil service act. He has served 17 years as State Forester.

Black stated that this was the reason for the board's action today.

THREE ABSENT

Three members of the board were absent and had previously sent a letter to Governor Frank F. Merriam vigorously protesting against the meeting call and adding that they would protest any action that was taken today.

The members in attendance, besides Black, were E. Walton Hedree of San Juan Bautista; Swift Berry of Camanche and William J. Boice of Lakesport, who was appointed to the board last night by the Governor. The absent members were H. S. Gilman of Los Angeles, Ernest Dudley of Eureka and G. A. McAllister of Piedmont.

Black stated that the four board members pledged themselves to take steps to find employment for Pratt in forestry work, very probably as director of the State nursery at Davis.

INEFFICIENCY CITED

The board chairman cited Pratt for inefficiency and dereliction of duty. He criticized him sharply for several of his actions, and stated that he opposed the Board of Forestry on various suggestions, including the abolition of the system of employing transients to fight fires and of using tank trucks in fighting fires. He stated he was derelict in not charging certain lookout men who had through negligence permitted fires to start and spread.

Schofield now is administrative engineer for the State Board of Equalization. He is a graduate of the University of Idaho school of forestry, and has been in forest work in Idaho, Utah and Montana.

OUSTER OF PRATT IS UP TO DIRECTOR

Director's office in Sacramento was closed today and was not available this morning.

For many years, Black, representative of lumber interests, has been seeking to bring about the removal of Pratt as forester and he was able to muster a bare majority on the board for the first time by taking into camp William J. Hoice of Lakesport.

Hoice was appointed to the board Friday night by Governor Merriam, only a few hours before the meeting time.

The session Saturday was a heated affair, held behind closed doors. Representatives of the press were excluded by an order issued by Black, the newspaper men before forced to get their information from words that poured through the transom.

Talks Cold Turkey

In speaking to the board, Black talked cold turkey. If Pratt remained in office, he would be blanketed into civil service. He would not permit that if he could help it.

Seventeen years on the job means nothing to him.

"We've got to act right now," he declared.

Tells Of Past Effort

He accused the state forester of inefficiency and dereliction of duty. He stated Pratt was not progressive enough to suit him, and declared he wanted a younger man on the job.

"Two years ago," Black said, "I tried to have Mr. Pratt removed. But the California State Chamber of Commerce turned the heat on Governor Rolph. Governor Rolph was weak and yielded and Mr. Pratt stayed on the job. And now the state chamber of commerce is turning the heat on Governor Merriam in the same way. Outrage!"

Other Incidents

Black cited several trivial incidents to attempt to prove his charges of inefficiency and dereliction of duty.

A lookout ranger in Shasta County had failed to spot a fire for nearly an hour after it had gotten started.

"I told Mr. Pratt about that," said Black, "but he did not discharge the lookout immediately as he should have done. That I believe was dereliction of duty. He discharged him some time later."

Could Not Use Car

Also Black wanted the use of Pratt's state automobile to attend a meeting of a women's organization.

He told one he couldn't see the car because he wanted to go to the opening of the baseball season," complained Black.

He scored the state forester for his failure to attend meetings of legislative committees.

Takes Credit

"Whatever progress has been made in forestry work has been due to the board, not to Pratt," was Black's declaration.

He also asserted that Pratt was slow to agree with the policy of placing full time fire fighters on the payroll, rather than hire transient laborers for the work. Black likewise claimed Pratt opposed the introduction of tank trucks.

Pratt denied the charges, declaring he had introduced a system of paid fire fighters some time before that, although not on the large scale it later was put into effect.

Words Fly

Bitter words flew at the meeting. Black said that two years ago he offered Pratt the proposition that if he would resign he would put him in charge of the state nursery at \$300 a month. He claimed Pratt agreed to it and later broke his word.

"I did not promise that," the state forester said. "I merely said I would consider it."

Black interrupted with "You did no such damned thing!"

Pratt Makes Statement

After the meeting Pratt made the following statement:

"In view of the protest of the three members of the board not present, I will carry on until notified by Director Nordenholt and by Governor Merriam. There is something deeper down about this that I don't understand."

He believes Schofield has been nominated because Black feels he will be more attentive to the lumber interests than I have been.

"It has been my policy to conserve not only timber but water-sheds, grains and forage, buildings and small towns. We have been the rural fire department of California."

Forester Is Defended

In the meantime, powerful interests vitally interested in fire protection work in California are moving to the defense of the state forester.

At the Northern California Firemen's Association meeting in Auburn yesterday, a resolution was adopted unanimously urging Governor Merriam to keep Pratt in the service. Another calls upon Director Nordenholt to retain the state forester in service.

Resolution Is Given

The resolution to Merriam declares:

"Certain interests in the state are desirous of making a change in the office of state forester for their own selfish gains."

In addressing the gathering, which gave him a tremendous ovation, Pratt said it is questionable whether Saturday's meeting was a legal gathering.

The three forestry board members voting with Black are Swift Barry, of Carmel; E. Walton Hedges of San Juan Bautista, and Baker.

Dec 1934

THE SACRAMENTO BEE

EDITC

Selfish Interests Seek To Crucify M. B. Pratt

AT a rump session on Saturday of the state board of forestry, attended by only four of its seven members, the ouster of M. B. Pratt, California's conscientious and able state forester, was recommended to George D. Nordenholt, director of the state department of natural resources.

The prime mover in this shameful action is one S. Rexford Black, secretary of the California Forest Protective Association—an organization that promotes the program of the private timber interests of the state—and chairman of the forestry board.

Because he has refused to bow to the will of these interests, M. B. Pratt is slated to walk the political plank while his place is filled by one who will be the yes man of certain timber barons.

The manner in which this nefarious business was concocted and brought to fruition wrote a new low in the annals of political chicanery.

The meeting itself was manipulated in such a fashion as to make it impractical if not impossible for the friends and supporters of Pratt to be present.

Nor are the people of California so deaf and blind as to be oblivious to the fact that the fourth vote—which made possible the action hostile to Pratt—was cast by a Lake County man hastily named to the board by Governor Frank F. Merriam.

The whole business reeks of underhanded politics and a conspiracy to get rid of a man whose only crime has been to work faithfully and fearlessly for the preservation of California's forests.

This action is made the more reprehensible by the fact that it was taken with malicious intent just five days before Forester Pratt,

in office for seventeen years, would have been blanketed into civil service under the constitutional provision overwhelmingly approved by the people at the last election.

Thus the people's will is flouted by the political spoilers, and their intended victim is one man in the state service who merited every safeguard which civil service could throw around him.

The final outcome lies in the hands of Governor Frank F. Merriam.

It is his word that will ratify the indefensible and unpardonable action of the state board of forestry or that will scotch this contemptible plot to sacrifice an able state official to the animosities of selfish private interests.

To claim that the final decision is up to the state director of natural resources fools not even the children in the kindergarten grades.

This director holds his office at the pleasure of the governor. He is responsible to the governor for all his actions. And whether his decision is to be for good or ill, the citizens of California rightly and properly will hold the governor responsible therefor.

M. B. Pratt should be retained in office.

His record, his high sense of public service, his devotion to the principle of conservation, and his refusal to accept dictation from the destructionists have made him an invaluable public servant, one whom the people of California demand shall stay as state forester.

Governor Merriam, it is up to you.

What are you going to do, crucify M. B. Pratt or replicate this rank attempt to play politics with the forests of California?



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THE SACRAMENTO BEE, MONDAY, DECEMBER 17, 1934

FRITZ DENOUNCES BLACK FOR WAY OF OUSTING PRATT

Professor, Who Refused To Be
Catspaw On Board, Tells Of
Unfair Procedure

(McClatchy Newspapers Service)
SAN FRANCISCO, Dec. 17.—Professor Emanuel Fritz, associate professor of forestry of the University of California, to-day vigorously denounced S. Rexford Black of San Francisco, the friend who obtained him an appointment on the state board of forestry, for attempting to use him as a catspaw in Black's personal campaign to oust State Forester M. B. Pratt.

Fritz declared that as far as he is concerned, "it no longer is of primary importance whether or not Pratt's ouster by the board Saturday is approved by Director of Natural Resources George B. Nordenholt, but the real question is whether state forestry business is to be dominated by a single man without the advice of the full board of seven men appointed for that purpose."

Explains Position.

The professor issued a statement describing all the circumstances surrounding his brief entry into politics and his sudden exit, all of which took place between last Tuesday and Thursday.

Fritz was appointed to the board Tuesday by Governor Frank P. Merriam, but on Thursday, before he even was sworn in, notified the governor that he could not accept.

Reason Is Given.

He gives this as the reason: "I quickly perceived what Black was trying to do. He was working my friendship and my confidence in him, to use me as a catspaw against Pratt. I was willing to serve on the board, when the appointment was offered me, as a professional forester. Black was an old friend of mine, and I hope our friendship will not be jeopardized by this incident. But I will not let myself be used in that way. I would not do for a friend what Black wanted me to do."

Matter Of Being Fair.

"Having the whole state forestry situation dominated by one man appeared to me as distinctly harmful to the normal conduct and progress of forestry in California. I offer no brief for Pratt and also I have nothing against his proposed successor. It is just a matter of being fair and preventing the whole forestry situation in the state from being jeopardized by the ambitions of one man."

"The forestry board was kept in ignorance of Black's plans. The board had not met for six months.

Personal Antagonism.

"It seems that this is largely a personal antagonism against Pratt on Black's part. Black represents the timber interests, as the Secretary of the California Forest Protective Association. But the majority of the timber interests generally are satisfied with Pratt. I know them and I know the majority do not care particularly. They are operating under the requirements of a forestry code that is far more rigid than any requirement imposed by the state.

"I regard Pratt as an honest and capable official. There is a question of whether he is the high grade man for this growing job but that I do not know. I want to be fair. It is not fair to ouster a man out of his job without a trial or a hearing before the board. There is a general feeling among foresters that Black has harassed Pratt so much in the past as to tie Pratt's hands and make his work ineffective.

Procedure Is Improper.

"If Pratt is not the competent man that the state forester should be, there is a proper and fair way to eliminate him. As far as I know, no formal charges of incompetence have been presented. The thing has been delayed so long as to make action difficult. The best way out would have been for all organizations concerned to have an opportunity to present their case and to conduct an open competitive examination in which Pratt could compete with the rest on an equal basis.

"As for William C. Schofield, the administrative engineer of the board of equalization, who was recommended by the majority of the forestry board Saturday for Pratt's job, I have nothing for or against him."

Professor Fritz, having gotten his protest against Black's methods of domination off his chest, said he wants to be entirely fair to Governor Merriam and make it clear that the governor apparently is taking no active part in the battle. He said, however, that some foresters feel the governor has not gone out of his way to see that Pratt is given a fair deal.

Exeter Banker Hits Black For Dictation

(McClatchy Newspapers Service)
EXETER (Tulare Co.), Dec. 17.—Ernest Dudley, Exeter banker and a member of the state board of forestry, sees in the dismissal of State Forester M. B. Pratt the assumption of dictatorship by S. R. Black, board chairman and secretary of the lumbermen's association. "I cannot agree with Black in the methods he uses," Dudley said. He has maneuvered for three years to become the dictator for forestry policies."

Notes from S. A. F. Affairs--February, 1936, pp. 3-12

O. R. King

- 1) Letter from E. H. McDaniels, Chairman of Columbia River Section, stating that a special committee of the section will study Black case with an eye to by-laws--adequate protection of the individual from unfounded or hasty action.

Chapman's answer was in two parts as follows:

- 1) Procedure in Constitution and By-laws;
- 2) Procedure actually followed

Charges were signed by seven people--Chapman says names are withheld and all guesses (including Black's) have been wrong.

Charges presented to S. A. F. January 28, 1935

- 1) Black secured a position on the State Board of Forestry by political means, and elected chairman at request of Rolph for the purpose of getting Pratt dismissed.
- 2) He tried without the sanction of the Board to get Governor Rolph to dismiss Pratt--"incompetency and political activity."--Governor thought that he had the approval of the Board.
- 3) Black has discredited Pratt to his supervisors, to the public, and to subordinates.
- 4) Black has usurped the authority of the state forester.
- 5) About the same as number four
- 6) He failed to call meetings for the Board of Forestry--usurped the prerogatives of the State Board.
- 7) When the initiative was won to put the State Forester under the protection of Civil Service, Black tried to get the Board of Forestry to dismiss him in the interim, which Black could have done with the new Board member Fritz's vote. But Fritz caught on and would not accept the appointment.

Note: Board members intent on Pratt's dismissal were S. Berry and Hedges.

Chapman, with Black's okay, sent a copy of the charges to CFPD directors. Swift Berry and Mr. Moir accused Chapman of "broadcasting the charges". Chapman says that Black "gave me no names of persons to write to corroborate his statements made in his reply [defense] of July 18." However, Swift Berry and Richard Colgan sent in pro-Black statements.

Notes from S. A. F. Affairs (continued)

The case was sent to council on September 20., 100 pages single spaced. Each member read it, mailed in his vote, and mailed the Case testimony to another member (There were only four copies.). The verdict on November 20th was—expelled. Eight members out of nine on the Council voting yes. (Kotok voted no.) (Fritz was on the Council at this time.) Charges number five, six, and one were thrown out because they required proof of motives.

Black's answer to the charges: He had requested that Chapman have charges published in the Journal but that this could not be done because of Black's attack on Pratt in his own defense.

Chapman says that Black, Berry, and E. I. Allen were the only ones who made attempts to tie Black's actions with his motives, to insist on trying the state forester as part of the Black case.

Chapman defends the countercharge that the U. S. Forest Service men wanted Pratt retained, because "lumbermen" wanted him fired; Chapman says that Berry intimated the opposite point of view.

September, 1935 Investigation ended

SAF Affairs March, 1936 Vol. 2, No. 3, pp. 19-20

"Petition in the Case of S. Rexford Black"
 From the California Section and the two Pacific Northwest sections. (December 12, 1935 Petition)
 Council agreed on January 25 to grant a review.

Charges against Chapman were signed by Swift Berry, R. A. Colgan, Clyde S. Martin, T. K. Oliver, and W. R. Schofield. As a result of Chapman's work in the Black case, the following charges were presented to Society vice-president S. T. Dana on September 21, 1936: The undersigned herewith present...charges that H. H. Chapman...acted with conduct unbecoming a professional forester and in a manner deliberately unethical for a member of the Society, in connection with his handling of the S. Rexford Black charges by masking public statements tending to reflect upon the reputation of other foresters so as to prejudice their means of earning a livelihood, without at the same time giving equal publicity to defense statements." Specifically, the most important charges centered around a letter which Chapman had printed in the SAF Affairs (February, 1936) in response to a request for information concerning the Black case. Part of the charge involved Chapman's alleged unethical mention of Swift Berry and E. T. Allen in this letter.

Dana notified Chapman of the charges and the two corresponded concerning how the matter should be handled. Chapman, probably desiring to clear his own name, wanted to have the charges investigated. One opinion against investigation was cast by Col. Greeley, who was chairman of a Society committee which was reviewing the Black case.

On November 11th Dana submitted a memorandum to the Council with a ballot concerning the Chapman case. This ballot determined that Dana would investigate the case, which was in line with the Society's by-laws. Various approaches to the case were offered and it was suggested that discussion should be opened as to the general procedures which should be followed in such cases.

From the beginning Dana attacked the case on two levels: that of Chapman's guilt in this particular case, and that of the general problem of how to handle such cases in the future. Dana's report to the Council and the ballot on March 19, 1937 illustrated this division. The Council responded by

unanimously voting Chapman not guilty and accepting Dana's suggestion for changes in the by-laws to meet such cases in the future.

Dana based his decision concerning Chapman's innocence on several points. One of the major issues was the propriety of the letter which Chapman had had printed in the SAF Affairs; Dana justified this act as follows:

"Opinions may well differ as to the extent to which publicity should be carried in cases of this sort, but that the President and the Council have the right to make their findings, with the reasons therefor, as generally known as they think wise seems to me indisputable. In the present instance, it seemed reasonable to assume that other sections would share the Columbia River Section's desire for further information, and had an equal right thereto." Dana felt that Chapman had not acted unethically in omitting Blue's defense because the letter had merely contained the charges--with neither opposing or agreeing arguments. Furthermore, the defense contained numerous unfavorable references to Pratt.

A further specific charge accused Chapman of making derogatory remarks concerning two men, who had defended Black. Dana termed the language used as "unfortunate" and would have preferred to see the names of people omitted from a discussion of principles. However, he felt that the statement could not be termed unethical, since it did faithfully portray the position which the two men took.

1941--CFPA approved the constitutional amendment to reorganize the State Board of Forestry, (on November, 1942 ballot). CFPA report says there was opposition from the U. S. Forest Service and the State Forester.

Proposition 6--defeated

Reprinted from JOURNAL OF FORESTRY,
Vol. XXX, No. 8, December, 1932

Report on the California State Labor Camps. By S. Rexford Black. *California State Unemployment Commission, San Francisco, California. 1932. 47 pages.*

A copy of this report by S. R. Black, should be in the hands of every Governor in the country and those other officers and private individuals who are concerned with or interested in the alleviation of unemployment. It describes how California reduced the length of its bread line by sending some of its unemployed to publicly-operated labor camps in the forests where the men were given shelter, subsistence, clothing and tobacco in return for a maximum of six hours work each day. The plan was admittedly an experiment and only about 3300 men were cared for, but it was such a success that it will be placed in operation again this winter on an enlarged scale.

The underlying theory of the California plan is that the average unemployed man is willing to work if given the chance and that if he cannot work for a wage he is willing to work at least for his bed and board.

California had to meet the problem of caring for, not only its own unemployed, but in addition a horde from other states that doubtless was lured on by the prospect of a more equable winter climate.

In all, 28 forestry camps and 2 highway camps were operated. The men in the forestry camps built 504 miles of fire-breaks and roads in addition to other miscellaneous fire hazard reduction work such as cleaning up inflammable debris around recreation sites, along highways, etc. A total of 200,399 man-days' relief

in the forestry camps cost the state \$109,893 or approximately 55 cents per man per day. The men were recruited through various charitable agencies in the cities. "Only volunteers were accepted in the camps, but after reaching camp, each man was required to work, or leave." The men were housed in tents in some cases and in others in buildings such as unused logging or construction camps. Medical attention was provided through a first-aid man in each camp. Food was of standard construction camp and logging camp kind; camp officers ate at the same table and of the same food as the workers. The camps were operated from December 1 to early in April.

The author, S. Rexford Black, a member of the Society of American Foresters, Secretary of the California Forest Protective Association and recently appointed Chairman of the State Board of Forestry, served as chairman of the Governor's State Labor Camp Committee. He is regarded as the "father" of the state labor camp plan. The report gives just the bare facts of the establishment and organization of the camps; Mr. Black might well have gone further and discussed their social aspects. These impress the reviewer as follows:¹

Operation of the camps has emphasized some very important factors which should be of interest to all concerned in social welfare work. The camps took jobless men off the streets, away from the necessity of begging and away from the pernicious influence of the psychology of the disgruntled mob. They gave the men a healthful outdoor occupation that kept them physically and mentally fit and self

¹See also "Camps for the Unemployed in the Forests of California" by R. L. Deering. JOURNAL OF FORESTRY, Vol. 30, No. 5, pp. 554-557. 1932.

respecting. The camps attracted only the better class of the jobless. The genuine bum stayed away from a camp where he is expected to work; more than that, when the news spread eastward that indigents in California were being sent to labor camps, the real bum cut his westward journey short. In this respect the labor camp idea really aided relief agencies in sifting the bum from the willing but unfortunate.

The camps were models for discipline. There was no disorder; very little supervision was needed. The camps were self governing, and infractions of rules were dealt with by the men themselves. The men were quite satisfied and there was apparently no feeling among them that the state was taking advantage of their dependence upon it to get work done cheaply.

The forest is a huge reservoir of work that can be tapped at any time without much preparation. Debris piles up, roads, trails and firebreaks grow over, diseased trees menace others, erosion commences in barren spots, etc. All of this requires correction and none of it requires any great degree of skill from the laborers. It requires only simple planning and preparation and no great amount of equipment; its results bring returns in reduced hazard at once; there is no increased expense for maintenance after the

work is done, and it can be started on short notice and stopped without loss. In these senses a clean-up job is a better labor project than reforestation. It would take too huge a sum of money to do such a clean-up job if the cost were to be charged solely to the work accomplished, in fact it just would not be done. On the other hand the public care of jobless through charity is also costly and there is mighty little to show for the expenditure except that idle men have been kept idle, herded in large population centers where they become the prey of social agitators. Why not combine the two—keep the men occupied at some work that will stimulate them mentally and build them up physically and at the same time get some needed public improvements accomplished. It is superior to straight-out charity. Unemployment, especially the seasonal kind, is always with us though noticed by the general public only during business depressions. To give the unemployed a dole is as vicious as to starve them. To make a big play at relief only during emergencies is unsound. The forest can take care of the jobless in normal times as well as during depressions. This fact should not be lost sight of. It may be the solution of a large part of our annual unemployment relief problems.

EMANUEL FRITZ.

EMANUEL FRITZ
102 THE UPLANDS
BERKELEY 8, CALIFORNIA

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Forest History Society

Nov. 19, 1972

Dear Elwood:

I was glad to hear from you that you are getting the Fritz oral interview in final shape. I had given up hope. In fact I would have felt satisfied if it had been left buried in the files. Don't know how I ever let you talk me into such a thing. My place in American forestry is a very small niche compared with the places of many of my contemporaries. In forestry I had but one aim — to get it out of the swivel chair & into the woods. More planting and less talking what others should do. Aside from forestry I did what I could to preserve the private enterprise system. That wasn't a popular stand among socialists. You must have been quite pleased to have such a large turnout for the dinner meeting you put on in Hot Springs. I enjoyed every bit of it. Hope it brings into F.H.S. more members & more \$.

The October number of Forest History is the best yet. Quite in keeping with the mag's 25th anniversary.

On page 28 the question is asked about the beginnings of the safety movement in the logging woods. I have a clear remembrance of part of its beginnings. In ^{October} 1915 I came down from Idaho to attend the World's Fair in San Francisco, the S. A. F., the P. L. C. (Pac. Logging Congress), the Western Forestry & Conservation Assoc., the Order of Hoo Hoo, and perhaps the A. F. A. held joint meetings. Our field trip was to Humboldt County via R. R. We slept on the Pullman cars - 23 of 'em - for 3 nights, there being too few view hotels in Eureka. At that time the Red Cross was making a drive for Safety in all industries. A Red Cross man was along on the trip. At one of the Hammond Lbr. Co. camps we listened to a talk & a demonstration of handling accident cases. Our group was a very large one and was augmented by the loggers themselves, who were given time to attend. The Red Cross man did a fine & effective job. But the woods workers were a little stand-offish. I heard one close to me tell his partner, "I don't go for that stuff. We're a tough lot and don't need a city fellah tell us how to avoid accidents and take care of ourselves. But it worked. Not many years later the men insisted on "hard hats".

Sincerely

Frederick J. Smith

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