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WALTER F. McCULLOCH

FORESTRY AND EDUCATION IN OREGON, 1937-1966

An Interview Conducted by

Amelia R. Fry

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At Forest History Society luncheon "Mac" McColloch receives his interview from interviewer Amelia Fry in Portland Oregon, August 16, 1968.

Below, Society president Paul Dunn presents Mac with award making him a Fellow of Forest History Society.





Paul M. Dunn, left, and W. F. McCulloch, April, 1964

INTRODUCTION

Walter F. McCulloch, Dean of the School of Forestry at Oregon State College from 1955 to 1967, defines his job as "educating the whole man." Other forestry school deans, like Dr. McCulloch, may write professional dicta on the problems of forest resource use; like him, they can sport graduate degrees, both earned and honorary; they probably also have developed a modus operandus which allows them to run an academic subculture with varying degrees of competence and happiness. The place where "Dean Mac" becomes unique, and the reason why the Forest History Society of Yale University had long tried to persuade him to tape-record his memoirs, lies in the major role he played in developing a school of forestry that maintains a tough academic competence while at the same time it assists in as sensitive a way as possible the college student's task of maturing into a useful member of society. "Our concern is for the man, his capacities, his wishes, and his hopes," he says in the interview. "We're not interested in the total number of bodies in the school."

Mac came to Oregon State College in 1937 as a young instructor in silviculture. In 1942 he interrupted his teaching career in favor of a three-year stint to administer the new state regulatory law for forest practices. It was when he returned to the College as head of the department of forest management that the forestry dean, Paul Dunn, gave him free reign to revise the curriculum and to institute a

student personnel program. This highly personalized approach to producing future foresters had evolved in Mac's head for nearly a decade, growing from his natural interest in students, their individuality and potential as human beings. Perhaps the ideas had begun to take form during his work for the Master's Degree in Forestry, which he won in 1936 at Syracuse and which included a minor in Education. Then his further graduate study in education at the University of Southern California and the University of Oregon reinforced his conviction that something was needed in addition to the forestry academic program of management, engineering, and forest products. Still later, while he was working in the State Forester's Office, his own conversations with practicing foresters produced practical evidence that the forestry student should also learn how to be a "leader of men."

Mac, as well as many others over the past half-century, has helped the field of forestry keep up with changes in engineering techniques, fire control methods, management principles, and precepts in silviculture and genetics. But few educational leaders have laid out a program which consciously contributes to the profession's distinguishing earmark: the forester's zeal, a commitment which has prevailed through the years, sometimes to the dismay of its antagonists.

This spirit of commitment can be traced at least as far back as 1900 when a handful of foresters, in forming the Society of American Foresters, met with Gifford Pinchot and pledged themselves to "furthering the cause of forestry." Forestry has continued to be more than a profession. It is a brotherhood. If the commercial threats to the permanency of America's only renewable natural resource have contributed

to the astonishing longevity of The Cause, so has the idealism inherent in individual members and in the courses of several schools of forestry.

Walter McCulloch's story of the operation of the School at Oregon State College (later changed to Oregon State University) gives us an insight into how such professional fervor has been nurtured in the organized program that began in 1945. The professors gave more time to counseling the students. Students interested in other fields, such as journalism, were encouraged to transfer out. Occasionally a boy was told to leave on evidence of low moral character. Many others were victims of the natural attrition because, as Dave Mason says, "Mac won't have loafers in his school." New courses were added to aid and abet leadership, such as courses in English, speech, and public administration.

Those who managed to remain in the School had the advantage of continued counseling, plus the use of the "Self-Learning Center," where tapes and transparencies are available to enrich class lectures. The collection is not entirely factual material. Here the aspiring foresters can hear a tape of a lecture by one of his professors or by leading foresters the world over. He can also hear the American prisoners of war in Korea who defected to China, a tape kept on hand to "shock students into a sense of responsibility for their actions." To evoke a sense of commitment, there is a talk by Bob Richards, the Olympic pole vaulter who became a missionary. "It puts a spiritual tone into our program," says Mac.

In other words, the student who goes through the program at Oregon State University learns not only what makes a Douglas fir grow,

but why foresters, in the Pinchotian tradition of guardianship, are honor-bound to balance the longevity of the fir with the economic need of human society.

In the summer of 1967, when the Forest History Society asked the University of California's Regional Oral History Office at Berkeley to undertake a tape-recorded interview with Dean McCulloch in Corvallis, Oregon, this interviewer set about the task of carefully organizing the interviews. The sessions would have to be lean and brief for Mac was fighting Parkinson's disease, and he warned that his daily condition was so unpredictable that he might not even be able to participate once the interviewer had flown to Corvallis. His wife, "Mrs. Mac," who had been a productive writer, was in a nursing home unsuccessfully coping with a severe arterial disease.

The project was a gamble, and funds were limited. However, his bibliography is long and inclusive, touching on topics that range from his emerging theories on forestry education to his analysis of the operations of the Oregon forest practices act, and of course, his delightful dictionary of expressions used by loggers, definitions he had spent long years collecting. The tape recordings, it appeared, should serve only as a supplement to tie this material together and to fill in the spaces. He had already taped some anecdotes, "yarns," of his earliest recollections of experiences in the woods, and these were on hand in the Self-Learning Center and could be copied for deposit with the interview in both Yale and the Bancroft Library at Berkeley.

We agreed beforehand that we would organize the sessions along a priority system of "first things first," in case he had to call off the

interview abruptly. However, when the time came for the actual tape recording, Mac was able to be interviewed for the allotted time, the morning and afternoon of August 10, 1967. In addition a final session was held the following morning to "mop up" details that were left out the previous day.

Forestry leaders and cohorts of Mac's in California and Oregon had offered various tips for questions to include in the interview: ask about his contribution as an educator, as the first administrator of the Forest Conservation Act, as a promoter of forest research, as a man of widely varied experiences in his youth in British Columbia. In addition, each of these men added some variation of, "You'll enjoy interviewing Mac. He's a charmer."

They were right. We met briefly in the late afternoon at the School. At his desk, we discussed the outline and agreed on a priority system for the topics to record, and he helped collect several pounds of writings by and about him and his world which I would pore over later that evening. The meeting was hurried and brief, for it was apparent that Mac was uncomfortable and washed out.

The next morning, at the door of his neat brown and white house, which sits on a city lot near a park, Mac greeted me with the easy smile that has helped along his reputation as the "charmer." The tall gauntness gave him a youthfulness his sixty-two years did not deserve.

Once inside, we set about the busy business of placing the microphone, arranging the tapes, and angling chairs so we could talk easily. Mac interrupted.

"Wouldn't you like to relax a minute before we begin, maybe listen to a little Telemann?" This was certainly a different twist in the usual interviewing procedure, and a happy one. And perhaps too, it was an example of Mac's much-neralded social sensitivity that led him to guess, and rightly, that his interviewer was a chamber music enthusiast.

As "The Concerto for Diverse Instruments," filled the living room, I noticed it was mercifully insulated from the intense heat of the summer outside, and that on the walls were water colors of mountain and forest landscapes. A built-in high-fidelity system was in one corner, with Northwest Indian artifacts placed on the book shelves nearby. There also was a model of an old logging train, made and presented to him the previous year by his faculty in acknowledgement of his fruitful deanship and his work as a youth on the railroads.

After the first hour of talking, we turned off the tape recorder for a few minutes while Mac brought out tea, imported from his favorite shop in Victoria, British Columbia. ("Or would you rather have a java-mocha blend of coffee?") He discussed his physical condition honestly and expressed his frustration that he was not able to entertain his visitor for dinner, as obviously had been his usual custom.

He was honest in answering questions during the interview. If he felt restrained from frank discussion about a sensitive topic-- particularly the tumultuous times at the School in the years just prior to World War II--he refrained altogether. Later, during the editing, when I protested his exclusion of this subject, he wrote:

"Barney Standing, an old friend recently deceased, was a highly successful personnel officer in the U.S.F.S. He applied

three criteria to his statements where men were concerned: is it true, is it necessary, is it kind? My remarks were true, but I feel I did not adequately meet the test of the other two criteria" Nor could he be convinced to put the sensitive passages under seal. Barney Standing had won out.

Mac's initial response to the transcript was, "To my chagrin, [I] found I had made the same mistakes as numerous other speakers [whose tapes I have listened to]." He was meticulous in his revisions, correcting the ambiguities of speech, both his own and the interviewer's, and also inserting sections where more development was called for than our economic dialog had allowed. He took the transcript to his long-time friend, retired Dean Paul Dunn, who approved Mac's rewrite job. This office then re-typed and indexed the manuscript, and Mac, after some persuasion, provided pictures of himself and his wife to illustrate it. For deposit at Berkeley and at the Forest History Society at Yale, the transcripts of Mac's earlier tape-recorded "yarns" were photocopied by the School of Forestry at Oregon State University. That office also provided copies of Mac's articles that serve as appendices in the primary copies of this interview.

Amelia R. Fry

Interviewer

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CHILDHOOD AND COLLEGE IN BRITISH COLUMBIA

Fry: Are you ready to start with the day you were born?

McCulloch: O.K. I was born in Vernon, British Columbia, in 1905, March 21. Really the locale was by accident. It was the nearest town that had a hospital.

Fry: You mean Vernon was an accident?

McCulloch: Yes. [laughter] It could have been somewhere else just as well, but there was a hospital in Vernon. My parents at that time were living in Sicamous on the main line of the Canadian Pacific Railroad.

Fry: What did your father do?

McCulloch: Let me backtrack just a little bit. In the earlier days my dad, Arthur C. McCulloch, was a steamboat man on the rivers and lakes of central British Columbia. He came from a family of seafaring men, the youngest of nine in the family, as was my mother in her family. My dad came west to work on the rivers and on the lakes running the old paddlewheel steamers in the frontier days. Then he transferred to railroading. It was apparent that steamers would be superseded by railroads eventually. As a youngster I spent a lot of time in the wheelhouses of steamboats and in the cabs of engines and the cupolas of cabooses.

Fry: Did this give you any particular knowledge of engines?

McCulloch: Oh yes, of the men who ran them particularly, because

McCulloch: they were the pioneers. When I was a youngster the men in charge of trains were chiefly the men who had built the railroads in British Columbia. In fact, my father in 1914 was on the construction of the last trans-continental line, the Canadian Northern, and in 1915 was conductor on the first passenger train of that railroad out of Vancouver, B.C.

Fry: Were you with him by any chance?

McCulloch: No. I met him at Kamloops and we had a very brief visit as he was going through. To back up just a little more, my mother as a youngster, almost a babe in arms, was brought out west in a covered wagon, which gave me a little additional affinity for history. Her name was Elsie A. Fraser, same as the river.

Fry: She used to tell you stories about her early days then?

McCulloch: Yes, about the prairies in Manitoba.

Fry: She came from where to where?

McCulloch: From Ontario to Manitoba, down through the United States because there were no through roads across Ontario in those days. She became a school teacher.

Fry: What did she teach?

McCulloch: Everything that was in the curriculum--a one-room school, all grades.

Fry: This was the school you went to?

McCulloch: No. This was when she and my father were courting, so to speak, in the early years.

McCulloch: One thing I should put in about forestry is that in 1910, the year of the terrible fires, we were living at Sicamous, and for several days everybody in that little town, everybody, piled possessions in railroad box cars and sat in the box cars, waiting to leave if need be. A fire did come to within a few hundred yards of the town. This was the year when there were fires throughout the entire Northwest from top to bottom and fore and aft.

Fry: Yes, that's the landmark year.

McCulloch: In later years every summer was still marked by an almost incessant pall of smoke. Many times I've seen the trains running in the middle of the day with headlights on full. They didn't do that just as a safety measure but out of sheer necessity.

Fry: You had that many fires up there?

McCulloch: That's right.

Fry: Do you remember how you felt about this destruction at the time? And was the prevalent attitude one of shrugging this off as inevitable?

McCulloch: It was a kind of a "God's-handiwork" sort of thing, and you gave up because the fires were so big and so many, and there was no way to get to them, no roads. It's only in recent years that some roads have been built through that country to provide access to fires.

From Sicamous we moved to Kamloops, to Revelstoke, and to Penticton. These were all small towns concerned

- McCulloch: with the railroad because in those days my father worked out of these towns on railroad construction. So I went to a variety of public schools and in between, when I couldn't get to school, Mother taught me.
- Fry: I was wondering if you didn't have a lot of your education at home, with a mother who had had all this experience teaching.
- McCulloch: And a father who on the side was a botanist of considerable local repute. He had a very good school teacher when he was a boy in Nova Scotia, a man enthusiastic about botany who gave part of his enthusiasm to my father. So Dad and I had many an expedition looking for a certain flower which was supposed to be in a certain locality. Generally, we found it.
- Fry: You say your dad had some repute. How was his reputation established?
- McCulloch: People knew he was interested in flowers and would bring him all kinds of things to identify. And he used to bring back rare species for use in the local high school.
- Fry: Did you have a lot of books and botanical reference material around home?
- McCulloch: Quite a little revolving around Gray's Botany, which was the bible for many years. I don't think I have it here now, but somewhere around the house I have a botany book with a little orchid pressed in the front cover. It's been in there for over fifty years, a reminder of a

McCulloch: plant collecting trip with dad.

Fry: Then what did your mother teach you?

McCulloch: Mostly English composition. I never had a course in formal grammar. We went from town to town following the railroads, and I happened to miss grammar in high school, public school. My mother was also fond of geography and perhaps I got some of my later ghost-town-chasing from her. I went to high school in Kamloops and in summers went into the woods with the next door neighbor, Mr. A. J. Bruce, and his son, Alfred, who was my age.

Fry: What was he doing in the woods?

McCulloch: He was guardian of the forest.

Fry: This was a provincial post?

McCulloch: A Dominion position at that time, in a federal forest. Of course there were many survey parties and timber cruising parties working in this forest in the summer, and so I became acquainted with the early day professional foresters. So from the early days in the woods with the Bruces, I knew a man who later became Chief Forester of Canada, D. Roy Cameron.

Fry: And this started about 1913, is that right?

McCulloch: Yes, that's right.

Fry: And some of these stories that you've tape-recorded for the University* here relate to experiences you had with

*McCulloch, W. F., "Old Days in the Woods," I, II, III. A transcription of tapes in The Self-Learning Center, School

Fry: Mr. Bruce?

McCulloch: Most were related to the early twenties.

Fry: But if the story is set before 1922, it would refer to your Bruce period. Is that right?

McCulloch: I think what you are referring to is that story about the son, when we were on the same timber cruising party, and he acquired the claw marks on his chest. That was Alfred Bruce.

Fry: And also there is a speech of yours that I read last night in which you contrasted practices in forestry in 1913 with 1953.

McCulloch: That's right. The old gas car with its acetylene head light--a kerosene locomotive head light, as a matter of fact--was unsold so long in Portland that it became a collector's item. It was about three feet high. This was displayed in a railroad equipment store in Portland.

Fry: Did you really enjoy these summers around 1913? Did this have some influence on your wanting to go into forestry?

McCulloch: Undoubtedly. These were the finest summers that any boy ever spent.

Let me reminisce just a moment at this point. Also the finest thing that could ever happen to a boy (I mentioned riding around in the locomotives and the steamboats) was the greatest event of the week when I was living in Kamloops.

of Forestry, Oregon State University. Copies of transcript also in Appendix of this volume in Bancroft Library, University of California, Berkeley, and Forest History Society, Yale University, New Haven, Connecticut.

McCulloch: We small boys would go down to McCannell's livery stable where we would watch the hostler harness up the four-horse team of the North River Stage. And if the hostler had been sober for a while, which was unusual, and if we had been well-behaved for a while, which was also unusual, we got a ride in the stage from the livery stable up to the Grand Pacific Hotel. There we would occasionally sneak a look under the swinging doors and see some "Knuckles O'Toole" banging away on the old piano. With a great flourish the stage driver would leap to the seat (he wasn't a humble person like the hostler; he was a person of great significance), crack his whip, and away he'd go with people screaming bloody murder because he'd careen around the corner on two wheels to make a spectacular start. This was marvelous of course for small boys.

And meeting the train at seven in the evening coming in from Vancouver was a great event, too.

Fry: What did you do when you met the train?

McCulloch: Well, you watched the wily passengers who had been there before-hand who knew not to get off too fast. The ignorant would jump off the train and rush into the omnibus to get a seat to go up to the hotels--each hotel had its own surrey with the fringe on top, that sort of thing, a real old omnibus with two horses. The wily men would wait until the omnibus was full, and then stand on its back step so when they came to the hotel they got off first and

McCulloch: I got the best rooms in the house. The omnibus early bird, [last off the carriage, had to sleep on the billiard table or on the floor. [laughter] Those were the days. And then a couple of people would get a little hasty and there might be, hopefully, a fist-fight or two. And then there was always a restaurant in the station and the proprietor would have a huge school bell and jangle this thing up and down and make a great clatter. Persons would pour off the train and rush into the restaurant for a quick meal in ten minutes.

Fry: Now, are we talking about the town of Kamloops?

McCulloch: That's right. These were all Kamloops enterprises.

Fry: What kind of music was that on the piano? You played a Telemann record for me a while ago. Is that where you picked up your interest in baroque music?

[laughter]

McCulloch: I'm afraid not. This differed a bit from the baroque. It was latter-day-nostalgia type of music.

Fry: The old 1890's-type barroom music?

McCulloch: That's right.

Fry: The "Bird In the Gilded Cage"?

McCulloch: And the long black sleeve protectors pushed up to one's elbow.. Those were sateen arm covers to keep shirts clean, had a rubber band at each end. Saloon piano players always wore them. So did the bar keep, and used them as an extra wiper now and then.

Fry: Well, what did boys do to make money in those days?

McCulloch: I swept out a store. I got fifty cents a week for that. And we'd do errands and be delivery boys before they used automobiles as delivery wagons.

In fact, I shouldn't say this, but certain unnamed small boys around Kamloops made life miserable for the first automobile owner. He had what would be the equivalent of a democrat (The democrat was a light wagon.) with a cranky engine under the seat. The huge wheels had wooden spokes, and if boys ran fast enough they could poke a long pole into the spokes and the whole thing would come to a grinding halt.

[laughter]

Fry: You'd poke the pole through two wheels opposite each other?

McCulloch: Yes. What do you mean I did this?

[laughter]

Fry: I didn't say a word. I said opposite each other--the pole.

McCulloch: I thought you said, "you" did it.

Fry: That's your guilty conscience working over time.

[laughter]

McCulloch: Also the motorist was afraid to get off, and then he'd have an awful job trying to get the car started again.

Fry: Did he keep this car, or did he decide he'd better go back to horses?

McCulloch: Probably thought horses were better.

I remember two great excitements in the town: in 1912,

McCulloch: Kamloops had its centennial of the founding of the Hudson Bay Post in 1812, the first Hudson Bay post in that territory.

Fry: What was the centennial like?

McCulloch: There was a big parade in which I rode in a white Vauxhall automobile with tremendous enjoyment. The parade consisted of practically everything that could move. Some folks dreamed up the idea of trying to recapture the early days of the trading post with Indians and fur traders riding around the town. Of course there were speeches by the mayor and others; and fireworks, particularly fireworks. In those days the railroad ran right down the main street of town, so they had a parade on the railroad as well.

Fry: With a locomotive pulling all the floats?

McCulloch: That's right, on flat cars.

Fry: And everyone was dressed suitably, something old?

McCulloch: Right, all those who could find something to dress in. There were a good many Indians in town because there was an Indian reservation right across the river, and they enjoyed this parade more than anybody, I believe. Some of them were fortified internally of course, and that added to the excitement.

Fry: And the second big event?

McCulloch: An airplane appeared in 1918. We had been forewarned so were busily watching the sky from the crack of dawn. At last it appeared, an occasion long remembered, because I

McCulloch: was watching the plane so intently I forgot to watch the road and rammed my bike smack dab into a telephone pole. Considerable damage to bike and rider. When the plane took off, the shadow passed over our back yard and threw the chickens into a panic. Biggest hawk they had ever seen, so they scuttled into the hen house and stayed there the rest of the day.

Fry: How did you pick up your interest in history? Was this from your mother or were you marked by this centennial celebration?

McCulloch: That may have had something to do with it, but I always was interested in who lived in the little towns and why. What did they do? How did they get here? What happened, where did they go, and why?

Fry: You mean you were the type who always asked questions.

McCulloch: I'm afraid I was the type who asked too many. But if you don't ask, you don't find out. Of course, sometimes you find out the wrong thing too.

Fry: Yes, I wondered if you really got some honest straight answers there.

McCulloch: Oh, occasionally.

Fry: It sounds like you were an early oral historian.

McCulloch: I was an oral inquirer.

Fry: So in other words, you've had this interest in history then since very early in life.

McCulloch: To be honest with you, I think it came about in this way:

McCulloch: I mentioned that the men who were running the railroads then were mostly those who had built it. They were all close friends of my father, so he would take me over to their homes and we'd sit on the porch and they'd tell me stories of the early days, doubtless exaggerated rather thoroughly. But nevertheless they gave me a feeling for the times.

Fry: Well, that was a pretty rare experience too for a little boy.

McCulloch: It was indeed.

Fry: I think a lot of little boys might not have sat still for older people sitting there telling them stories about other times.

McCulloch: Well, I got it not only from the old timers but also from my grandfather, who lived with us for quite a few years. He had been fifty-five years in sail all around the world.

Fry: And was he a Canadian?

McCulloch: Yes, from Nova Scotia.

Fry: This was a grandfather on whose side?

McCulloch: On my father's side. The old man was so tough that his sons made one trip with him and then jumped ship. That's a fact. He was a very hard man. Of course, he had to be in those days.

Fry: He was a ship's captain, you say?

McCulloch: That's right, for many years in sail around the world. Sometimes he'd be away from home six or eight years at a

McCulloch: time.

Fry: Did he carry any particular kind of cargo, or just anything?

McCulloch: Just anything that was offered. Tramp vessels like his would pick up just anything that was on the docks so to speak. I shouldn't get started on him. I can go on for a long time about my grandfather.

Fry: Do you have any of his stories that you could tell?

McCulloch: Yes. Suppose I stop with two.

Once he had a group of Lascars, East Indian seamen, a very motley crew indeed. They mutinied, and he put down the rebellion. But shortly after, he was standing at the stern of the vessel reading the log, you know, with the little propeller you threw overboard--

Fry: Excuse me, but do you know how he put down the rebellion?

McCulloch: Just with his big fat fist. Captains had to be divine authority on their ships, being away from port as much as six months. Otherwise there would be chaos.

Fry: This is the tradition, isn't it, of the sea?

McCulloch: That's right. It's not important now with radio and fast passage, but in six or seven months at sea without sighting land, you had to have the authority and exercise it.

There was a polished brass cover around the compass, the binnacle at the stern of the ship, and as my grandfather stood there watching the rotation of the little

McCulloch: log, measuring his progress, he saw in the binnacle a reflection of a barefoot Lascar coming at him with a raised-up knife. So he stepped aside just in time, stuck out his foot and the man fell overboard, and my grandfather continued to read the log.

Fry: And that was the end of the Indian with no further ado, you mean.

McCulloch: Precisely.

Fry: Did all of his crews jump ship at the first port?

McCulloch: No, the men were not as independent as his sons.

Fry: Well, go ahead and tell your second story.

McCulloch: This one has some sentiment in it. At three o'clock in the morning, off the coast of Africa, my grandfather woke up and said to the mate, "Mary called me." Mary was his wife. He said, "She called 'Ben,' three times." The mate wrote this in the log and signed it. And that same night in Nova Scotia, his wife, my father's mother, was dying, and she sat up in bed and called, "Ben," three times. .

This was in the log of the vessel. There may be some confusion with the word "log" used twice in such different connotations, but the log my grandfather was reading was a little propeller on the end of a string. You throw it overboard and it rotates and actuates a counter which tells you how fast you're going.

Fry: Like a speedometer.

McCulloch: That's right. And the log book was the daily chronicle of the trip. Well, that's enough of early history.

Fry: Do you have any other indications of what today we call extra-sensory perceptions?

McCulloch: No.

Fry: Then it hasn't necessarily been inherited by you or anyone else.

McCulloch: No. Not a bit.

Fry: This is such a controversial field right now, it might be interesting to future historians.

Then, I wonder if you have any idea how your grandfather gathered up his crews.

McCulloch: He had to take what the shipowners gave him and of course they got the cheapest sailors they could find. One reason they didn't jump ship was that they didn't know any better because the life they were leading before they got aboard ship was probably worse. Here's another item which you won't believe about this shipping business. When my grandfather was apprenticed as a young cabin boy aboard ship, he was paid a dollar a month and board, and "board" usually consisted of fairly well rotted salt pork with hard tack and black coffee. No wonder they got scurvy. The young boys learning to run up the rigging were not allowed to wear shoes aboard ship. They were in bare feet, so that as they clambered up the rigging the first mate could pursue them with a long stick with a

McCulloch: needle in the end jabbing their feet to make them climb faster.

Fry: In other words, your impression then, in these stories by your grandfather, was that it was a sort of tradition for an authority based on force.

McCulloch: That's right.

Fry: How was your grandfather as a person off the ship? Did he appear to be somebody who related to people on a basis of brute force?

McCulloch: He was tough. Some Spaniards tried to shanghai him one night in Havana. He threw two over the seawall and the fall killed them. It took the British consul a long while to get him sprung out of jail.

Fry: He was lucky he even got out.

McCulloch: That's right. You had to be hard just to stay alive, because in the days of the sailing vessels, law and order were not as well established in seaports as it is today. It was you or the other guy.

Fry: What was his name?

McCulloch: Captain Benjamin McCulloch.

Fry: Did he have any experiences with pirates?

McCulloch: Not that I know of. From a forest history standpoint, maybe we should note that at one time log pirates operated on the lower Fraser River and in Puget Sound. Maybe on the Columbia too; I don't know. Log rafts and sometimes their custodians had a habit of disappearing. The big

McCulloch: operators established a patrol service to protect their booms. The piracy problems also led to the establishment of registered log brands, same as livestock branding.

To get back to grandfather, due to him I developed a very sound respect for authority, particularly when he was right at hand.

Fry: You didn't challenge him very often, did you?

McCulloch: Never. I knew better.

[laughter]

Fry: Well, what kind of a man was your father, who grew up under somebody like this? Maybe his father wasn't home enough to make much difference.

McCulloch: He wasn't home enough when my dad was growing up. By that time my grandfather was well established as a very capable sea captain and was all around the world, not home very much. Then my father, being the younger of the family, perhaps had it a little easier than the earlier children.

Well, that takes care of the early years. After high school I went to the University of British Columbia.

Fry: What about your undergraduate years at the University-- were you pretty well set in your mind what course of study you wanted to pursue?

McCulloch: Yes. There was not a full forestry curriculum when I attended, so I took botany and graduated as a botanist.

Fry: Your father's influence showing up there perhaps.

McCulloch: Quite possibly. Let me say something about college in those days in British Columbia.

Fry: What did you do besides attend classes?

McCulloch: Going to college was more of an event in the early 1920's than it is today. I couldn't guess how many of my high school classmates attended University, but it was far below the percentage of today's high school graduates. I can illustrate the point by saying there was just one university in British Columbia at that time, and I think the enrollment was about 1500. So it was a big event, and I was as much awed by the change to metropolitan life as to the university atmosphere. To help out with expenses I did odd jobs whenever I could find them, and as a result had little time for student pleasures. I saw one rugby game in four years, for example. I did join the Outdoor Club and spent some weekends hiking and snowshoeing. About a dozen of us built a two-story log cabin as our headquarters, not far from the present Grouse Mountain chalet. Had a rude experience there once. We climbed up the mountain after a very heavy snowfall, and to get to the cabin door we had to dig a trench ten to twelve feet deep. The man opening the door was slammed back against the side of the trench as out popped a black bear. He scattered mountaineers right and left as he galloped away, blinded by the bright light. Apparently he had burrowed under the bottom log on the

McCulloch: downhill side. Then the heavy snow filled it in and he got so fat on our winter grocery cache he couldn't dig out again. We couldn't use the cabin for several weeks till the stench died down.

My close friend on these expeditions was Ernest S. Gibson, a student in engineering. We met in New York City several years later and shared an apartment there. In 1966, Mrs. Mac and I took Ernie on a motor trip to northern British Columbia since he was badly crippled with arthritis and driving was difficult. Glad we did, for he died a few months later.

After leaving the University of British Columbia in 1925, I returned to forestry as an assistant ranger in the British Columbia Forest Service for a brief period.

Fry: Where?

McCulloch: In the North Thompson Country in central British Columbia. I worked pretty much in fire control with some timber cruising and timber sale administration mixed in with it. Later I got into forest research.



"Tin" pants in the 1920's.
No fake photography; they
stood up alone.

McCulloch, the River Driver,
1925



McCulloch: After that came a period of odds and ends of jobs here and there and everywhere before finally getting established, some half dozen years later. Timber cruising, working in logging camps, working on logging railroads. There's a model log train up on top of a speaker cabinet in my home.

Fry: I saw that. That was presented to you last year by the staff?

McCulloch: Yes, when I stepped down from the Dean's job.

Fry: Now, more specifically, after you got out of the University, what did you do?

McCulloch: I worked in forestry, both in British Columbia and in Washington as a private timber cruiser. I worked as a logger, and with an uncle in the construction business in Portland.

Then I went back East and worked in a ship chandlery with a friend in New York harbor and took over the store when he quit. This was in the fall of '29, and I was planning to go on for a doctorate, but then the roof fell in. Things were pretty tough and the owners of the store at my suggestion decided to close it. So I had to look elsewhere for another job.

Fry: This non-forestry interlude is unusual, because so many graduates just went straight into the Forest Service and stayed there. At least in the United States they did.



McCulloch as Compassman
and Cruiser, 1925



In Forest Research, 1929



McCulloch in timber cruising
days, 1928. "Holed up in
abandoned logging camp. Note
home-made heating stove."

McCulloch: Well, I left British Columbia to come to the United States and work with an uncle in construction, and then worked at any forestry job I could find. Civil service work didn't look attractive to me, so I did whatever I could. You appreciate that in the depression years, jobs were pretty scarce, there were mergers taking place and reductions in staff and so on. I might say there were many interesting experiences there with foreign seamen, as we were supplying their vessels and trying to communicate. Between my limping French and halting Italian and a little Portuguese, we could make ourselves understood most of the time.

Fry: Could you give us one anecdote to illustrate what you were working with there?

McCulloch: Well, for one example, the chief engineer of a Portuguese ship came in one time. He called himself a "premier mechanician" so we figured he was the chief engineer. He gave us a long list of supplies with two prices. One, with higher prices, we were to bill to the company, and the other one we were to supply at the real prices and give him the difference. So we threw him out the door.

Fry: He was going to make a little.

McCulloch: He was going to make quite a little. He had about a \$500 differential there. We wouldn't go for that. We did run into many interesting people.

At the other end of the scale were some Ivy League

McCulloch: men who had yachts. They used to come in and supply their craft from our establishment. So we made some interesting transitory acquaintanceships.

Fry: These aren't people then that you kept up with later in life?

McCulloch: No, particularly since we wound up the business.

Following the closing of the store I transferred to the Fox Hill Foundry in Hoboken, New Jersey. This foundry was owned by this same uncle of my friend, the one mentioned previously. And there I had a job on the drafting and a little designing of propellers for the tug boats in the harbor and occasionally the big liners would come in.

Fry: How did you, a botanist, get into a job drafting and designing ship propellers?

[laughter]

McCulloch: I was told to do it--more draft than design.

Fry: During this period, so many people were out of work that it was all that a Ph.D. could do to get a job. But you stepped in and started doing something totally out of your experience.

McCulloch: I had done some mechanical drawing and knew a little about ships.

Fry: What kind of propellers did the foundry design, for instance?

McCulloch: Oh, we had a terrific overhaul job on a ship which had bent two of its four propellers. It actually had four

McCulloch: fourteen-foot propellers. I should say that the Fox Hill Foundry was practically the sole source of supply for the tug boats around the harbor, and had a spare propeller for every tug of the Moran Tugboat Company. They're still operating. It was very interesting work. For example, the little charter fish boats, similar to those along the coast here at Depoe Bay, would like to start from the Battery on a Sunday morning and rush to the nearest new wreck first, to get the fish from around it with their sea-going parties of fishermen-amateurs. If they could get a propeller that would give them a knot an hour faster, they'd beat the other boats. So they always wanted the shop to design a faster propeller.

Fry: Did you say nearest wreck first?

McCulloch: Yes. When a barge or a vessel is sunk in shoal water, at first the fish will congregate all around it, and if you're there first with your charter fishing party you're going to get a lot of fish. But if you come out in the second or third boat, you're not going to get much.

But these fellows didn't realize what it meant in terms of fuel or added horsepower to get added speed. If, for example, a boat were making twenty knots an hour and burned five barrels of oil, maybe you could get twenty-one knots but then you would have to burn maybe ten

McCulloch: barrels of oil. This had to be explained to them, and they wouldn't listen. Sometimes you got mad and gave them the propeller they wanted, and it was so large and left such a big hole in the ocean, they would fall back into it so to speak.

Fry: That's why some of the ships had their noses up in the air.

McCulloch: And that's how we made Christians out of some of these wise guys who didn't know about propellers.

[laughter]

Fry: Did you actually design any new kinds of propellers? Did you make any innovations?

McCulloch: No innovations.

Fry: Part of this period, you were back in British Columbia, weren't you?

McCulloch: For a while before this time as propeller-draftsman.

After I had been at the Foundry for some time, things got tougher in the East too. It seemed desirable to search for greener fields, and that's when I went on the Erie.

Fry: I see. How did you get your job on the Erie?

McCulloch: By talking to the president of the railroad. The vice-president, excuse me. He was Mr. Robert Woodruff, a very fine man.

Fry: You went straight to the top.

[laughter]

McCulloch: Yes. He later was president.

Fry: How did you happen to go to the vice-president?

McCulloch: Because I went to a lecture in New York one night by the chief of the American Railroad Association, the industrial organization representing the railroads at Washington. He mentioned that in spite of the depression, opportunities were still available for college men on the railroads. And he mentioned the Erie Railroad. So I talked to him after the meeting and said that I wanted an introduction to somebody in the Erie. So he gave me a note to Mr. Woodruff, the vice-president.

Fry: So you had a position then in which they used college men? What was this?

McCulloch: This was a job in which you started somewhere at the bottom, firing engines, switching and working with a track gang. But as the depression worsened and things got tougher on the railroads, they had to take care of men with seniority, and I could see that I was losing ground faster than I was gaining. Eventually there came a day when I had no job. So I worked as a track hand on the same railroad. Eventually I got to be a foreman of a new track-cleaning crew.

After four years, I decided to go back and finish my interrupted forestry education at Syracuse.

Fry: Mac, you had a number of rich, varied experiences before finally settling in Oregon in 1937. You didn't, as so many people did in the depression, go into CCC work or

Fry: I live under a protective umbrella of government forestry. This might have been a period in your life when you acquired a great deal of experience, and a great deal of wisdom, and a great deal of respect for the innate qualities of men, which in turn lead to your educational theory here.

McCulloch: You're right in all respects except the acquisition of wisdom; I didn't gain much. But the other things I did, and it was very useful.

When the chips are down you suddenly establish a new sense of values. In the middle of the depression before I was married, Steve Gibson, who had been at the University of British Columbia with me, and I shared a very crummy apartment in the tenement area of New York. One Saturday he came home and said, "Mac, I'll have to depend on you for eating money this weekend; we didn't get paid." I said, "Steve, I was depending on you because I didn't get paid either." So there we were, facing a long weekend and not a nickel in the pocket. So Saturday morning we got up very early and went out and took a big pack sack with us and made a note of the location and picked up milk bottles and peddled them to grocery stores, a little farther away than our local neighborhood, and so we got eating money for the weekend. Then on Monday or Tuesday of the next week when we got paid, we put the milk bottles back again. When you're reduced to those

McCulloch: straits, you think of things a little differently thereafter. There are some fresh realities in the world. You view men and their problems differently than if you'd never had those experiences.

Fry: And your system of ethics becomes quite realistic suddenly.

McCulloch: It does indeed. We figured we weren't stealing, we were borrowing. While on the subject of stealing, our front door was flush with the sidewalk on West Twenty-third Street. If you wanted to get rid of anything, wrap it in paper, tie a string around it and put it outside the door, and in five minutes it would be gone.

Fry: You mean just set it there and someone will come along and take it?

McCulloch: Never more than five minutes. Gone. So it was a little bit back to the jungle, every man for himself.

Fry: This was almost as primitive then as some of the conditions you speak of in one of your tapes at the Self-Learning Center where you and your friend were under conditions of extreme stress in both the task you were doing and the weather in an isolated section of the woods for ten days. You both felt that you were getting--

McCulloch: "Timber tetched."

[laughter]

Fry: "Timber tetched," the day before the sun came out.*

*Ibid, I, p. 19, typed transcript.

McCulloch: That's right. You realize then how close to the surface are the primitive responses. The civilized veneer is not very thick.

Fry: And so did you feel at the time that there was much connection between a situation like that back in the woods and a situation in the middle of a metropolis with thousands of people around where you were really up against it?

McCulloch: Well, actually we were so far mowed down on that expedition in the woods that I couldn't think constructively. It was a close call for both of us really. You can't imagine the day-after-day grind: wet clothes, wet tent, cold food most of the time--sometimes we couldn't get a fire going. And doing very hard work, and the terrain getting worse instead of better as you went along, and the flies driving you crazy (those were the days before insecticides). It's a rough thing to go through, but it soaks out some of the complacency in you.

Fry: And now you know the limitations, too, of a human being.

McCulloch: Yes, you don't ask some man in the future to do something which you know he can't get done.

Fry: Had you had any particular religious training in your home?

McCulloch: Not specifically. We were members of the Presbyterian Church and it was pretty much a fundamentalist church, hell's-fire sort of thing. And they weren't very good compromisers. There was black and black and white

McCulloch: and white.

Fry: And it doesn't take very long to get everything black by their standards does it?

[laughter]

McCulloch: That's right.

Fry: And so you more or less set up your own beliefs with your own experience, I guess. And when you were living precariously and going from job to job like this in the depression, have you ever looked back to see just what you got out of all this wide experience?

McCulloch: Those experiences sound a little more important than the bare facts justify. They were rather dissimilar experiences, but they were realistic. I lived through them and they gave me a kinship with working men which I have found useful ever since. I'm not at a loss when I talk to men who work with their hands.

Fry: You can feel that you're one of them, down underneath it all.

McCulloch: Sure. When you shovel coal all day long, you know what it is to work.

Fry: Well, I guess you must feel a kinship with a wide span of humanity.

McCulloch: Yes. Although in these later years with the rapid advance of science, I've lopped off that end. It's too much for me.

Fry: I think most people feel that way about the fields they're

Fry: not in direct contact with constantly.

McCulloch: That's right.

McCulloch: In 1934, we went ahead and moved to Syracuse where I worked on my Master's Degree in Forestry for two years.

Fry: You said "we" went to Syracuse. Were you married by this time?

McCulloch: Yes.

Fry: When did you marry?

McCulloch: 1931.

Fry: That was really a low year financially wasn't it?

McCulloch: Yes it was. Fortunately Mrs. Mac had a good position. She was Public Health Supervisor of twenty-two nurses in one of the most populous counties in New Jersey. She has a degree in Public Health Education from Teachers College, Columbia, and a Master's Degree in Home Economics from Oregon State University.

Fry: You must have met her, maybe, when you were working at the Fox Hill Foundry?

McCulloch: Yes. On a Sunday afternoon excursion to Rye Beach, Connecticut. That was the popular thing to do in those days, take a steamer trip. And in the depression the price had been lowered to the point where you could afford to go now and then for fifty cents or something like that.

Fry: And what is her name?

McCulloch: Margaret Mildred Neher. The first two years we were married we were around metropolitan New York with the

McCulloch: Erie, and the next two years, 1933-34, in upstate New York and Pennsylvania. At Syracuse I got a Master's in Forestry with a minor in Education.

Fry: It was unusual for married students to go to school in those days.

McCulloch: Yes, because the grant we got was \$62.50 a month.

Fry: How did you get the grant?

McCulloch: Applied for it.

Fry: This was a scholarship at Syracuse?

McCulloch: That's right.

Fry: Did you live on it? Or did your wife work?

McCulloch: There wasn't any job available to her at Syracuse, but we hadn't counted on that. We lived on the \$62.50. We paid ten dollars a month rent for a four-room apartment.

Fry: Was that about the normal+-

McCulloch: That was the normal rent, yes.

Fry: And what date was this?

McCulloch: This was in 1934. I was in the Adirondacks at the Syracuse forestry summer camp as an instructor for two summers. My wife was a counselor at a YWCA summer camp, also in the Adirondacks. She had an offer to go to Labrador in Sir Wilfred Grenfell's Public Health operation but was not able to get away.

Fry: What instructors and courses stand out in your memory?

McCulloch: The most important gain at Syracuse was not in subject matter but in friendships. Some of the staff had been

McCulloch: In almost on the ground floor of forestry and brought fine personal reminiscences into their teaching. I was most closely associated with H. F. A. Meier, my major professor; C. C. Delavan, (I worked for Del two pleasant summers in the Adirondacks); Joe Illick, Sam Spring, Harry Brown, Bill Harlow, Ed McCarthy, Joe Lowe. In addition I had a more casual acquaintance with most of the other staff members. These friendships still prevail with the survivors.

Graduate students and their wives had a fine social rapport, and I well remember weekly shopping expeditions with the Lowes, hunting for bargains to make that \$62.50 go farther.

McCulloch: About a month before graduation at Syracuse, I had an offer to take over the small forest experiment station which was operated by the Forestry Department of Michigan State College as it was known in those days. It was located a few miles from Sault Ste. Marie and we moved there in 1936. Many signs of winter were still in evidence though it was then May.

Fry: You left a month before graduation, but you got your degree anyway?

McCulloch: Eventually. Oh, the registrar and I had some words about it. He wanted me present for the graduation ceremonies, a requirement which I didn't agree with. In fact, I never have been handed a diploma. On graduation day in British Columbia, I was fighting fires, and before I got the degree in Syracuse, I was working in Michigan; and when graduation time for my doctorate came here in Oregon, I was back in New York.

Fry: I suppose these diplomas were mailed to you.

McCulloch: At long last. I didn't get a diploma handed to me at any time. In fact, I'm still on probation at the University of Washington because I entered there in 1927 as a graduate student with only three years of high school. And the fact that three years of high school was all there was in Canada in those days, made no difference. I was a delinquent graduate student, and I'm still delinquent.

McCulloch: The fact that I had previously graduated from the University of British Columbia, which had a fairly good reputation, made no difference at all. I had had only three years of high school; therefore I was automatically a deficient student. Registrars can be very positive at times.

Fry: Later on when you became a dean, were you able to apply rather flexible standards to admitting students who had variables like this crop up in their high school transcript?

McCulloch: We have to follow the regulations of the State System of Higher Education, but it is still a good habit to cultivate registrars.

Fry: They're pretty powerful.

McCulloch: Yes indeed, because they can always find a rule which covers something.

Fry: The Michigan job was your first experience in research, is that right?

McCulloch: No, I'd been in research in the British Columbia Forest Service earlier, mostly concerned with reproduction on cut-over land, survival of seedlings and similar studies.

Fry: What kind of research did you have at the Michigan Station?

McCulloch: Well, a number of things. This had been a little agricultural school operated by the County, but they couldn't make a go of it of course, and the College took it over. We were concerned with pulpwood production pretty largely. Also we had a nursery supplying all of the

McCulloch: Upper Peninsula with planting stock and even some of the Lower Peninsula of Michigan; this was a Clarke-McNary nursery, operating under cooperative state-federal funding. The second summer we were there, the Michigan State College Forestry School summer camp on the Station property had engaged a man from Oregon State College to come and teach forest engineering. We got along very well together.

Fry: Who was that?

McCulloch: C. J. Budellier, a well-known logging superintendent in the early days here in Oregon. He and I got to reminiscing about logging and the early railroads, and he said, "You ought to come back to Oregon." When he got back to Oregon State at the close of the summer camp, he found there was need for a new staff man, and he put my name in the pot and here we are.

We were glad to leave Sault Ste. Marie, as a matter of fact, because we arrived here in Oregon on the twenty-first of October, 1937, a warm Indian summer day, and before we had left the "Soo" we'd already had temperatures below zero and a foot of snow in the yard. On Easter Sunday that year, Mrs. Mac and I walked down the Charlotte River. There were still several feet of ice and four or five feet of snow on top of it. It's a long, long winter in northern Michigan.

Fry: Your work in the research station there must have been



Mrs. McCulloch and her collie,
Lady, Easter Sunday, 1937,
Charlotte River, Michigan
State Forest Experiment
Station

Fry: pretty demanding physically, then, if you had all of this weather to contend with, and the snow.

McCulloch: We certainly did. We moved down to Lansing for the winter to the headquarters of the Forestry Department, where I taught a short course for Conservation Department employees.

Fry: In what, timber management?

McCulloch: In general, yes. In general forestry practices, because of the Conservation Department employees there, as well as foresters, also fish and game managers, and what not. They didn't have a state forestry department, as such.

TEACHING AT OREGON STATE SCHOOL OF FORESTRY, 1937-1942

Fry: You are ready to discuss forestry education now?

McCulloch: O.K. From about 1937 to 1947 or so, substantial changes were made in the School of Forestry at Oregon State University (Oregon State College, in those days). George W. Peavy had been a very forceful dean and was fiercely devoted to "his boys," as he called them, and "his School." So when he became President of Oregon State he retained the forestry deanship. This move also retained him as a member of the State Board of Forestry, where he exerted considerable influence for the betterment of forestry in Oregon.

Due first to a decline in Civilian Conservation Corps activity, and later to World War II, forestry enrollment in this period fell off drastically, from a high of 555 to a low of less than 25. Peavy and other forestry leaders in the state felt that this time of reduced activity was an appropriate period in which to lay plans for the inevitable postwar expansion of the School. When Peavy retired as President of Oregon State, the forestry deanship also became vacant. It was felt that strong leadership and strong relationships with the forest industry were both needed. After a considerable search, the deanship was offered to Paul M. Dunn, who was a very successful dean at Utah State. Paul accepted, came to Corvallis in 1942, and at once began planning for the recovery of the School, postwar.

Fry: How did he do it? I don't know Mr. Dunn.

McCulloch: Well, he left Oregon State in 1955 to go on to a much larger enterprise, which illustrates his ability; he is now one of the vice-presidents of the St. Regis Paper Company. Paul spent a tremendous amount of time and effort traveling the state, interviewing public and private foresters and industry leaders, trying to put all the pieces together, and he did it very well indeed. When Paul became dean he sought all the helpful advice he could find. Especially as a member of the State Board of Forestry there was excellent opportunity for him to become acquainted with industry leaders. Paul talked with them and with all the faculty members he could find; some of course had gone to war. Looking for staff to cope with the unexpected rush of veterans, Paul asked me to return to the School when the war was over.

Fry: I wonder if you could say some things about your first semester's teaching at Oregon State University?

McCulloch: Well, of course it was a rat race because I came from the administration of a Forest Experiment Station in Michigan directly to Corvallis and walked in the classroom and began. Also I followed one of the most famous members of the forestry staff, T. J. Starker, a man of great renown in the Northwest.

Fry: You mean he left as you came on the faculty?

McCulloch: No. He left the silviculture class. In 1937 there was a

McCulloch: flood of students, due to the Civilian Conservation Corps program when everybody wanted to be a forester. There were one-hundred more students in the school then than there are even today. So all of a sudden the School had to hire four new staff members of whom I was one, and T. J. Starker gave up some of his work. I took one of his major classes.

Fry: I see. This was in what?

McCulloch: Silviculture. Three other men who came at that time were Henry Vaux, Clarence Richen, and Bob Evenden who is now with the Morrison-Knudsen Company.

Fry: And then Vaux later became Dean of Forestry at the University of California and Clarence Richen is now--

McCulloch: A vice-president in charge of Northwest timberlands for Crown Zellerbach.

Fry: In your first classes, did you notice anything about the students then that were different later on?

McCulloch: That's a little hard to answer because there's such a wide variety in men. To my dismay my class had as many as one-hundred men enrolled.

Fry: That was a big class.

McCulloch: That was an enormous class for forestry, because up to that time there had been maybe twenty or twenty-five in upper division courses. But also I had the task of forgetting the ten years I had spent back East and trying to place myself suddenly back in the middle of the Northwest

McCulloch: forests. I spent many nights on books frantically keeping ahead of the classes.

Fry: Adjusting to Douglas fir in the western states?

McCulloch: True.

Fry: But, you apparently did this and became rather successful in it. Were you able to do much research or writing during this period?

McCulloch: A little of both. Not a great deal because I spent so much time keeping ahead of things. And then too I had resumed work on my long-neglected doctorate, which I had had to give up way back in 1929.

Fry: And this was being done where?

McCulloch: The University of Oregon. I had spent one year as a graduate student at the University of Washington, and the two years at Syracuse University which I mentioned before, and then the equivalent of two years at the University of Oregon.

Fry: In what field were you getting the doctorate?

McCulloch: In Education, the Ed.D. in 1947. I had a marvelous experience because I took courses from such men as Dean Jewell of the School of Education at the University of Oregon, the Dean of Education at Syracuse, the Dean of Education at the University of Southern California, and Dean Hill of Education at Yale. Also at USC I took all the courses offered by Dr. W. H. Burton, who was leaving to administer the teacher training program at Harvard.

- McCulloch: (Interesting sidelight: Bill Burton was a freshman forester in Corvallis in 1907.)
- Fry: How did you manage to go to these various campuses and take courses under these men?
- McCulloch: I was majoring in silviculture at Syracuse and took a minor in Education for my M.S., and then later went down to the University of Southern California where a number of these men were teaching in summer school, and attended two summer schools down there, then two more at Oregon. This was a very enriching experience, not just drudgery.
- Fry: And this was made possible because you were on nine-month duty here?
- McCulloch: That's right, for my first five years.
- Fry: Would you like to say anything now about the relation of the School in those days to the needs of government forestry and commercial forestry, so that you can contrast it with the period of the 1950's and 1960's?
- McCulloch: Well, at that time of course the forest industry was not as far advanced in forest management as it is at the present. So in the management department specifically (which was most of the School) there was quite a little emphasis on preparing for civil service careers. Most of the men in management looked toward the junior forestry exam for the U.S. Forest Service as the chief employment opportunity. Professor Starker for many years very successfully ran a seminar in regional forestry pointed at

McCulloch: this exam. Actually this course was several things: a review of forestry operations around the country, a brush-up on vocabulary, and some sound advice on how to be successful in answering different types of exam questions. This course enabled many men to pass the exam who might not otherwise have done so.

Fry: So you felt then that at this time the men in the pre-war years were getting a pretty good technical education in management?

McCulloch: That's right. Also in products and engineering, the other two departments in the School. But at the same time students were lacking in comprehensive, all-around education, and their communications ability was very low; so we've worked on those things since. Interestingly enough, Dr. Reichart, who is now in charge of the School's Self-Learning Center here, at that time was a professor of English as well as Education. He initiated a vocabulary building course which enabled many men to extend their vocabularies so they could get by the federal exams, whereas otherwise they would not have succeeded. So Dr. Reichart has been a friend of forestry for a long time.

Fry: This was in general vocabulary or in technical forestry vocabulary?

McCulloch: General. It's astounding that college students can communicate successfully with relatively few words. For example, in an examination I gave the students shortly

McCulloch: after arrival, I used the word "preponderant," a very ordinary word. There was a good deal of complaint that I was using esoteric terminology which they'd never heard before. And probably they were right--because "preponderant" is in a nine-thousand-word vocabulary level, and most college students then had six thousand.

Fry: And do you think their vocabulary is larger now?

McCulloch: I'm afraid it has suffered considerable erosion in the intervening years. Now we find men better prepared in math because they can see an immediate use for that, but they quarrel and struggle and strain to avoid English, not realizing that they are avoiding a career by so doing.

Fry: Then this situation of a dwindling vocabulary is not improving?

McCulloch: I would say not.

Fry: At least in forestry students.

McCulloch: That's right, and I find the same complaint in the English Department about other students. So we work quite vigorously with students on English. We give a comprehensive test at the end of the second year, and those who flunk must take more English.

Fry: I noticed that in both old curriculum and new curriculum you require nine hours of English, three courses, as a minimum for all students.

McCulloch: That is basic, and if a man's performance isn't satisfactory, we require additional writing and additional

McCulloch: vocabulary in two more courses.

Fry: That's very unusual isn't it?

McCulloch: I think it is. This goes back to the feeling of employed foresters that they lacked sufficient facility in English. Ed Heacox, who was in charge of timber lands for Weyerhaeuser for some time, once said that he had reached the point where he would not hire a forester until the man could put on Ed's desk two reports, or theses, or what-have-you, which would illustrate his competence. Ed was tired of re-writing reports from men in his department. Recently the largest industrial forestry firm in Canada--McMillan-Bloedel and Powell River--advertised for a forest mensurationist. A major stipulation in addition to technical ability was that candidates must be fluent in writing and speaking.

ADMINISTRATION OF THE STATE FOREST CONSERVATION ACT, 1942-45

Fry: You were gone from the School during the war years, weren't you?

McCulloch: Yes. I was asked by Nels Rogers, the State Forester, to be the Assistant State Forester in charge of the new Forest Conservation Act administration. I had known Paul Dunn previously and we soon got together, and I spent quite a little time during those three years conferring with him on School affairs. Also tied in with this while I was Assistant State Forester, I traveled the length and breadth of the state trying to put across the Forest Conservation Act. But while meeting with foresters everywhere, in addition to the State's business, I made it my own business and School business to buttonhole every forester I could find and ask him what he most lacked in his forestry education. Two things emerged: the first was English. They all felt a lack of communication ability. And secondly, the old standard programs in forestry did not include personnel administration. As a man goes up the ladder, this he must have. So when I came back to the School in '45, we introduced a course in what we called forest administration, which is really administration of men rather than of trees.

Fry: When you left the School, had you already sent out feelers to see if you could get placed somewhere else?

McCulloch: No, I was asked to take this job with the State Forester

McCulloch: before I ever departed from the School. Actually I had volunteered for service in the Air Force, was accepted and was given an officer's rating. Then six months later, about a week before I was to report, I received notice that I was ineligible because at the time of initial application I had lacked six weeks of being an American citizen for ten years. So, after all this monkey business it was too late to do anything constructive along that line, and the State needed me and asked me to go to Salem and help out.

Fry: So that's how you avoided the Air Force and happened to get into the State Forester's Office.

McCulloch: Well, not quite. The Air Force avoided me.

Part of our forest conservation job at Salem was to try to get logs for the war effort without denuding the forest. It was a question of education with the operators. I would say that some very fine things were done unselfishly and constructively by members of the industry. Governor Charles Sprague was one of the original forces behind the Forest Conservation Act, and he was aided by Dave Mason particularly. This was putting into practice some of the forward looking and very laudable aims which had been talked about during the period of the Blue Eagle, NIRA [National Industrial Recovery Act].

Fry: You mean in Article Ten of the Lumber Code?

McCulloch: Yes, that's right. That was an outgrowth of a feeling of responsibility on the part of the industry leaders that

McCulloch: the time had come, in fact had come and gone, when we should have started to look into the future farther than we had to date. As long as the future supply of timber appeared to be limitless, there did not appear to be much purpose in spending time and effort and money to grow new timber. This had been the feeling. But it was sensed by industry leaders that this was no longer good enough.

Fry: You're talking about after NRA and Article Ten, but before the Conservation Act was passed in 1941?

McCulloch: Yes. So this gave impetus to the passing of the Act.

Fry: Yes, I've read in a number of places that even after the NRA was ruled unconstitutional in 1935, industry went ahead and said, "We'll do this ourselves anyway." And that this tied in directly with the Conservation Act in Oregon in 1941. Did it really?

McCulloch: That's right. Forest conservation became much more attractive to many people because it had industry's approval. If we in the State Forestry Department had tried alone to put this into an Act, it would have been difficult or impossible.

Fry: What part of industry pushed this?

McCulloch: The larger, more responsible operators, and this is not throwing rocks at anybody. But it is true that the money to be made in logging and lumber manufacture during the war years attracted a great many fly-by-night operators. One of them could set up two so-called sawmills in one quarter-section of land and just mow it down overnight

McCulloch: practically. So the responsible segment of the industry could see that this would put all companies in bad odor with the public.

Fry: But this was after the Act was already established, if it was during our participation in World War II.

McCulloch: Yes, but it operated at a very low ebb for the first year or so.

Fry: Oh, before the subsequent amendments.

McCulloch: That's right.

Fry: I see. Were there provisions of the Act which related directly to some of the NRA code that industry had adopted up here?

McCulloch: Well, I can't cite them specifically but the same principle of maintaining the resources was tied in with the code.

Fry: And did you have pretty much the same leadership in industry, the same men, the same companies, that had been active in working under Article Ten?

McCulloch: Yes, that's right.

Fry: What were these?

McCulloch: Weyerhaeuser, Crown Zeilerbach, U.S. Plywood, Booth Kelly, people like that.

Fry: Who were the men in these companies with whom you had most contact on this?

McCulloch: That's hard to recall. It was twenty-seven years ago. Among the more active was Ed Hayes, recently executive vice-president of Weyerhaeuser, a moving spirit. He had

McCulloch: the long range vision and was eloquent in persuading his fellow operators to go along with him. Ed Stamm of Crown Zellerbach was another. Nelson Rogers was the Oregon State Forester then. He was highly regarded by industry. Neils was one of the leaders in this thing. And of course Dave Mason; he was the father of the sustained yield idea.

Fry: And Dave Mason was not connected to a company?

McCulloch: He had his own consulting organization, Mason, Bruce and Girard, a company widely known and widely respected.

Fry: And I guess had contacts with all the timber companies.

McCulloch: And worked for the U.S. Treasury and knew his way around in Washington and had been with the Western Pine Association, also on the staff at the University of California. So he had a tremendous background. Colonel Greeley, of course, was also a major influence behind all of it.

Fry: Oh, how was that? With his position--

McCulloch: As executive secretary of the most influential and the biggest organization of forest products people in the country [West Coast Lumberman's Association]. And Greeley was such a natural leader that what he said was gospel to a great many people.

Fry: Did Greeley and Mason work in tandem or--

McCulloch: Well, they worked very closely.

Fry: Now how did you fit in? You were still on the faculty at

Fry: Oregon State. I've been told you wrote the bill.

McCulloch: No, that's not accurate. It was the handiwork of many people with many amendments and changes. Suggestions to fit various points of view were brought in to make it palatable to the largest number to get it passed.

Fry: Do you remember the evolution of this bill?

McCulloch: No, frankly, I don't. My participation was insignificant until the time the proposal was enacted into law. After I became the first administrator of the Act, I was in the thick of the changes that went on for several years thereafter.

Fry: So Mason and Greeley had something to do with writing it?

McCulloch: Well, I'm quite sure they did. Their views were reflected in the end result. And Governor Sprague--I can't begin to tell you how much we owe to Charles Sprague, not only for this Conservation Act but in tightening fire control and in the formation of "Keep Oregon Green."

Fry: Did Sprague actually take any initiative in this?

McCulloch: Yes, he did.

Fry: How did he do that?

McCulloch: He said, "Come on boys, let's sit down at the table and talk this over."

Fry: You mean he suggested coming up with an Act?

McCulloch: I don't say we can lay it solely at his door, but he made sure that the cooperation continued and that it did get through.

- Fry: Was there any partisan lineup on this?
- McCulloch: None, fortunately.
- Fry: So you didn't have that to contend with.
- McCulloch: No.
- Fry: In getting the bill through, did it go through the first session that it was presented?
- McCulloch: Yes.
- Fry: Just sailed right through.
- McCulloch: I couldn't say that it went through at the first reading, but the 1941 Legislature passed it without undue quibble.
- Fry: How did your official work begin with the Act?
- McCulloch: My association with the Act came when Nels Rogers, knowing that the Air Force had decided to dis-accept me, asked me to go into Salem and lend him a hand. Being a man of vision, he was particularly concerned with the long term impact of the war on the forests and how we could make a reasonable compromise to obtain logs and to obtain future forests at the same time. So I was asked to make a survey of the functioning of the Act during its first year. I prowled the west side of the state doing that, and one of my colleagues at Corvallis, Herbert Willison, took the east side. I combined his remarks with mine in a report to the State Forester.
- Fry: And there is a copy of your report. We'll refer to that.*

*"Forest Conservation in Western Oregon," a report one year after the enactment of the Oregon Forest Conservation Act. December, 1942. State of Oregon.

McCulloch: There's a report of sorts, yes.

Fry: What else do you have to add to it?

McCulloch: Well, after filing the report, Nels asked me to stay and be Assistant State Forester in charge of that activity for the Department. I made up a kit of kodachrome slides illustrating good and bad practices and went to every state headquarters in Oregon and put on a little training show for the forest inspectors. This was all new to them.

At first we assigned two or three conservation inspectors to visit the logging operations, but they had to cover too much ground so we finally arranged to inform the regular protection inspectors more thoroughly. They learned what was acceptable under the Act and what was not; what could be a legal compromise and what could not. This way they passed the word on to the logging operators. I would say the first two years of the Act were spent in education instead of rigid enforcement, because if you crack down too hard on something brand new you're only going to get it tossed back at you.

Fry: Educating the inspectors and through them the operators?

McCulloch: Right.

Fry: Were these inspectors men who were already on the State Forestry staff?

McCulloch: Yes, that's right.

Fry: And had been in other types of work?

McCulloch: Yes. What we tried to do was to integrate the new

McCulloch: conservation duties with the existing logging inspections. I'm talking of fire inspections now, making sure that the operations had adequate tools, equipment and men to take initial action on a fire. Hazard reduction and other protection practices were regularly reviewed on inspection trips. So to this existing work load was added conservation inspection, checking the operation for compliance with the provisions of the law. One trip to a logger's show then sufficed to examine compliance with both fire safety regulations and conservation regulations, saving travel time. This was important because there was a great war-time upsurge in cutting in Oregon's forests, and we needed a large force of inspectors in the field. The extra conservation burden was made tolerable by the short course on standards using slides as I mentioned earlier. The conservation work could have been confusing without the in-service training in this area.

Fry: Did you feel that you had enough inspectors, or were they spread too thin?

McCulloch: Well, in terms of the tremendous fire protection job, the inspectors were spread a little thin, but this was the best we could do and eventually it worked out all right. Immediately following the war, I think we had something like fifteen to sixteen hundred mills in the state. Now we have about six hundred but the cut is still the same. However, today there is much higher quality and of course

McCulloch: much higher productivity. There were many fly-by-nighters sawing ties for example. They would take any kind of tree, slab off four sides, make one tie, and waste as much wood as they sold. So when making inspections, we tried to get in a little missionary work with them.

Fry: For better utilization?

McCulloch: Right.

Fry: With so many different operators, it meant that you had many more inspections to make then than you would have, for instance, right now.

McCulloch: Oh yes. Also, after twenty-five years, the Act is well received and is now accepted as a daily routine by operators.

Fry: So the first few years were the hardest both quantitatively and then in the nature of your work, in introducing it as a new thing.

McCulloch: That's very true. We soft-pedaled the last little comma and dash in the law and instead tried to get the men to work with us reasonably well, getting them to see why they should be doing it.

Fry: In this "gentle persuasion" era, did you have any problems with any of the larger companies?

McCulloch: No, our problems were with the smaller ones who were here today and gone tomorrow. The bigger ones knew it was to their advantage. Some of them went beyond the requirements of the law even in the very early stages.

Fry: Would you like to mention who those were?

McCulloch: Crown and Weyerhaeuser particularly. This doesn't say that some others didn't, but those two specifically because they had so much at stake.

On private lands within the Forest Service boundaries, the Service took care of fire control for the State and the State took care of some Forest Service tracts, swapping back and forth to reduce travel time. So the Forest Rangers of the U.S. Forest Service also then became conservation inspectors for us along with the fire inspection of those operations. So I went to all the U.S. Forest Supervisors' offices in the state and talked to their field men with the same set of slides. Thus we had a coordinated approach and each man was thinking of the same situation at the same time when he was out on inspection.

Fry: I was going to ask you about amendments because in your report and in subsequent papers, you gave suggestions for amendments and recommendations.

McCulloch: Well, some were a little ahead of their time, but were accepted later. Others were accepted at the time. It was just a question of give and take. We got what we could in the way of advances in the Act. In other words, we started out with a cost of \$2.50 an acre for replanting if the management had clearcut and left no seed sources.

Fry: And the State Forester was empowered to go in and replant it at a cost of no more than \$2.50 an acre?

McCulloch: That's all they could assess the operator. Now I think

McCulloch: it's up to around twenty dollars.

Fry: Yes, and I remember reading that your recommendation was for doubling the original price to five dollars.

McCulloch: That was thought dangerous at that time. It was too big a jump ahead.

Fry: Then there was the problem of seed trees and where the seed trees should be left and what kind of seed trees should be left. Did you have much resistance in getting this tightened up?

McCulloch: A little because initially some of the small operators thought that anything that had one green branch was a seed tree, or some old totally incompetent tree that they wanted to leave could be called a seed tree because they couldn't sell it. [laughter] Of course, it is a little tricky to tell a man that he should leave a thousand dollars' worth of trees on an acre.

Fry: Yes, I should think you would have had a lot of opposition to this.

McCulloch: Well, we did at first but eventually, since it was reasonable and fair and long-range and for the good of the state as well as the operator, it came to be accepted.

Fry: Which of these recommendations were resisted and went more slowly than the others?

McCulloch: The resistance depended on whose ox was being gored. Where a man would suffer unreasonably if required to do a certain thing, we tried to avoid requiring that kind of

- McCulloch: compliance and would substitute for it something both logical and legal.
- Fry: The larger companies were the ones who had the most influence in the Legislature, weren't they?
- McCulloch: Not necessarily so.
- Fry: Well, your trade associations like West Coast Lumberman's Association and Western Forestry and Conservation Association, I suppose, have a certain amount of lobbying power with the Legislature, and I would have expected this to work in your favor.
- McCulloch: It did, with this reservation: some legislators appear to be "agin" anything big, whether the highway department, a chain grocery, or a large lumber company. However, we did have some very fine men at the Legislature representing the forest industry of Oregon. Charlie Ogle was probably the best known, and thoroughly respected by both houses. He was a great help with all forestry bills. Later the forest industry association merged with the general business community of the state. They have a man within this organization who's working at the Legislature now on forest problems.
- Fry: You mean it was the State Chamber of Commerce?
- McCulloch: No. The Associated Oregon Industries is an association of business and industry within the state.
- Fry: I'm trying to remember the name of the organization which represents a number of small loggers and small landowners.

McCulloch: Western Forest Industries Association.

Fry: And how did they perform?

McCulloch: They were just getting started at this time, so they took no active part in the Conservation Act. The Industrial Forestry Association, the forest production group, many of whom were in the West Coast Lumberman's Association did take an active interest. The industry supported good forestry legislation at the biennial meetings of the Legislature.

Fry: The Western Forest Industries Association was the one which opposed the sustained yield cooperative activity.

McCulloch: Yes, that's right. They felt that this would tie up timber which otherwise would go to some of their small operators.

Fry: Yes, it would tie up timber which otherwise would go to other large operators too, by definition.

McCulloch: Yes; this they didn't recognize at first.

Fry: So I thought that maybe since this conservation legislation was also considered more difficult to comply with by small operators, they would oppose it too.

McCulloch: They did not evidence much concern.

Fry: But, at any rate the bill went through and it's been amended I guess almost every session since then.

McCulloch: It has been improved as acceptance improved. As I say, twenty-five years ago, if you said "thinning," people looked at you as if you were odd: "What's thinning?" But

McCulloch: It's done by big and some small operators today.

Fry: Were there any technological advances at this time that helped the cause of forestry? Perhaps the use of tractors or--

McCulloch: No, tractors were well established. Let me say parenthetically that I was one of the fellows who laughed at the idea of a tractor in the woods because back in the Twenties, the tractor was an animal with big awkward steel wheels that would hardly pull itself. But the bulldozer changed all that picture, the bulldozer and heavily powered trucks.

Fry: I guess it was the trucks that really came in after World War II. Is that right?

McCulloch: That's right. Many trucks prior to that time didn't have enough umph to pull up even a slight adverse grade.

Fry: And did this make any special difference in the advancement of forestry?

McCulloch: Yes, because it enabled operators to reach small volumes of timber at a reasonable cost, whereas if you had to go by railroad, you'd be forced to let it sit there. Also trucks gave a good deal more flexibility to an operation. You could quickly move from one place to the next wherever you had a road system established and pick up diseased or infested trees following an epidemic. This was a great advance. It was economic rather than technologic but it had the same impact.

- Fry: Have there been any amendments in the law over the years which reflect changes in industrial techniques?
- McCulloch: No. Actually the standard operating equipment used in the woods is very effective in meeting the requirements of the Act.
- Fry: I guess I was thinking about some of the diameters mentioned in the Act. Wasn't there a diameter limitation on trees that could be felled?
- McCulloch: Yes, at first. It wasn't adequate and it was changed.
- Fry: And then this I suppose had to be decreased as utilization of smaller pieces of timber became possible.
- McCulloch: Yes, actually the chronology of the Act was that it has occasionally moved ahead of what was in practice, or occasionally has followed practice as we could get support for the change.
- Fry: Have you followed this Act in your own active interest?
- McCulloch: No, that is not part of my current activities. One thing more I should say is that the general acceptance in Oregon by the operators has made it possible to sell the idea elsewhere. Both Washington and California subsequently came up with their own acts of a similar nature.
- Fry: Yes, but Oregon was the first one.
- McCulloch: Oregon was the first.



Oregon State University Forestry Staff, December, 1954, just before Dean Paul Dunn left Corvallis. Seated (from left): G. H. Barnes, W. F. McCulloch, Dean Paul M. Dunn, H. R. Patterson, W. A. Davies, W. I. West. Standing (from left): R. L. Wilson, R. F. Keniston, D. D. Robinson, J. E. O'Leary, J. T. Krygier, M. D. McKimmy, J. D. Snodgrass, J. R. Dilworth, W. P. Wheeler, R. A. Yoder, W. R. Randall. Professor Nettleton not shown.

Education of the Whole Man

Fry: Would you like to continue discussing Oregon State now, as it was after your three years in the State Department of Forestry?

McCulloch: All right.

Fry: Could you tell us how you made the change-over from the State Department of Forestry back to Oregon State in 1945?

McCulloch: Well, actually there wasn't much to it. Dean Paul Dunn then needed help at Oregon State and asked if I would come over; we had an understanding that when we got toward the end of the war period when other men would be able to pick up the work, I would leave Salem and come back to Corvallis. And that was done. With return to the School in mind I had a couple of assistants working with me at Salem and they took over the administration of the Forest Conservation Act when I left.

Fry: The School of Forestry was probably somewhat different from the way you had left it in 1942. Can you say what some of its distinct characteristics were when you returned?

McCulloch: What made my return most pleasant was the generous willingness of Dean Paul Dunn to experiment and to give me a free hand in curriculum revision. Having made curriculum one of my major fields in my study of education, I was able to call on help from professional curriculum planners. We realigned the three departments in the School. What had been technical

McCulloch: forestry became forest management; what had been logging engineering became forest engineering, a much wider scope; and what had been wood products became the forest products department.

Fry: You came back in 1945 as a professor, right?

McCulloch: And headed the Forest Management Department.

Fry: So this gave you some administrative power within the School.

McCulloch: Let's say "opportunity."

Fry: "Opportunity." [laughter] There were two other department heads also.

McCulloch: That's right.

Fry: And did they agree with you pretty well?

McCulloch: Yes, in fact the ground was laid before they were engaged. They came in '46 with an understanding of the School program.

Fry: Who are they?

McCulloch: W. A. Davies is head of the department of forest engineering, and W. I. West became head of the department of forest products. He is still with the School but not as head of the department; he's gone back to full-time teaching now.

In addition to departmental obligations in timber management, I was also personnel advisor for the School.

Fry: This was student personnel?

McCulloch: That's right. We felt that personal development was an inseparable part of a forestry education. A personnel program was put into effect and is still being carried on.

McCulloch: Doing it today is Dr. W. P. Wheeler, a very capable personnel man. Some twenty years ago, the late Dr. Joseph Illick who was then Dean at Syracuse, made a trip around the country looking at the various forestry school programs. He was highly pleased with our emphasis on development of the whole man. In those days when I was asked what I was doing or what was my business, I said, "Men," and that floored quite a few people. Our major concern was not how many credits accumulated in the registrar's office; that did not equal a professional forester. We tried to develop, and to measure, the whole man. Dr. Illick was very much impressed with the effort which was put into the program at that time; in fact, he said that we were doing more toward personnel development than other forestry schools. I think probably that was true.

Fry: Do you know if other forestry schools picked this up too?

McCulloch: Pieces of it, because in meetings of forestry school deans, Paul Dunn and myself were asked to discuss the School's personnel work with the other deans, and some segments of it were tried in other places and improved upon. Of course we've updated our program right along. In 1947 I had a one-term sabbatical, and spent the time asking the major forestry schools what they did in personnel development.

Fry: Did you get any good ideas there from others?

McCulloch: Oh yes. Some of the best ideas were not being used--through inertia and habit, custom and tradition that you don't

McCulloch: Interfere with the student outside of class hours, you just teach him in the formal class-room. We don't believe in that proposition at all. Our real concern is with the development of the whole man, and we have had testimonials from important people saying that this pays off. Dick McArdle, formerly Chief Forester of the United States, has been very kind in his assertion that the development of the whole man is a fine thing in this School.

Fry: Maybe we should mention here that the technical and the academic preparation of the man is not neglected in all of this.

McCulloch: Oh not at all. It's complementary. There is no use graduating a man with a straight A if he's not well-adjusted socially and professionally, and so we try to mesh the academic and the personnel program and give them equal weight in the School.

Along this line one of the most important, or at least one of the most rewarding things we did was to obtain a summer work report for every student so we knew what he had done to prove himself in the field. The employers like this too because when they come to hire a student, they have access to a personnel file where prior employers have reported, "He's a good man" for this, that or the other thing. Also, within the School, when we got a report back and found that Joe Doaks was failing on the job or not doing as well as he should because of Item X, then we worked

McCulloch: on Item X and the next summer we expected Joe to produce.

Fry: Now as I understand it, one of the main ways that this program was actually put in operation was by giving professors credit for the time they spent on student personnel work and releasing some of their teaching and research time. Is that right?

McCulloch: Well, that was our hope. But it didn't work out because we had such a flood of students after the war that it was impossible to shake the professors loose. At one time I was trying to be head of department, personnel advisor, and teach sixteen credit hours. You find with that load you don't research on the side, or you omit something else. It just doesn't work.

Fry: Well, I don't understand then how the professors had the time to do all this counseling of students and writing the reports on them and "looking at the whole man."

McCulloch: The School made it the prime responsibility of every professor to develop men, and they were all ready to do this. In fact, they were hired with the assumption that they would give major emphasis to developing the whole individual. And so we just worked and worked, and sawed wood as best we could.

Fry: And you didn't have any faculty uprising from the long hours?

McCulloch: No. Foresters have always been hard-working fellows anyway, so this just meshed in with what they expected to do at the School.

- Fry: Did you pick up these ideas for the student personnel program in your contact with these leaders in the field of Education during your summers at the other universities?
- McCulloch: Some, but most of it I got right out of the horses' mouths by buttonholing foresters at work during the years I was with the State.
- Fry: Could you trace this idea of educating the whole man to any other experience that you ran across, or books that you read, or people you talked to?
- McCulloch: Well, it was just a point of view that developed gradually as I found that here was an area of weakness in forestry education generally, so we should try to find some way of correcting it. Here is a real problem. How do you correct that? Eventually you do achieve operating procedures to match your philosophy.
- Fry: It was "necessity being the mother of invention" that--
- McCulloch: That's right.
- Fry: Rather than your reading, for example, John Dewey and deducing logically from that--
- McCulloch: True. Incidentally, John Dewey was one of Mrs. McCulloch's professors when she was a student at Columbia Teachers' College.

I put together in a small book, "The Forester on the Job,"* some of the things that we felt should be done.

*Walter F. McCulloch, "The Forester on the Job" (Corvallis, OSC Cooperative Association, 1955).

McCulloch: I gave our head librarian a copy. He returned a note of thanks saying: this could just as well be called "The Librarian on the Job" if you took "logs" out of the pages and inserted "books."

Fry: You would suggest then that somebody who wants to know what some of the needs are in training foresters, read this.

McCulloch: The Forest Service uses the book in some training programs in several Regions around the country. And a couple of forestry schools use it. It's just a simple little manual of the things I found out, working with men myself and what other employers told me.

Fry: And I notice, as I flip through, that it does contain a lot of your past experience on "training the whole man."

McCulloch: Yes.

Fry: "Personnel problems, communication, motivation, leadership," and so forth.

McCulloch: The kind of thing that most curricula neglect.

Fry: Right. They're busy thinking about those trees.

McCulloch: They forget about the total job.

Development of Research

Fry: Well, along with development of personnel, were there any other major developments? You must have had something to do with research and how it developed when you came back after the war.

McCulloch: Well, actually research had been at a very low ebb in

McCulloch: pre-war days. There was such a tremendous crush of bodies on campus, far beyond anything that we'd ever experienced before, that there was little time for research. It tagged along behind. In fact, you won't believe this, but once in pre-war days we had a fifty per cent increase in research money in one year--from fifty dollars to seventy-five dollars. [laughter] This was the entire grant for the whole School to carry on forest research. Post-war, we did a little better.

Fry: I have a chart here somewhere in my notes about the rather complex development of research. One of the other professors sketched it for me. I understand that there was a forest products laboratory in 1941 just before you left.

McCulloch: Yes, in '41 the Legislature voted \$20,000 a year for two years to investigate more and better methods of production, better methods of marketing, and new product development. That was the Oregon Forests Products Laboratory and it was staffed by one-half of one forest products department man's time and one helper.

Fry: Then after that you had a Forest Experiment Station?

McCulloch: Yes, and this was carried on at a relatively slow rate during the war years. Paul Dunn was responsible for reviving it on a more substantial basis post-war. Then, with the agreement and the cooperation of the forest industry, the State passed a so-called severance tax which provided for either four or five cents per thousand board feet cut to be

McCulloch: placed in a fund to be used for research. Sixty per cent was spent on forest products research and forty per cent on forest management research. This constituted a new forest research laboratory. It was administered by a group of responsible foresters and public interest members.

Fry: Wasn't it administered in Salem for a while at the State Forester's office?

McCulloch: Yes, for a few years. Salem did the accounting for us through the State Forester's office. Later the governing committee became an autonomous body and as time went on more changes were made. Back about 1953, the Forest Protection and Conservation Committee was set up with five men: the members of the State Board of Forestry who represented industry, the Dean of the School, and one public member.

Fry: What were you doing in all this?

McCulloch: Actually, since I was not Dean, I was doing nothing in this. Paul Dunn was most actively engaged, and in this area he put in a terrific amount of time. There were such things as patent laws to be investigated and applied where possible, and Paul gave this a tremendous amount of effort. This should be emphasized.

Fry: Then somewhere along in here the Agricultural Experiment Station got into the act.

McCulloch: No. Let's put it this way, we got into the Agricultural Station's act. Within the School itself, entirely aside

McCulloch: from the State operation, eventually our research effort-- again due to Paul's considerable application to it--became of sufficient size to warrant what came to be known as the Forest Experiment Station, and we maintained that until about two years after Paul left. Then, because we were using many of the same techniques, crossing department lines for the same sort of research program, it seemed desirable to put this into the Agricultural Experiment Station. So Dean Price of Agriculture very generously accepted this proposal and divided his Station into the Agricultural division and the Forestry division. We got tremendously fine backing and support from the agricultural people.

Fry: Did this give you more funds?

McCulloch: Yes, Dean Price gave us a percentage of increases he received, and so we picked up quite a substantial part of the costs of operation.

Fry: And a lot of this was federal money?

McCulloch: Yes. Almost all that came through the Agricultural Station was federal. Then too, as our forestry program enlarged, we began to get grants from the federal government directly to the School, and some individual grants from industry in small quantities, and some from the foundations.

Fry: I wonder if the McIntire-Stennis program, which I understand you did have a great deal to do with--

McCulloch: Well, I tried to help. About five or six of us, maybe

McCulloch: fifteen years ago, were asked by the Forest Service to review as an independent body some of their research. We began to see that State appropriations alone would not meet the total needs of forest research in the various areas, and so half a dozen of us got together and made trips to Washington and knocked on doors and pounded down corridors until we finally got some attention, and we kept at it and eventually the McIntire-Stennis Act was passed, in October, 1962.

Fry: Now, who were these other men?

McCulloch: Forestry school heads: R. H. Westveid of Missouri, Frank Kaufert of Minnesota, Dick Preston of North Carolina, Hardy Shirley of Syracuse, Al Nutting of Maine. We got help from others occasionally, but these men carried the burden and were successful, particularly through Preston's association with Congressman Cooley of the House Agriculture Appropriations Committee.

Fry: Did you have any other special friends in Congress to help?

McCulloch: Yes, Al Nutting of Maine, the head of the School of Forestry there, had a close association with Congressman McIntire, and we had friends who approached Senator Stennis in our behalf.

Fry: Did you get any help from the Forest Service in some of your contacts?

McCulloch: Yes, they were helpful in that they could open doors for us that were a little more strategic than we were aware of ourselves. So this helped.

Fry: And did you testify before any committee hearings? I wonder if any of this work would be in committee hearings.

McCulloch: There was some. Because of distance I didn't testify personally, but Westveld, Preston, Kaufert, and Shirley went down and gave the word.

Fry: And what was your main pitch when you talked to the Congressmen, buttonholed them?

McCulloch: The significance of forestry as a basic economic resource and the fact that what could be done locally wasn't adequate. Also that the federal government itself is in a considerable landowner position with respect to forestry and needed all the basic research it could get.

Fry: What were the main opposition points?

McCulloch: Well, there wasn't any real opposition to the idea. There was opposition to the appropriation of dollars, particularly from the corn and cotton men who were well entrenched, and in a couple of instances they got the money and we didn't.

Fry: Corn and cotton. Was this also research?

McCulloch: Yes, they were looking for more ways to grow and harvest both of them.

Fry: So it was a competition for funds between these agricultural interests.

McCulloch: There was no competition as far as the idea was concerned, and I should say at this point that Dean Price, who was a member of the land grant experiment station executive group, was very instrumental in gaining support. He was

McCulloch: quite successful in working on our behalf in Washington and at other land grant universities around the country.

Fry: Did you go to other universities too to get support for this? Did you make speeches or--

McCulloch: Well, I didn't have to because when the forestry deans got together once a year, they made this an important item on the agenda and finally got the dean in each state to alert his congressman and senator to the need and ask for their support. This worked.

Fry: These were primarily forestry states I guess.

McCulloch: That's right. However, to make sure that it would go and that there would be no discrimination between states, the McIntire-Stennis Act applies to all states including Puerto Rico and Hawaii.

Fry: I wonder if you got any opposition from congressmen who said: you already have the McNary-McSweeney Act, which has put research stations on a number of campuses, and so why do you need this additional money? Did they bring this up as a duplication?

McCulloch: No, it was too far distant. The relationship was quite clear that what we were doing with McIntire-Stennis was one thing and the McNary-McSweeney Act was something else again.

Fry: So you didn't have that ghost to fight.

McCulloch: Fortunately we had another good argument on our side, that the Forest Service was extending its research program and

McCulloch: was desperately in need of good men to staff it, so the McIntire-Stennis Act provides for graduate students in the realm of forestry. This was quite a help.

Fry: Was this your first experience in getting into national legislation?

McCulloch: Yes.

Fry: Did you have any subsequent experiences in this?

McCulloch: Not in legislation. But there was another important association with the federal government. In 1956 the Forest Service asked a number of men to serve on a national advisory committee to counsel with the Battelle Memorial Institute. Battelle had received a contract from the Forest Service entitled "A Study of the Cooperative Forest-Fire-Control Problem." The objectives were (1) to analyze justifiable standards and costs of fire control, and (2) to develop criteria to determine equitable division of fire control costs between federal, state, and private owners.

Fry: You did not talk directly to members of Congress about this?

McCulloch: No, the assignment was to share professional forestry knowledge with Battelle.

Fry: But this was a report that could be background for possible legislation?

McCulloch: Could be, but that was not the primary purpose of the study. I should say at this point that the forested states all had great interest in this study because they had agreed

McCulloch: to finance the work out of their cooperative fire control allotments from the Clarke-McNary cooperative program. Also, the facts developed by the study could well result in changed bases for allocation of federal funds to the states.

The advisory committee met with Battelle personnel several times to give assistance in the study. Committee members were: John L. Aram, Vice-President, Weyerhaeuser Company; Stanley G. Fontanna, Dean, School of Natural Resources, University of Michigan; L. J. Freedman, Vice-President (retired), Penobscot Chemical Fibre Company; J. E. McCaffrey, Vice-President, International Paper Company; myself, as Dean of Forestry here; C. G. McLaren, Vice-President and General Manager, National Container Corporation; E. F. Swift, Executive Secretary, National Wildlife Federation; Charles L. Wheeler, Vice-President, Pope and Talbot, Incorporated.

Fry: So this committee was made up of men from industry and forestry schools.

McCulloch: Yes, and all worked diligently. It was a rewarding experience.

Fry: When was the study completed?

McCulloch: In June, 1958.

Fry: What did it spell out?

McCulloch: To summarize what I said previously, in general it analyzed fire costs and the distribution of forest fire control expenses among the state, federal and private interests.

Fry: For specific states, do you mean, or was this to be a plan for the United States?

McCulloch: Nation-wide in scope.

Fry: Do you think this report had any influence then? Did they use it?

McCulloch: There was a concerted feeling that it was useful.

Fry: Do you have anything else that you'd like to add on the period just before you became Dean? Between World War II and your Deanship. Are there any men that you'd like to comment on during that period or any particular issues that arose and with which you had to deal?

McCulloch: Much needed to be done, and much was done to advance forestry. There was a postwar expansion of the industry. There was an equally great expansion in outdoor recreation, and tensions developed over widely different uses suggested by partisans for the same piece of forest land. That situation is by no means settled at the present time.

Fry: Do you want to go on now to your Deanship?

McCulloch: A few items might be included. I was fortunate in that my ideas on the personnel program were shared by Dr. W. P. Wheeler of the staff. Bill has done an absolutely superb job in developing this program, so we are known quite rightly as the school that insists on the development of men rather than the collection of credits.

Fry: And his exact title is "personnel director"?

McCulloch: Until recently. His title is now Head Advisor.

Also important, was keeping up to date with the changes in the field by having staff men spend more time in research in their own areas so they would have current material to bring to their classes. We were successful in getting a few grants here and there to bolster the research program, which, as mentioned previously, had become a part of the Ag Experiment Station.

The Legislature, in 1961, transferred the formerly independent state agency, the Forest Research Laboratory, to the School of Forestry at Oregon State University. This brought in a very large research organization, both in forest management and forest products. With this new big group a part of the School and the small research operation already in the School, we made an entity more than big enough to justify our research standing on its own feet; so with the blessings of the Agricultural Experiment Station

- McCulloch: administration we departed from them two years ago.
- Fry: And is this research program supported partly by state funds and partly by federal funds?
- McCulloch: Chiefly by the severance tax on logs, coming out of the pocket of the private operator. There is also a small general fund appropriation, recognizing that the people as a whole have a stake in the development of forestry in Oregon. Then there are some grants from the National Science Foundation and other federal agencies, and some contract work where an operator brings in a specific problem and says, "I'd like to have this solved. How much will it cost?" This helps to piece out the fairly static income which we get from the severance tax.
- Fry: And you as Dean of the School of Forestry were also head of the Experiment Station, is that right?
- McCulloch: Yes, when I was Dean I was head of the Station. R. M. Kallander was the administrator in direct charge of the Laboratory.
- Fry: And then did you have any kind of a committee to help you decide on what research projects would be undertaken?
- McCulloch: There were, and still are, two research advisory committees, one for products and one for management. They review proposals for growing the wood and for utilizing it.
- Fry: Now research is done by professors at the School and at the Laboratory, is that right?
- McCulloch: Yes. A close rapport exists between those primarily

McCulloch: concerned with research and those primarily concerned with instruction.

Fry: Do the instructors get to do any work at the Laboratory, or do they want to?

McCulloch: With the amalgamation of the two programs, the men formerly in the Forest Science Department of the School, which was our research arm, became part of the Laboratory staff, and some of the Lab staff are part-time in teaching. Most instructional staff members are engaged in research in their spare time or in the summer part-time.

Fry: What did you do about professors who were in the more basic sciences like botany and entomology?

McCulloch: Initially we paid for the forest soils man and the forest entomologist in the Agricultural Experiment Station. When the Forest Experiment Station was established in 1954, we felt that these men should be closely associated with their colleagues rather than being members of the Forestry staff. In entomology we have two men now.

Fry: In the department of entomology?

McCulloch: That's right. We have a number of graduate students in each of these three areas.

Fry: Forestry graduate students?

McCulloch: Yes, as well as graduate students in science.

Fry: So the specialized professors are placed within their own departments on campus but are partly supported by the School of Forestry, and they teach forestry students.

McCulloch: Dean Price gradually made funds available to us to support these three posts.

Fry: Now backtracking just a little to where this large research structure became available for the campus, you were Dean I guess while all of these arrangements were being talked about and prepared for. I'd like you to spell out what your role was.

McCulloch: Well, we were always trying to arrange the facilities, the funds, and the time so that staff men had opportunity to do their best work in both research and teaching.

Fry: Whose idea was it to bring this to the campus?

McCulloch: This originated out of a request by Mr. Rudy M. Kallander, the administrator of the Lab, for a review of the program. Dr. Frank Kaufert, Dean of the School of Forestry at Minnesota, was asked to come and examine what we were doing and make a report, which he did. Dr. Kaufert raised the question whether the Lab would not be able to do a better job if it were more closely tied to the University-- be a part of it, rather than just a state agency in Corvallis. The report was read by the advisory committees and the industry leaders. William Swindells, President of the Willamette Valley Lumber Company, offered the proposition that maybe the Lab should be part of the University. This would enable the staff members to carry on their advanced work for higher degrees as staff members rather than as outsiders and at a very considerable saving.

McCulloch: Consolidation would just improve the total aspect of our relationships immensely. The research group would be "members of the family" instead of "friends in town," and so with the approval of the two research advisory committees, the necessary legislation was prepared, again under the direction of Mr. Kallander. And with the help of forestry friends who represented us at Salem this was put through.

Fry: Was there any special opposition anywhere?

McCulloch: Nothing of significance. Oh, there were one or two scattered objections from people who didn't understand or were afraid this was a take-over of the forest industry by the School, which was totally without reason of course.

Fry: How about vice versa? Did anybody feel that it was a take-over of the School's research functions by forest industry?

McCulloch: At first a few of the staff were a little apprehensive, but that feeling has disappeared.

Fry: This makes your research problem-oriented, as opposed to a more esoteric or "basic" research, is that right?

McCulloch: Not entirely so. We are doing some basic work. For example, the National Science Foundation now recognizes forest science and is paying for some of the research. An interesting point is that the advisory committees gradually realized that we needed more basic research and now support use of some funds for a certain amount of basic work.

Fry: How are you tying it in with the work being done by the U.S. Forest Service research in the Northwest?

McCulloch: We're really tying it in because there has been a research advisory committee to the Station on which the Dean of Forestry is represented. The Director of the Station is represented on both of our advisory committees so we share knowledge back and forth. There's wonderful cooperation in forest research in the Northwest. It's just a delight to work with the people in other organizations.

Fry: You don't get any competition then on who's going to do the most for Douglas-fir silviculture, or anything like this?

McCulloch: No. For example, in genetics we had one man at the Laboratory (before it was a part of the School), one man in the School, and one man in the Forest Service, all three working one day for one man and the next day for another, without regard for formal allocation of budgets. This has been a very fine thing indeed.

Fry: And what has been the response of industry on the whole to the research? Have they been able to use it?

McCulloch: Yes, indeed. A very good response. They feel this is their particular bailiwick because they're paying for it in large part. So they have a genuine interest. I should say this: as work becomes more basically oriented, the average individual, including myself, is less and less able to evaluate it and you have to take it on faith that the man doing the work knows what he's doing.

Fry: This is sometimes difficult to sell to a man in forest management for a large firm.

McCulloch: True.

Fry: Do you have much complaint that you're getting into too much "unusable" research?

McCulloch: I haven't heard any. Of course, I've been away from it for the last couple of years. The research group has done an excellent job in acquainting industry people with what they were doing ahead of time, instead of just dropping it in their laps. We have quarterly meetings of these committees to review what has been done and what has been proposed to be done. So the industry is pretty well informed.

Fry: What efforts are made to disseminate information that comes from research?

McCulloch: We have a full-time editor and an assistant on this work. In addition to the annual reports, there's a large flow of material to journals where the researchers have their findings published.

Fry: In existing journals or do you have your own organ?

McCulloch: In journals and our own as well as individual bulletins.

Fry: What is your journal? What is its title?

McCulloch: It's called Index.

Fry: That's the title of it?

McCulloch: Yes. It is put out partly by Extension and partly by the Laboratory. Some of our men are actually paid by the Extension Division of the School of Agriculture, part-time. One man is half-time Lab, half-time Extension, and two men are part-time teaching and part-time Extension. A large

McCulloch: amount of material has been published by the researchers.

Fry: Do you get a tremendous amount of phone calls and visits and letters of inquiry?

McCulloch: Oh yes.

Fry: Does this require a full-time person just to ferret these things out?

McCulloch: Actually it takes more than one full-time person. We don't have one assigned to it. It's rotated around to the man best able to answer the question.

Fry: And who rotates it?

McCulloch: The administrators or department heads.

Fry: Can you give some indication of about what your mail load is on this, or visitor load. How many inquiries do you get per day?

McCulloch: It's more than enough to keep a man busy full time. We just answer as best we can.

Fry: Well, you held your hands about ten or twelve inches apart. Was this what's on your desk at any given time?

McCulloch: That's about the way the incoming mail looks to the man who receives it. There are many inquiries, and from far beyond the boundaries of the state. Our publications go quite a distance, and increasingly now there's the business of other researchers in other regions wanting assistance with projects similar to what we're doing. There's tremendous interest now in tree improvement. There are forest tree improvement committees around the country in different

McCulloch: places, so there tends to be a pooling of information.

"What are you doing about so and so?" a man from Georgia will ask. Or we'll ask somebody in North Carolina what he's doing in this particular area.

Fry: Douglas fir seeds are being used for reseeding in such places as Ireland and parts of Germany, and they're getting this seed I understand from the Douglas fir area here.

McCulloch: That's right.

Fry: Does this increase your volume of mail from those areas?

McCulloch: Oh, not in tremendous amounts because we direct the letters to the seed merchants insofar as possible and let them answer the questions.

Another area of endeavor that's very compelling at this time around here is seed orchards and the improvement of stock through genetic operations. We have a very fine genetics plantation in our School forest.

Fry: Oh, how long has that been there?

McCulloch: Oh, I would say roughly about ten years.

Fry: Does this fit in with the work then, that Leo Isaac did in the Douglas fir--

McCulloch: No, he wasn't very heavily in genetics. He was in silviculture.

Fry: In silviculture, and I guess he laid some of the groundwork for genetics.

McCulloch: That's right. He has been known as the father of Douglas fir for a long time. I dabbled a little bit in Douglas fir

McCulloch: artificial regeneration myself. Thirty years ago I produced some young fir from cuttings with excellent root systems, using a rooting stimulant, auxilin. I did this through a combination of ignorance and stupidity--put my treated twigs in the greenhouse and promptly forgot them for nine months. The greenhouse foreman called up one day and asked if I would please move my trees. I said they were not mine and he could do anything he wanted with them. But he kept on badgering me and finally I went over to the greenhouse. The young trees were beautiful. At last I remembered my growth-stimulating experiment nine months earlier. To make a long story longer, they were planted on the McDonald Forest and were forgotten once more during my three year absence at Salem. When I came back to the School I liberated the trees from the over-topping brush. Now they are thirty-five to forty feet high. Some day we'll grow seedlings from these trees and I can look forward to being a Douglas fir grandfather--perhaps the only one. These trees are of value to our geneticists because the stock is all the same. Grafting or other practices can be tested accurately since any changes will be due to our experimentation, not to any differences in the trees.

Fry: This genetics work is still relatively young, I guess, as genetics work goes.

McCulloch: That's right. Let me illustrate further what I meant about cooperation. Our men in genetics are part of the

McCulloch: genetics seminar on campus along with others who are in the genetics of poultry, of bees, of swine and so on. The principles of genetics are the same. But our faculty men are welcomed into this meeting, held once a month or so, and we feel that they belong as geneticists rather than foresters. We are now working to establish what we hope will be the Douglas-fir genetics center of the Northwest on our School forest, partly on the old state forest nursery situated there.

Fry: By the way, did you have anything to do with the establishment of that forest?

McCulloch: No. That was before my time. The first School forest land was purchased by staff, students and alumni, spurred on by T. J. Starker, twenty years a staff member, and now the sole survivor of the first graduating class of 1910. The College Board of Regents then bought a small parcel to add to the initial purchase. The greatest acquisition occurred when Dr. Peavy received substantial grants from Mrs. Mary J. L. McDonald for this purpose. Hence the name, McDonald Forest. Dean Dunn secured from the federal government the release of what was called the Adair Tract from Camp Adair at the end of the war. We now call it the Paul M. Dunn Forest.

Fry: You were able to use this forest for a lot of your work I guess when you were on the staff as a teacher.

McCulloch: Yes, we use it daily. Actually the School forests are just detached laboratories for many classes: silviculture,

McCulloch: surveying, mensuration, tree identification, dendrology.

This relieves the need for a summer camp.

Fry: But then the students have this other experience out in industry before they graduate, don't they?

McCulloch: They must have two summers of satisfactory experience--satisfactory to the employer and to us.

Fry: They actually have a job within industry?

McCulloch: Or with one of the public agencies.

Fry: This takes a lot of placement and time.

McCulloch: Yes. We have an advisor to handle this. For example, he'll get requisitions for maybe thirty jobs from the Forest Service with specification as to what they want, and then he sorts out the men and puts them in the slots so to speak. We feel that a student should know something about working in forestry before he graduates. It's too late then to decide he's in the wrong field. Also it gives him a knowledge of a company or an agency and gives him seniority. Some employers say, "We want this man when he graduates."

Fry: So this helps in placement, too.

McCulloch: Oh very much so.

Fry: Do you feel that your personnel program has shown results in the way a man can progress after he gets into a job?

McCulloch: Indeed so. Of course, we can't say it's solely due to that. The man's own intrinsic capacities come first, and then we try not to get in his way so he can use his abilities well.

Fry: Dave Mason made two comments to me about the School here under your guidance. He felt that the students here had to work very very hard--

McCulloch: We hope so.

Fry: And I guess he means in individual classes and in the work load put on them by the various professors, not necessarily an increased academic load.

McCulloch: The schools of Forestry and Engineering both require more credit hours than other schools on campus. In other schools students can get by with 192 total hours to graduate and we require 204.

Fry: So this means that they do take more hours then per semester.

McCulloch: Yes. They must take seventeen hours every semester, every term, and the others take sixteen.

Fry: I guess a dean can't do very much to increase the difficulty of a course or make the work any harder; that would depend on individual professors.

McCulloch: In the hiring of staff men, the dean chooses men who have this persuasion to start with: that they want a lot of work from their students, and want it well performed. Our theory is, and it's well substantiated, that the students will have to work hard when they leave, and in order to achieve success they'd better start working hard now.

Fry: Who have you hired that you've been particularly pleased with as teachers and you feel have worked out and have a bright future?

McCulloch: I have faith in all the men on the staff.

Fry: Are all the ones on the staff now hired by you? You mean all the ones--

McCulloch: Both those employed by Dean Dunn, and myself when I was Dean. As a footnote, some staff men aren't here any longer, for one reason or another. This is not necessarily detrimental to them; perhaps they and the program didn't match one another, or they accepted other offers.

Fry: They have to have this particular motivation, I guess, for teaching and counseling and--

McCulloch: And for building men.

Fry: The other thing that Mr. Mason suggested was that perhaps there was a program of selectivity that went on before students could really enter the School of Forestry here. Is that true?

McCulloch: No, that is not the situation.

Fry: We didn't know how this could work in a state-supported institution.

McCulloch: It doesn't. We have to abide by the admission requirements of the University. However, in the catalogue it states that standards which are satisfactory for the University as a whole, may not suit the requirements of some professional schools and that students might be expected to be required to do more in those schools. That's a rough approximation.

Fry: Do you do any pre-counseling of students before they actually formally enter the School? They enter the School at the

Fry: sophomore level, don't they?

McCulloch: No, as freshmen. During New Student Week there is a very intensive counseling period, and program and preparation period.

Fry: We thought maybe you managed to discourage some students whom you felt really wouldn't fit into this forestry curriculum and into forestry as a field.

McCulloch: Well, for example, during New Student Week about ten years ago, a very obnoxious individual showed up among the students: dirty, sloppily dressed, foul-mouthed, and so I just went to this guy and said, "There's no place in forestry for you; get out. I will refuse to sign your registration card." So he left and three weeks later was in jail. He had just come down here thinking to find a snug harbor from which he could rob dormitories. Of course, you can't always be that lucky but Forestry runs a pretty tight ship.

Fry: Well, you must have a pretty high attrition rate, if nearly everyone who so desires can enter the School.

McCulloch: It's as high sometimes as seventy-five per cent of those who entered. But this is due to several things. One is poor information, and we can correct that. Poor intention--

Fry: You mean information about what the demands of forestry are?

McCulloch: That's right. That's why we have this Introduction to Forestry text and orientation course.

Fry: And this was something that you instituted?

McCulloch: That's right, with help from the staff. We feel we owe it

McCulloch: to the man who is coming in, putting his money in good faith on this career, to tell him all there is about that career, particularly whether or not he's adapted to it. Some students are ill-informed, and we can correct that.

And some are ill-intentioned--we can terminate them; and ill-advised by the high school counselors--we can correct that too.

Fry: So a lot of this occurs between freshman and sophomore years, is that right?

McCulloch: Also in the freshman year. There's quite a heavy dropout at the end of the first year. For instance, we get ten or a dozen students each year who register in the School of Forestry and expect to get fish and game in forestry, but on this campus that's in agriculture. Similar errors occur. For example we had a student one time who was crazy about aeronautics, so we talked him out of forestry at the end of the year and into aeronautical engineering on the campus. Now he's a test pilot.

Fry: How did he think forestry would give him aeronautics?

McCulloch: He was going to fly around in the woods.

Fry: Aerial photography and mapping; I see.

McCulloch: Another man was very much interested in editorial work, so we shipped him down to the school of journalism at the University of Oregon at Eugene where he graduated and is now an editor in this state. So our concern is for the man, his capacities, his wishes and his hopes. We're not

McCulloch: interested in the total number of bodies in the School.

Fry: I'd like to ask you a personal question here. When you look back over your career, do you feel that your career has fitted you pretty well?

McCulloch: Well, I'll put it this way: If I had absolutely free choice of any other occupation and any other place to be, I would sooner be right where I am.

Fry: And you have a feeling that you are in a position where you can use your tools and abilities and interests--

McCulloch: To help young fellows find similarly satisfactory careers-- that's been my hope.

Forestry Education and the Hill Family Foundation

Fry: We probably should insert here something about the Self-Learning Center and how this fits into some funds which I understand are from the Hill Family Foundation for educational projects.

McCulloch: Well, David T. Mason has for many years been consultant to the Hill Family Foundation on their holdings of timber land in Linn County, Oregon, across the river from Corvallis. About the time Dean Dunn left here, Dave had the idea that perhaps the Hill Family Foundation could be interested in an educational project in the West, particularly where the Foundation operates. Initially Dean Dunn and later Dr. Barnes of the staff and I, worked out a rough-draft

McCulloch: proposal, and this was submitted to the Hill people. From a modest initial beginning, it has become a very significant contribution to the development of the School.

At the present time the Foundation funds a number of benefactions. The whole program, which I will detail for you, is known as the South Santiam Educational and Research Project. One is a series of scholarships for students in four high schools in the South Santiam area of Oregon to attend any university of their choice. Another is scholarships for students interested in vocational training. Then there is a group of scholarships, both undergraduate and graduate, for students in the School of Forestry here. There are high school achievement awards intended to enlarge the horizons of high school students, again in the South Santiam area. Two of the most significant portions of this program from our standpoint have been the funds to bring visiting professors from various parts of the world to the School of Forestry. And then a staff development fund allows a staff member to submit an application for funds to carry on some specific enterprise which would enlarge that staff member's capacity to teach. We are in the third five-year unit of this program.

Fry: So this has been going on then for eleven or twelve years.

McCulloch: That's right. And beyond this is the School's Self-Learning Center. This was an idea developed by Dr. R. R. Reichart, formerly of the department of English and the school of

McCulloch: education. Dr. Reichart's idea was to provide a center where various teaching and learning aids could be provided, much as you provide books in a library for students who would come outside of class hours and study for themselves. It's been very helpful to our program. We are now in the second three-year period of this enterprise.

Fry: And it was for this center that you tape-recorded some of your stories of your early-day experience in forestry.*

McCulloch: That's right.

Fry: And when did you do that?

McCulloch: Just this last year at the requests of students and the Self-Learning staff. They wanted me to provide some perspective for students to look back on, to see how far we have come.

Fry: In forestry.

McCulloch: Yes.

Fry: I thought that you and Reichart worked on this Self-Learning Center more or less together.

McCulloch: That's right. Actually, my part was to make the proposal to the Foundation. I arranged for Dr. Reichart to talk to the executive secretary, Mr. A. A. Heckman, and to Dave Mason and members of the Board of Directors.

*McCulloch, W. F., "Old days in the Woods." A transcription of tapes #320, 321, 322, in The Self-Learning Center, School of Forestry, Oregon State University. Copy of transcript also in Appendix of this volume in Bancroft Library, University of California, Berkeley.

Fry: Is this Center used a lot by the School of Forestry?

McCulloch: Oh yes, a good deal.

Fry: Have you helped in creating materials for it?

McCulloch: Yes, we used our orientation course as kind of a guinea pig. In addition this provides students with knowledge of the Center's existence so they could take advantage of it, more so than just stumbling on it accidentally.

Fry: In this orientation course then, you send the students into the Learning Center where in these individual booths they can check out tapes and--

McCulloch: Tapes and printed materials, course outlines, help in physics, geology, botany, math. We're employing cross-campus people to provide an array of aids in various courses outside the School of Forestry. For example, the head of the geology department has the entire geology-forestry program on tape in the Center. Then any student who misses a day of class or is in the infirmary can come over and pick up most of what he's missed.

Fry: Then is this transcribed too so that they can read it instead of listening to it?

McCulloch: Yes.

Fry: And what do they use the tapes for?

McCulloch: They use those in class largely, also to supply some outside requests.

Fry: As instructional aids?

McCulloch: That's right. For instance that famous tape on the

McCulloch: infamous conduct of the American prisoners of war in Korea is used to shock the students into a sense of responsibility for their actions. We have a very fine tape from Bob Richards, the Olympic pole vaulter who has since become a missionary. His inspiration puts a spiritual tone into our program. Through tapes you can enlarge the teaching staff immensely at very low cost.

Fry: And these are brought in by the professors and then used in class?

McCulloch: That's right. From the Self-Learning Center.

Fry: Do other departments on campus use this Center as much as forestry?

McCulloch: No, because ours is specifically designed for foresters. But pharmacy, farm crops, two or three other places on campus which are engaged in the innovation of their curricula, have been over to see what we're doing with the idea of putting such a center in their program.

Fry: I guess you go light on books in this Center because those are available in the library.

McCulloch: That's right. We try to supplement what's available elsewhere and not duplicate.

Fry: Do you use video tape?

McCulloch: Yes, to a small extent.

Fry: I understand that Professor Reichart is now an advisor to some other college that's trying this. Is that right?

McCulloch: Yes. Pacific University, a small private school in

McCulloch: northwest Oregon at Forest Grove, is in process of developing a new visual aid center. Application was made to the Hill Family Foundation for assistance, which was granted on the recommendation that Dr. Reichart be engaged as consultant. This is now going on.

Fry: Did you also help with the proposal and the other Hill Family Foundation grants to the School of Forestry?

McCulloch: Yes, on the South Santiam Project. I worked with Dave Mason particularly on that. The Project Committee now consists of Mr. Mason as chairman; Dean Stoltenberg of the School of Forestry; the former Dean of Administration of Oregon State, Dean Lemon; the Assistant Secretary of the Oregon State University Foundation; James Dunn, Dean Dunn's son (He's also development officer for Oregon State University); the Hill Family Foundation representative on their lands, Mr. Gene Ellis; the local forest supervisor for the Forest Service, Mr. W. S. T. Moore; the retired assistant to the president of Oregon State University, General J. H. Berry; and myself. This committee reviews the granting of scholarships and other fiscal and physical business of the committee each year.

Fry: What are some examples of professors who have come to Oregon State University under this program?

McCulloch: Dr. Fritz Fischer of the Swiss Forest Research Institute at Zurich, Switzerland; Dean Thorsten Streyffert of the College of Forestry at Stockholm; Dr. A. Okazaki of

McCulloch: Kyoto University, Kyoto, Japan; and Dr. Richard Plochmann of the University of Munich. These will illustrate.

Fry: How did you select these men and how did you get them?

McCulloch: Well, chiefly through association of staff members and others we had met abroad, we were familiar with the work of these men. Dave Mason has a world-wide acquaintance with foresters, and he knows most of these men personally. So from his background it was easy to make a choice. Then we had some domestic foresters too, such as Leo Isaac and Dean Emeritus Jeffers of Idaho. Dean Jeffers was our first visiting professor. This next year DeWitt Nelson--"Swede"--will be visiting professor for the spring term.

Fry: The just-retired head of the Department of Conservation in the state of California.

McCulloch: Right.

Fry: And do you print these lectures so that these are available later?

McCulloch: There is a series of printed material for most of them.

Fry: They stay about how long?

McCulloch: Usually one term. I should also add Vice Chancellor Mobbs of the University College of North Wales. He had twenty-five years in India as head of their forestry program.

Fry: What's the response of the students to imported forestry?

McCulloch: To the very young ones, it doesn't make much difference, but the seniors and graduate students take to this very

McCulloch: well indeed. We have a graduate seminar led by the visitor. Graduate students and the staff particularly attend these seminars.

Fry: And what is the effect on the staff?

McCulloch: Very beneficial of course. It widens our horizons and gives us--selfishly--good contacts in other parts of the world.

Fry: I was wondering if you had any professors take off for Wales or Germany or Japan afterwards?

McCulloch: We have had, to Denmark, Switzerland, Sweden, Germany, Austria, Thailand.

Fry: Have you gone anywhere?

McCulloch: Not off the continent.

Fry: I wondered if we were about to miss a chapter in your life.

McCulloch: Too busy to get away. However, for many years, partly due to my interest in history, Mrs. McCulloch and I used to travel by car through the West, when it could be worked into a crowded calendar.

Fry: You have a program here of continuing education for men in forestry and allied areas. How did this start?

McCulloch: In this period following the war when Paul Dunn was Dean, he started a program of short courses to serve returned veterans and employed foresters in the woods, and we increased and amplified that. We now have underway maybe fifteen short courses given by the staff two or three days up to two weeks, such things as continuous forest

- McCulloch: inventory, forest taxation, herbicides and their use, silviculture, aerial photo and that sort of thing.
- Fry: To update knowledge of present foresters.
- McCulloch: Yes, wedge-prism cruising, for example, was unheard of when most of our men were in school. This is a new technique. One of the staff members is a specialist in this area. Between staff and friends out in the state whom we borrow as teachers for a day or two, a pretty good presentation is made.
- Fry: Is this all arranged by the Dean's office?
- McCulloch: It has been to date, yes.
- Fry: I remember, in looking over all of these materials of yours, reading a report that you made which was a proposal for just such short courses, before any of them had gone into effect. This lead me to believe that you must have been one of the major instigators of a program like this.
- McCulloch: Well, it's true that we've had this for quite some time. I wasn't the major instigator, but I amplified what we had been doing. Lately staff members themselves have decided, Well, we ought to give a short course in such and such a thing. Or government agencies or industries will say, Why don't you do thus-and-so? And so we do it. But this is all imposed on the faculty as an extra obligation. It's difficult to carry on very many short courses because the staff man's day is already full.
- Fry: These short courses carry themselves financially I guess.
- McCulloch: Yes, that's right.

Fry: We can start out on Woods Words now.* This is a most remarkable book, and I want to tell you that probably the most dog-eared copy in existence is the one on my desk. I couldn't have functioned at all in this series without that dictionary of forest terms.

McCulloch: Well, from somewhere you've scrounged up a remarkable background in forest history, because you have more knowledge of it than a lot of foresters.

Fry: Oh really?

McCulloch: Yes.

Fry: I guess that's because foresters have been so adept at imparting their knowledge on tape to me.

McCulloch: Well, somewhere you really got a background in this business.

To go on to Woods Words, Stewart Holbrook I think said it in the introduction when he explained that the nurse was completely bemused when the old logger in the hospital tried to tell her in loggers' lingo something about how he was injured. This esoteric language of loggers appealed to me very highly when I was a young fellow because it became kind of a game to try to figure out what they meant without asking.

Fry: How young?

McCulloch: This was all through my teens in the logging camps and on

*McCulloch, Walter F., Woods Words, A Comprehensive Dictionary of Loggers' Terms (Portland, Oregon: Oregon Historical Society and the Champoeg Press, 1958).

McCulloch: the railroad with my father, who knew loggers because he switched a lot of cars in the logging camps to make up trains. So I knew by their first names quite a number of loggers in the interior. And I continued my interest when I worked in the steam camps down on the Coast. I said something in the preface too which perhaps explains it. In the early days of railroad logging there were no quick trips to town for loggers; they were stuck where they were logging until they gave up the job, and so for entertainment they sat around the bunkhouse or the camp store at night and made up yarns and words to describe their actions and their operations in the woods. Some of them were blasphemous and some of them were obscene, and most of them were very fitting. In fact, it was suggested that I should have an appendix to the book which could be sent by express. Not the mails.

Fry: Because it was too obscene for the mails?

[laughter]

McCulloch: It's too bad that ladies can't enjoy this.

Fry: You had to omit the more colorful ones completely then.

McCulloch: Yes. Or use euphemistic substitutes which loggers would understand and forgive me for.

Fry: That's a shame. I think that what we should do is append these to your interview so that at least they won't be lost to posterity. We don't have to send them through the mails. We can just keep them in the archives.

[laughter]

McCulloch: I'm afraid they'd make the archives odoriferous.

Well, in any event, in trying to interpret what an old fellow said, I'd listen carefully for a word and its explanation and then make a note on a piece of paper and stick it in my pocket, and the next time somebody else used that term then I knew. And eventually I was trapped by my own doings. I got interested in collecting these, first of all so I wouldn't appear ignorant, and then eventually I began collecting them for their own sake.

And as I mentioned also in the preface, an old-time logger at one of the logging congresses which I used to attend was bemoaning the fact that the words were being lost, but I had already saved a number of them. So I felt fresh inspiration to go on and save all I could find. So for many years, Mrs. Mac and I on weekends and holidays would drive around the Northwest and root out old loggers from hollow logs and old stumps and whatnot and get them to tell us of their experiences. Every once in a while a brand new nugget would crop out.

Then, once I got thoroughly immersed in this, I went back to all the early numbers of the West Coast Lumberman, the Timberman, the Puget Sound Journal of the early years, and everything that wasn't explained in the magazines I'd write down, then while there were still old loggers around, I'd rush to them and find out what this meant. So, as I

McCulloch: say, I was trapped by my own interest in it. And then the historical references too became of value. It was my sad fate two or three times to make an appointment with an old logger only to find that he was no longer alive when we got there.

One thing of interest: I had a date with an old logger to discuss woods words with him at his home in Tenino, Washington, and one wintry afternoon we drove up there from Corvallis. There was indeed a very tender touching scene: this old logger and his wife sitting on their porch, tea kettle on the stove, having a cup of tea and watching the traffic go by in the evening of their existence. The old lady said, "Hold up a mug and I'll pour you some tea." So I held up the mug and she poured the tea. "Tea" my ruddy old eye! It was straight bourbon. It wasn't tea at all. [laughter] So in short order the pursuit of words came to a halt for that day.

Fry: Did you go into bars that loggers frequent and sort of listen in on conversations?

McCulloch: In the early days, yes. And in later days, no, because the bars became frequented chiefly by Burnside drifters. Lower Burnside Street is a sort of blighted area in Portland, and Burnsider was a term of contempt used in the logging camps. But the migration of the loggers on the weekends from the woods to the bars and back again became a thing of the past when the camps began to be abandoned

McCulloch: in favor of "home guards," men who lived on a little subsistence ranch or a small piece of acreage in some little town. I've explained that in the preface too. So unfortunately the "woods words" business began to dry up. When it came to the point where a lot of work produced practically nothing more, I decided it was time to call quits and put it into print.

Fry: You collected these then, at a zero hour.

McCulloch: Just about.

Fry: You mean that a number of those words in the book are historical, even today no longer used?

McCulloch: Oh yes. Many many terms are no longer used at all. Today's logger is more likely to be a young fellow with a family living in some small town. The old timer was a hard-boiled old character to whom logging was his whole life and total existence. There are practically no logging camps left in the West today. There are still some in British Columbia reached by boat or plane, but not down here. We have truck roads everywhere. It was the passing of railroad-type logging and the big camp, which was really a little town in the woods, that made the difference in the loggers' thinking and talking and word usage.

Fry: What about logging regions? I was wondering how you handled the almost entirely different logging vocabulary of southern foresters compared to those in New England or in the Northwest.

McCulloch: I didn't try at all to do any of the eastern camps. Just the Northwest and north Pacific coast, British Columbia, Washington, Oregon, and northern California. But there are small differences even there. For instance, in the redwood region the man who cuts down the tree is known as a "chopper" and in the Douglas fir region we call him a "faller." There are a few such differences but not many.

Fry: And where did you find the most widespread and common usage of words? In those referring to everyday activities and personal habits?

McCulloch: Yes, the tools they worked with, the jobs they did, and the general operations in the woods.

Fry: In other words, the logging work itself.

McCulloch: That's right. The working words.

Fry: So there must have been some migration back and forth between camps then.

McCulloch: Oh a great deal. In fact, the man who migrated a good deal was called a "camp inspector." And my friend, Budelier, during the height of logging here on the Columbia River, made a bet with another logger that he could work in a different camp every day of the month, then lost by one day because he missed one boat. But the other fellow did work in thirty-one camps in thirty-one days. This of course is no longer possible.

Another thing that has changed the total picture of the logging business is social legislation: pensions and

McCulloch: that sort of thing. A logger doesn't want to walk off the job and leave his pension behind him. So the workers have become more settled and more staid, less imaginative and less colorful. Very few words have been added to the wood vocabulary in recent years. About the only one that has any significance is "hydramatic logger" for a guy who is shiftless.

Fry: "Hydramatic"--oh, I see. [laughter] A real pun.

McCulloch: And then of course one has passed into general usage-- "rocking chair money," unemployment compensation.

Fry: What other words did you pick up that have passed into general usage?

McCulloch: Well, for example: "a raft of," meaning a whole lot of something. That was an old-time term. It was used originally because the loggers rafted great quantities of logs on Puget Sound, the Columbia River, and the Straits of Georgia in British Columbia. The primary transport in the early days of course was water. All the logging started close to the shore, and railroads came in only when it was too long a haul from the tree to the beach.

Fry: I guess you had a lot of railroad language.

McCulloch: Yes, because early big-time logging was railroad logging.

Fry: And workers must have migrated from railroad jobs into logging camps, perhaps bringing this language with them. Did you find this was true?

McCulloch: Yes, that's true. Of course, I was especially fortunate

McCulloch: in that I knew the railroad terms myself.

Fry: Yes. And you were able to spot this. Do you note this in the book when it was a term that came from railroading?

McCulloch: No.

Fry: Language usually gives an indication of the types of activities and the sense of values of any sub-culture like this.

McCulloch: It was the loggers' prerogative if they liked a word; they even took some words from the Indians, the Chinook jargon of the northwest: "cultus," no good; "klahowya," how are you or hello; "tillicum," a friend. And then Indian reservations had impolite verbiage too. Chinook was a patois. You could get along on Chinook with most of the tribes, using much waving of hands, of course. But the logger himself didn't deliberately invent any Indian terminology. He just used what was most common and helpful later on with Indians because the Indian was too lazy to bother learning any of the white man's language if he could help it. The Indians of the Northwest had it good, you know, with the salmon. They didn't have to work hard or chase buffalo all over the plains.

Fry: I guess they were pretty lucky as Indian tribes go.

McCulloch: Yes, lots of berries, lots of deer and bear in the early days.

Fry: And they produced very fine art too.

McCulloch: The Haidas particularly, working in black argillite.

McCulloch: There's a fine array of this Haida stone carving in the Provincial museum of Victoria, British Columbia.

Fry: You were showing me some of your Indian art here yesterday.

When you started out how did you classify these words? What kind of a system did you use? You're not a lexicographer.

McCulloch: No.

Fry: Were you familiar with methods of lexicographers?

McCulloch: No, I just relied on the alphabet. I wrote them in alphabetical order on any old piece of paper I could find.

Fry: The word itself.

McCulloch: The word itself, right.

Fry: And this was your system?

McCulloch: This was my lack of system. This seemed to work because other people using it could readily follow the alphabet where, if I had tried some other system, it would have confused all of us.

Fry: When you got ready to publish, were there any particular problems in putting it together?

McCulloch: No. As a matter of fact, I had several thousand words and phrases on cards, and we just started from that point and that was the manuscript.

Fry: It was just a matter of typing out the cards then?

McCulloch: I typed them. Then I gave the manuscript to the Oregon Historical Society and they published it. The actual printer was in San Francisco.

Fry: What has been the response to this? Can you give us an

Fry: Indication of how widely it's been used?

McCulloch: I'm afraid I can't because I didn't make any attempt to follow it down. But there are books scattered around in camps and offices of lumber companies and so on.

Fry: Have you received any correspondence about it or objections from someone who didn't agree?

McCulloch: No. The most cheerful advice I got was that I should have said more of the things that I didn't say.

Fry: Those were the ones you had to leave out or euphemize?

McCulloch: Yes. I had no objections. I can't recall any complaint from anyone, which corresponds with my belief that loggers are generous anyway. But, it was a lot of fun and some small good was done in that words were saved which had been forgotten by the general run of loggers.

Fry: What kinds of words?

McCulloch: Well, for example, the "Sampson": this was an arrangement of block and tackle to get around a tough spot, applying to the strength of Sampson of course. The very term "to grease the skids" commonly in use today came from the grease which was put on the skids or cross pieces in a muddy road so the logs could be hauled more readily, sliding on these skids. A fellow with a bucket of tallow or some other kind of grease would walk along behind the bulls with a stick with a rag on it and make a daub of grease on each skid just ahead of the first log, which was snipped or cut off on one end to make it like a sled runner or a ski. This

McCulloch: wasted fine wood on excellent logs of course. But I shouldn't get involved in this or I'll get head over heels in logging stuff.

Fry: Well, we'll refer the readers to the book itself in a footnote and they can read these comments along with the book.

McCulloch: The editorial work was done on it by the Champoeg Press in Portland, Dick Abel, who ran the book store at Reed College. He worked with Tom Vaughan, Director of the Oregon Historical Society.

Fry: Is that press at Reed?

McCulloch: Well, Dick was the press, but he's no longer there.

Fry: Is this a fine-printing setup?

McCulloch: No, he didn't do any actual printing himself but he did the editorial work and layout and produced some very nice books. Western Guns and that sort of thing.

Fry: Well, your other accomplishments include poetry, and I have here a poem, "The Forest and the Town."* You had told me when I had the tape turned off what the background of the poem is, and maybe you can give that to us now on the tape.

McCulloch: Well quickly, this is sort of a review of historical events near the little town of Walton on the Bay of Fundy, Nova Scotia, where my father was a boy. Nearby in the long-gone town of Maitland in the early years, many shipyards built wooden ships. At one time a large number of clipper ships

*McCulloch, W. F., "The Forest and the Town," American Forests, Vol. 62, No. 7, July, 1956, pp. 40-41.

McCulloch: all around the world were skippered by Nova Scotia sea captains. It was such a hard land that that's all there was to do.

Fry: So they took to the sea.

McCulloch: They took to the sea. The sea governed their lives. For example, this you recall is where the tides come and go so rapidly. At the little port of Walton--that's where my father lived--at low tide it was about six or seven miles out to the ocean. And the people there were so governed by the tides they had an expression, I will do so and so "if the tide answers." In other words, "I will do it if the tide permits me to do it." I'll visit you tomorrow "if the tide answers."

Fry: When you wrote this poem you said you sort of put it together in the middle of the night because it was there.

McCulloch: That's true. In 1947 Mrs. Mac and I took my father and mother back to their old homes in the East. They had spent a little time along the Maitland Shore as it was called, and we went through this old town with its decaying docks and huge houses. It made quite an impression on me. Then later that fall, I just happened to think of this one night when I was having a little sleepless period, and I wrote most of it down in the night and then repaired it somewhat in following days. Then I forgot all about it for about ten years.

Fry: I noticed that it came out in American Forests, in 1956.

McCulloch: Nine years later.

Fry: And have you written any other poetry?

McCulloch: Just in sort of a foolish vein, nothing of significance.
I did write some domestic poetry at one time, but that's
been disposed of.

Fry: What one might call very personal poetry?

McCulloch: Yes, that's right.

Fry: So this poem is your contribution then to the world as far
as poetry is concerned. It makes one think that you should
go ahead and write some more.

McCulloch: That's my one grain of sand on the literary beach.

Fry: We'll take it from the beach and put it in the back of the
manuscript so other people can read it.*

*See Appendix.

Fry: There was another thing I wanted to ask you about: the third Tillamook burn. I understand you were in some high position fighting that fire.

McCulloch: A busy position rather than high. This third Tillamook burn was in 1945 and occurred after I had returned to the School of Forestry from the State Forester's office earlier that spring. Fire fighters were so scarce that anybody who could lend a hand was welcomed. So I went up to a place we now call Rogers Camp, named after the late Nels Rogers who was State Forester at the time. I was camp boss in the headquarters camp for some three weeks during the roughest part of the fire. When it became fairly well stabilized, so that it was just a question of waiting it out, I returned to the School at Corvallis.

We had some six or seven satellite camps operating out of the big camp. We had two radio systems operating and handled as many as two-hundred messages a day dispatching men and equipment, relaying news of scouts, reports on fire, and so on. One network was tied into the fire itself in the hands of foremen, strawbosses and camp fire bosses and others. The other was a state-wide Forestry Department network so we could yell for help.

Fry: Besides its size, which I guess was very large, do you know the statistics on how many--

McCulloch: Well, put together, the total Tillamook burn was probably over 350,000 acres.

Fry: And this one was so far the third and last really large fire?

McCulloch: Yes, Tillamook burns appear to occur in six-year intervals. In 1951 there was the possibility of what could have been another big one, but the State Forestry Department was ready for it and the boys jumped in on it fast. All the Northwest mobilized and moved in with cats and trucks and tankers and equipment of all kinds and beat it to death before it got out of hand.

Fry: Is this six-year interval caused by the fact that you get just enough vegetation re-grown in that period of time to--

McCulloch: No, I think it was just pure happenstance: 1933, '39, '45, '51. But in '51 they throttled it. There was none in '57.

Fry: Well, what is significant that you could tell about this burn in 1945? This was, I guess, just at the end of the war and some very new fire fighting techniques were coming out.

McCulloch: Well, actually we didn't have much that was new except tankers. The use of water was pretty well applied on this particular fire. There were big bulldozers with which you can build a road so you can use a tank truck close to the fire. One thing of real interest is that the author George Stewart came up from Berkeley and stayed at the camp for a couple of days with me and got some background on the fire

McCulloch: for his book.*

Fry: Oh, he did?

McCulloch: Yes.

Fry: What did he observe?

McCulloch: Everything that went on.

Fry: Did he take notes?

McCulloch: Oh yes, liberally.

Fry: Yes. That's quite a book isn't it? To explain what happens to the wild-life, the land, and the men, the total view.

McCulloch: Yes, it is. His book Storm is a very good complement on the other end--about the seasons.

Fry: Was there any administrative difficulty in this third burn?

McCulloch: No. Actually the menace was so great that every forester in the woods knew it, and there was the finest kind of cooperation. The Forest Service helped with the State's job there. Loggers helped, big companies helped, the Army helped. I made two trips up to Washington and back in a convoy with soldiers from Fort Lewis, several hundred of them, because there were practically no able-bodied men around Oregon for fire fighting.

Fry: These are relatively untrained people in fighting fires, aren't they?

McCulloch: Quite so, not as competent as loggers would have been.

*Stewart, George Rippey, Fire (New York, Random House, 1948).

Fry: So how did you operate with them?

McCulloch: Just the best we could. We said, "do this," and they would do this and, "do that," and they would do that. They had officers around to tell them what we told the officers needed doing. We also had several crews of just very young boys who were in non-hazardous positions, like mopping up after the main fire had gone by and that sort of thing.

Fry: And these were pre-army-age boys.

McCulloch: Yes.

Fry: And did you have any problems in keeping everybody fed?

McCulloch: No, that was pretty well understood from prior big fires. Field equipment was ready and all set to go when this one broke.

Fry: So this had been a matter of routine then.

McCulloch: Yes.

Fry: And did you have any problems in setting up communication between yourself and all of these different sources of manpower: the army, the state, the national forests and various citizenry that came out to help?

McCulloch: That was all handled by the dispatcher's office at headquarters of the State Forestry Department at Salem. One problem we did have was establishing camps. There was very rough terrain, straight up and down practically, and to find a little flat place with a water supply and from which you could get out in time of danger, this was critical. In fact the first job I had, five minutes after

McCulloch: arrival from Corvallis, was to hurry hell-bent-for-election down the west side of the fire on the Tillamook Road to evacuate a camp of navy personnel which had just been established, because the fire had turned around and was making for the camp. We had that possibility constantly in mind. One of the real dangers too was the tremendous volume of smoke which obscured everything. You couldn't tell where the fire was going underneath it. That was very rough country. For flying we had little scout planes but when you're up in one of these planes and look out the window and see rocks and trees going by on each side, you hope the bottom of the canyon's a long way further down. Down drafts between the fire, the heat, and the cold areas, all of which vary from the ocean side, made it very very tricky flying. Fortunately we didn't lose any planes.

Fry: Did you lose any men on this fire?

McCulloch: I think either two or three army personnel were killed.

Fry: Was that caused by their lack of understanding of the situation?

McCulloch: Well, one bulldozer man was killed because he wouldn't believe us that you couldn't take a cat across a particular sheet of rock. So it just tipped over on him.

Fry: I guess then that your main problems were just the fire itself.

McCulloch: Yes, for example: we held a certain fire line for a couple of weeks and then all of a sudden the wind picked

McCulloch: up and blew it five miles. So a narrow little fire trail wasn't of much avail at that time. What did help was the number of bulldozers available to make a good wide trail around hot spots.

Fry: Quickly.

McCulloch: Yes. After two prior burns the loggers knew what it meant in terms of lost jobs, so they immediately pitched in.

Fry: What about the financing of a fire like that? Does it get into hopeless difficulty later in finding out which departments owe what to whom?

McCulloch: Well, perhaps in an area of less urgency and less cooperation it would, but we didn't have difficulties of that kind.

Fry: I wondered if this had been planned beforehand, if a system had been worked out.

McCulloch: Generally when a fire starts, you fight the fire and get it out and then you talk about other things afterwards. So this was understood and the first people who jumped on the fire hollered for help while jumping.

Fry: Well, did the State of Oregon or anybody else have to pay the army and navy or was this gratis?

McCulloch: They furnished the men and supplies. There was no problem there.

Fry: What about the School of Forestry? Did most of the faculty members there pick up and go?

McCulloch: No. School wasn't in session but actually I think there were very few faculty members, maybe four or five, who

McCulloch: were left in the School because the enrollment was so low that the School was practically just marking time. But one or two other staff members did assist on the fire.

Fry: Was there anything else then that you would like to add about the fire?

McCulloch: Yes, an element of hope. Shortly after the fire was put out, people began to realize that we couldn't sustain damage of this kind without repairing it for the future benefit of the state, and so the Legislature passed authorization for a bond issue to provide money for replanting this and other burns, and that program has continued ever since and is now very close to accomplishment. The huge dry dead trees, snags as we call them, were a source of great danger because fire from the top of a snag can go for miles. So snag-free corridors have been cut along the ridge tops in strategic places for fighting fire. That work has been completed. Also (a little side issue) much of the snag-felling and tree-planting was done with convict crews from the penitentiary at Salem, so we rehabilitated men as well as land.

Fry: I think I read a speech of yours or a paper entitled, "Don't Burn the Fern." Apparently this came up as an issue some time or other on the rehabilitation of the burn.

McCulloch: Actually this was a general concern rather than specific to the burn. What we call the stump ranchers back in the hills used to set fire to the dry bracken fern to clear

McCulloch: off pasture land, and of course having set it they'd let it run through the good timber. And they were burning these little old fields out in the stumps, which at the present time wouldn't support a family anyway. In other words they'd beat the land to death.

Fry: Was there a problem of ranchers who were burning the bracken and this coming over into the Tillamook area?

McCulloch: Well, all areas in western Oregon. Not just the Tillamook.

Fry: I wondered if this had been a problem in rehabilitation.

McCulloch: No, by this time most of the ranchers had gone bust and moved out.

Fry: Oh, I see. In this paper you had mentioned that your research station here and also the one in Portland under the Forest Service had found that on some burns, about twice as many seedlings could grow underneath the canopy of ferns.

McCulloch: That's right.

Fry: And with shade and protection better than without it, because the temperature of the ground there apparently gets quite high in the summer.

McCulloch: The ground temperature is much higher than the air temperature above it of course, but if you have a small umbrella to shade the little seedlings so much the better. Unfortunately in some places the bracken gets so big and so heavy it mashes down seedlings, particularly on the west side of the coast range. You can get as much as

McCulloch: ten tons of bracken per acre, which is a terrific amount of material.

But to get back to rehabilitation on the Burn, the plantations established in the earlier years by this rehab work are now quite visible from the Wilson River Road, State Highway #6. One plantation with a bit of sentiment attached is the Rogers Memorial Forest in memory of Nels Rogers, a very capable state forester. The people of Oregon are getting back many many times over the money they put into the planting of the Burn and will for years and years to come.

Fry: Do you think then that at the present time the Tillamook Burn is heading toward regrowth and rehabilitation?

McCulloch: It's very definitely headed that way, but we're still not free of the menace of the weather. For example, 1967 has shown the worst fire condition we've had for sixteen years in Oregon. Last year when conditions were not quite as severe we had the fourth largest fire in the history of the state, next to the three big Tillamook burns. That was the Oxbow fire. And now with conditions worse than when the Oxbow fire started, disaster could strike, but foresters are better prepared than ever before to meet it. There's more mechanized equipment in the woods today.

Fry: Was it during your time that the state was empowered to shut down the logging equipment operating in the forests

- Fry: during high fire danger weather? I noticed that in the last two days they have done that here.
- McCulloch: Before my time. We now have closure by districts because you can't make a blanket closure of the whole state. It may be raining in some portion, so the state is divided into appropriate areas where you can or cannot operate under low conditions of humidity.
- Fry: And the loggers actually close down their operations?
- McCulloch: By law they must when it's below thirty per cent humidity.
- Fry: Were you aware of how they got this law passed?
- McCulloch: When it became obvious that to operate in dry weather was taking a chance of cutting your own throat. So the loggers' association and the timber owners themselves asked for legislation to stop the irresponsible few from burning up the land of the responsible majority.
- Fry: And again I suppose it was the small logger that usually was the one who--
- McCulloch: Yes, the fly-by-nighter who took chances, just as the first Tillamook fire was started by an irresponsible man who took a chance. He thought he could get just one more log before he shut down, but he dragged a cedar log across a fir and the friction started sparks in the cedar bark.

Fry: I'd like to hear more about your travels through the West with Mrs. Mac and your interest in history.

McCulloch: When attending professional meetings in the West, I'd tack on two or three days of vacation time and coming and going we would explore new country. We did a lot of reading beforehand so we knew what to look for, and had some knowledge of interesting places not yet infested with a swarm of tourists. The Western Collection in the Denver Public Library is a magnificent repository of information on ghost towns, mines, and railroads of the West. We have been to many ghost towns in Colorado, Nevada, Montana, Idaho, as well as those in California and Oregon. California is making a remarkable restoration of three historic old mining camps: Columbia, near Sonora in the western foothills of the Sierra; Johnsville, in the Feather River country, and Bodie, on a high mountain top northeast of Mono Lake. A famous railroad, the Bodie and Benton, was built on a very steep grade up the mountain into Bodie to haul timbers for the mines. With regard to Mono, Mark Twain is quoted as saying, "It's a crazy country where wood sinks and rock floats." He was referring of course to the petrified wood and the pumice rock.

Our most pleasant winter occupation was pouring over maps and historical sources to see if we could fit some new attraction into our conference schedule. We discovered

McCulloch: a cardinal principle of travel: never trust the local gentry to provide accurate information on roads. To prove it, one such piece of advice cost us a hole through the floor of the car; and another ignorant informer put us on a "good short cut" which scraped off everything loose under the floor. And to rub it in, the so-called short cut turned out to be longer.

Fry: And did a lot of this travel include hiking and camping also?

McCulloch: Not much hiking, because we had to cover ground, but some camping and kodachroming. We have several thousand slides resulting from those trips.

Fry: I wish I could describe the maps that we are looking at here. These are large maps of states and sections of states with black ink lines over the roads that you've explored, and these lines are a solid black network when seen from a distance. It looks like you've been to just about every five square mile area in all the western states and British Columbia, and just about every state in the United States. I notice Florida was missing by car travel.

McCulloch: We went a little bit into Florida, but not enough to show very specifically on a map from a distance.

Fry: California looks like you've covered it completely, every road that had ever been built.

McCulloch: The California gold rush country was one of our favorites. Still is. We have stayed overnight at the ancient Leger Hotel in Mok Hill, built in 1850; at the century-old St.



Mrs. Mac taking coffee break
while retracing the historic
Portland-San Francisco stage
road, Yreka-Weaverville sec-
tion. Along Trinity River 1960

McCulloch: George Hotel in Volcano; and at the equally aged Murphys Hotel in Murphys. Each was a delightful experience. It meant a great deal to our enjoyment of these expeditions to understand the country ahead of time--its early beginnings, the people who turned its resources into towns, some gone, some on the way out, and some into thriving communities. For instance, we knew that in Colorado apparently only a few minutes after gold was discovered, source historians said one could see on the horizon a railroad crew busily and optimistically laying track into the new town. Narrow gauge railroads ran all over the Colorado mountains. We made some seven or eight pilgrimages there, to run down the areas we had missed before.

Fry: And you recorded these on slides. Did you also do any writing about it?

McCulloch: Oh, a time or two, but not of any great consequence.

Fry: You don't have anything that you could add in the appendix here of your travels that you've written down?

McCulloch: American Forests several years ago published, "Last Boat to Telegraph,"* an article covering a tugboat trip we made up the Stikine River to Telegraph Creek, British Columbia from Wrangell, Alaska.

Fry: Was your trip on the tugboat enjoyable?

McCulloch: Yes, and historical.

*"Last Boat to Telegraph," American Forests, Vol. 66, #6 (June, 1960), pp. 28-29, 56, 58-60.

- Fry: Is this a trip that you and your wife made, or one that you made earlier?
- McCulloch: We made it together in 1959. Telegraph Creek was interesting. That was the jumping-off place for the projected round-the-world telegraph which was discontinued when the cable was successfully laid across the Atlantic. The original proposal was to put a wire across North America, up into Alaska, Russia and across Russia to Paris and then in the water to England.
- Fry: Was this done?
- McCulloch: Parts of the overhead line were built. In Telegraph Creek we saw large stores of wire to run it on farther, but the Atlantic cable knocked the project in the head.
- Fry: And you saw those wires still there?
- McCulloch: Oh, yes. Still in use. In central British Columbia north of the town of Kamloops there's a place called Wire Cache where there were two or three huge log cabins full of coils of wire for the same project. Now the natives use it to make suspension bridges across the rivers up there. It would cost more to go in and recover the wire than it was worth in those days.
- Fry: Was your wife also interested in history?
- McCulloch: Oh, very much so. She accompanied me on all these expeditions. This was a joint enterprise. We would read thoroughly before we went and then come back and find out how much was wrong in what we had read.

Fry: What were some of the glaring errors that you found? Can you just give an example?

McCulloch: Well, for example the population estimates. In very generous terms the book would say, "25,000 people used to live here," and maybe five-hundred lived there. Or, "It was located on such and such a river," and really was on a lake somewhere distant. For another example, some of the western road maps today still show towns existing which have been dead for over fifty years. This would be quite a shock to a man looking for shelter on a rainy night.
[laughter]

Fry: These are the highway maps that we use today?

McCulloch: That's right. The road shown leading to them often is predicated on hopes rather than facts.

Fry: What kind of a car did you travel in for most of these expeditions?

McCulloch: Well, mostly what was left of a Pontiac. We came home once with a hole six inches in diameter in the bottom of the car.

[laughter]

Fry: This is from your ghost town excursions.

McCulloch: That's right. We were stuck down in a canyon in a rock slide which fortunately went under the car rather than over it.

Fry: And in the earlier days what did you use?

McCulloch: A Buick mostly.

Fry: So you really didn't use any special equipment then, like four-wheel-drive Jeeps?

McCulloch: Our special equipment consisted of two things: one was a shovel to get us out of a hole I just got into. The other was a big long chunk of stove pipe wire which is strong but soft enough to bend around objects which have been broken in travel. Once we had a shower of rock fly up and disconnect the hydramatic drive some years ago in southern Utah, seventy-five miles from the nearest town. After I set the brake, Mrs. Mac put the car into high gear and then I crawled under and wired up everything that was loose and dangling, in that position. We couldn't back up, we couldn't go in low gear, but we made it in high from there back to Kanab, Utah. Those were the days. [laughter] And actually during that Kanab incident, we passed no car and only one habitation during the whole day's enterprise.

Fry: When were these days? Can you give me some dates?

McCulloch: Oh, from back in the early forties until the last two or three years. I became less venturesome as I got more creaky.

Fry: Is there any place that you haven't been that you want to go?

McCulloch: Not very many really. We've seen most of the West that we started out to look at twenty-five years ago, and it was very much worth while.



Margaret M. Neher McCulloch
("Billie" or "Mrs. Mac")

- Fry: I think you ought to write up some of this.
- McCulloch: I had good intentions, but it didn't get done.
- Fry: Use a tape recorder. Was your wife working here in Oregon?
- McCulloch: Not for other people; for herself, writing.
- Fry: She did a lot of writing?
- McCulloch: Correct. Both fiction and articles; also she was very successful with her book. Here it is.
- Fry: Oh, Second Year Nurse, by Margaret McCulloch. Published by Westminster Press in Philadelphia, 1957.
- McCulloch: This is a career book for girls, and she's received some heart-warming letters from enthusiastic youngsters all over the country.
- Fry: It's a sort of a fictional thing on what happens if one chooses nursing as a career.
- McCulloch: That's right. It's a fictionalized version of her own experiences. She started writing about the time we went to Syracuse.
- Fry: Well, you had a very active wife. This portrait of her that you just handed to me looks full of intelligence and charm. She's very pretty too.
- McCulloch: Indeed so, a very wonderful person.
- Fry: And did you have any children?
- McCulloch: No. She helped out from time to time with Red Cross and with Girl Scouts, or whatever you call them--Brownies. What are those small fry that flit around?
- Fry: Well, Brownies is one, and Blue Birds--

- McCulloch: She helped out for two or three years around here with kids.
- Fry: So your two careers and your travels kept you busy then.
- McCulloch: They did indeed.
- Fry: Were you involved in community activities?
- McCulloch: Not to any extent, no. I worked a little with the Cub Scouts. And any spare time I had, I worked on history for the benefit of the Oregon Historical Society.
- Fry: What did you do for the Cub Scouts? Were you a den mother?
[laughter]
- McCulloch: Yes, I was kind of a den mother. I tried to initiate them in history too. For example across the river here in Linn County there are Calapooya Indian mounds. An archeologist from California has done some excavations on them. So one day I briefed the Cubs ahead of time about Indians living on these little mounds that would keep them out of the water in the wintertime and how they would throw away things, broken arrow heads and such. We took along shovels and a screen. And to make sure all the boys didn't go away disappointed, I took along a few arrowheads of my own and surreptitiously salted the mound. And when they were found, shrieks of delight rent the air and they went at it just like badgers. Dirt flew in all directions and believe it or not, they came upon two or three marvelous artifacts. A jade chisel was one rare item.
- Fry: That you hadn't planted?

McCulloch: I hadn't planted those. So it was a very rich reward
for salting the mound.

Fry: Have you kept up with any of your little Cubs?

McCulloch: No. It's too long ago. This is over twenty-five years ago.

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Appendix

OREGON STATE UNIVERSITY

CORVALLIS, OREGON 97331

SCHOOL OF FORESTRY

FOREST RESEARCH LABORATORY

February 6, 1968

Mrs. Amelia R. Fry
Regional Forestry History Office
Room 486 Oral
The General Library
University of California
Berkeley, California 94720

Dear Chita:

Herewith the revised script of your interview with me last summer. In the past year I have edited several dozen tape scripts and to my chagrin found I had made the same mistakes as numerous other speakers. I have corrected these, have fitted in the blanks as you requested, and expanded in several places where you asked for expansion. Also, I have replaced several (35-41) pages re the School which were repetitions or sensitive. Paul Dunn read the revised draft yesterday and approves the rewrite. He will convey my concern to Woody in Portland today. The new script retains the substance of the original material in better form, and no one could take umbrage from the statement.

In re-reading the first draft several times it struck me that the amount of space given to ancestral anecdote was disproportionate to its importance. Maybe the grandfather stuff should come out. (pages 11, 12, and 13.)

I regret that I am unable to leap into the dinosaur project as Woody asked. It is a story which needs doing, and it would have been fun, but I can't give it the time and attention which it deserves. If Bob Conklin can take it on, the narrative would certainly have authenticity.

I am much impressed by your skill in conducting these interviews. It was a pleasant experience for me, and my only regret is that I was not in better shape to respond more constructively.

With kindest regards,

Sincerely,

WFC

W. F. McCulloch

wfm;lea
cc: Woody

February 14, 1968

Professor W. F. McCulloch
School of Forestry
Oregon State University
Corvallis, Oregon 97331

Dear Mac:

I should have written you two days earlier so that this letter could have arrived there on February 14 and been a valentine-from-a-not-very-secret-admirer in disguise. As it is, let's have February 14 on February 16 this year.

You have done a beautiful job on the manuscript. Thanks for spotting the repetitious parts; I feel as you do that future researchers will not gain much by reading things twice. Even though each is in a different context. I say leave the grandfather stuff in; it may seem not very relevant to you, but historians are omnivorous and will love it. (I was fascinated by it.)

I understand that there are a few people who are still sensitive to the crisis in the School of Forestry in the pre-World War II period, and you have rewritten it in such a way that no one should have hurt feelings about it. The part you took out is a good example, however, of industry applying its weight in a constructive manner to a problem in forestry education, and it probably should be recorded somewhere but put under seal for, say, twenty years. The loss of accreditation is something that should be explained by someone so that when a history is written it can have some semblance of accuracy. The subtleties of personalities involved, which you mentioned, are factors that won't be found in the old records.

I have a zerox of the deleted pages, but it would be better to use the originals which I sent you, if you still have them. Both Yale and U.C. have procedure set up to absolutely guarantee the integrity of the seal for as long as you deem it necessary.

Sorry if I retired you so presumptuously. Anyhow, it will be accurately stated now.

I hope the coming of spring in beautiful Corvallis will serve to lighten the unpleasant burden with which you cope from day to day. Your nice compliment about the interviews certainly lightens my day. Thank you.

Cordially,

February 20, 1968

Mrs. Amelia Fry
Regional Oral History Project
Room 486
The General Library
University of California
Berkeley, California 94720

Dear Chita:

While you were here I should have taken time for more detailed explanation of the sensitive situation. Thought of it once then forgot to give you the word. There are still valid reasons for forgetting the affair entirely. Barney Standing, an old friend recently deceased, was a highly successful personnel officer in the U.S.F.S. He applied three criteria to his statements where men were concerned: is it true, is it necessary, is it kind? My remarks were true, but I feel I did not adequately meet the test of the other two criteria. In such a situation I would very much prefer to have the few sensitive paragraphs of the original script eliminated, as I have done in the re-write. I offer you as solace two pertinent facts which I hope will provide a satisfactory analgesic for historical pangs.

(1) Actually Chita there is a misunderstanding to which I may have contributed. In Oregon we tend to say "the industry" even when referring to just one of the industry leaders; on a given issue he is not necessarily speaking for the whole spectrum of the industry at all. Right now there are sufficient differences of opinion that one industry association is suing another association over lumber standards. Reference the third paragraph of your good valentine letter: "The part you took out is a good example, however, of industry applying its weight to a problem in forestry education...." This really was not so. The official associations did not apply weight, nor did the leaders as a group. Several of the leaders did confer with Paul on a personal basis and were helpful to him. But there was no official posture taken by "the industry," or the industrial associations; no mass movement involved. It was instead a man-to-man discussion; and therefore the statement re industry can be rephrased as I tried to do, with greater relevance rather than loss.

(2) The accreditation matter should have been recorded in detail in the SAF files years ago, because a report must be made to the council on all accreditation proposals or actions. (In some instances the early day accrediting representatives really investigated, in one report naming names of two persons alleged to be guilty of biological indiscretion).

I don't have the original draft pages because I tried at first to make editorial change right on the draft. With so much interlining it became an almost illegible palimpsest.

With kindest personal wishes,

Sincerely,



W. F. McCulloch

wfm;lea
cc Woody

February 26, 1968

Dr. W. F. McCulloch
School of Forestry
Oregon State University
Corvallis, Oregon

Dear Mac:

I accept your reasons for forgetting the more candid explanation of the "sensitive situation" and I also accept the solace, except perhaps for a natural skepticism that anything about the accreditation could be found in the S.A.F. files now.

Thanks, too, for clearing up any overly-generous attribution to industry's "pressure" that I may have seen in ~~clearing~~ clearing up the dilemma. I'll check the final manuscript to make sure that this ambiguity does not exist there; I think I picked it up just from talking to you or from extrapolating from the interview.

Rest assured that this remains one of our better interviews, largely because of your realization of what should be selected for historical preservation--out of a rich and varied life. That includes the tales about your incredible grandfather as well as the harder stuff on forestry and education.

I'll let Woody wrestle with the dinosaurs and their history. I'm kind of glad that you and I are off the hook there. You could probably do a real job on it, with a little additional research, but if I "helped" the results would be disastrous, considering that I can't distinguish an axle from a drum stake. (And I couldn't even have written that sentence if your Woods Words weren't here beside me.)

I hope we can see each other sometime again, Mac--either here as you pass through going South again, or up there if a trip should materialize for me. Meantime, the final copy of The Work is under production here.

Sincerely, con simpatico
y affection,

July 1956, p.40-41

THE FOREST AND THE TOWN

W. F. McCulloch

In gentle little village long ago
Clear upon the morning air came
 cheerful sound
Of hearty men at work.
Sea-girt the town in front
And back behind two winding streets
The serried rank of forest ranged afar.
A wondrous wood it was of oak and pine
Well fit for keel and hull and spar.
And so the forest green
Became the treasure of the town,
As iron men wrought wooden ships
And spread a great renown
To distant shores. Bright chips
Of mighty oak new-hewed from rib
And plank, and tangy curls of pine
From 'neath the builder's plane
Bestrewed the busy shipyard on the main.
A special kind of oak it was
Which seemed by Providence bestowed
Awaiting there in forest dim
Against the day when shipwrights
Searched for timber staunch
To fashion fair a hull.
The great tall pine so straight and true
Was set for masts, the billowing weight
Of canvas bearing 'gainst the winds
Across the oceans' reach of all the world.
So sound the ships, so truly built
That soon the yard could not keep pace
And spawned another yard
And once again and then again
As all above the shore rang day and night
The clangor of fine ships abuilding.
Ax tunked, auger squeaked, and
Sharp adze bit, in giving shape and size,
And splendor to great logs, the
Bounty of the forest green.

Then to the youth, the dwellers of the town.
There came a vision bright:
↳ These barques of ours that bravely
Sail the distant seas, need not be lost
Beyond the ken of those who built them well.
Lay down the tools, take ship,
Our argosies we'll captain for oursel'
And to this native strand bring back
The ransom of the world."
So to the master of the school they hied
And had him teach the compass
And the stars, the fickle wind, and
Currents dread in roadstead distant far
And teach he did, so well 'tis said
That ever afterward in normal company
Of men, no scholar lad of his
Need ever feel unread.
Then quieter grew the town as one by one
The sons took ship and fared away
Fathers bereft upon the shore
Still toiled and still stout ships were built
But slowly now as aging muscles
Shrank from double chore.
Fast fled the years, and evermore, scanning the
Sphinx-faced sea, the sad-eyed
Fathers watched for welcome sign
Of sons returning. Blank, the sea
Stared back, as through long years
The sons, enmeshed in commerce
Far and wide, forgot the promise
Freely given and nevermore sailed home.
Storied lands of spice and copra,
Tea and teakwood, gold and silver
They knew well, but not their native heath.
And so the fathers and the town
Both sore at heart, declined. Nor
This alone the end of all their woe;
At first 'twas scarcely felt, then
More and more with crushing
Weight the steamship cast a cloud
On aging men and wooden sailing ships,
And knelled the shipyards to their doom.
Silent the ax and adze and auger,
Quiet the clamor, quiet the men.
Then fate another blow to all condemned,
As grievously now the forest
Kindled by stupid men fell all a-prey
To flames and none there were
Stout to defend the woods. To earth
Sank trees in smoke and char.

Scarce knee to brace a hull, or spar
To fit a mast was left unharmed.
Once rugged rocks of men,
Now lacking sons and joy of building, lost
Will to live. Then quick the sharp-edged
Scythe of Time to cut them down.
Greened once more the woods and weeds,
Warmed by sun and washed by rain
And soon with vigor as of yore,
But not the town.
Once happy homes with joyous
Childish shouts awash, grew
Still. Great gnarled elms above
The solitued street a fitful shade
Cast down o'er gaunt grey houses
Skeletal in untenanted dismay.
Swift-running seasons, winter snows
And summer suns, beat on hollow
House, reft shingle from the roof,
And door from hinge. While on the
Waterfront, the one time lifeblood
Of the town, the barren bones
Of shipyards groaned as ebb and flood
Of tide persistent gnawed them down
Across the years.
Came then a day when empty
Gaped the town, forlorn, forgot, undone,
With scampering mice now boldly
Coursing in the sun,
While up aloft a callous crow, claw
Hooked on limb, rasped a raucous
Curse on all mankind and on his works.
But cursed the crow in triumph
Yet too soon, for as the docks
Decayed and weathered houses fell
The greening forest burgeoned all about
To hide the scars. New treasure
Here for town a-new, and this time
Town for evermore,
As men mayhap a lesson learned
Wisely to use the forest at their door.
To cut with care and not cut all,
To use full well and waste not,
This the creed of men who came
Again; this time to crop the woods, not maim.
Not to lavish spars of pine and hulls
Of oak on all the seven seas,
Sending sons to boot. Not to

Garnish tree with fire to quicken
Forest to its end, but here
Instead unfailing wood to yield
And town support for aye. Then
Haply once again great spreading elms
Bright house and cheery urchin guarded
"Neath their shady crowns.
Echoed again on winding street
Chattering tongue and busy feet.
Again the erstwhile brazen mouse
Crept timidly about the house
Of night, lest lethal cat should bound.
And once again work's cheerful sound
Came clear upon the morning air
And joy again bedecked the village fair.

LOGGING---OLD AND NEW

By W. F. McCulloch

Mac McCulloch speaking. This discussion of logging comes mostly from a talk at one of the Sierra Cascade Logging Conferences, Redding, California. It comes also from early experience in a coast logging camp, from a knowledge of logging history, and from personal acquaintance with some of the old men who made it. Since we are right in the middle of things that are new, most of the emphasis here will be on things that are old. It should be pointed out, however, that just because something is old, it is not necessarily worthless. Even an old newspaper is quite useful if you own a canary.

This line I'm going to hand you can be shoveled into two piles, the bigger one dealing with ox team days and the much smaller one with the present and future. If you think my reference to a shoveled pile may be incorrect, you've just never worked around an ox barn. I don't know how a man qualifies to talk about the future in which naturally he has had no experience; but I have had some woods experience in the past, and qualified or not, I'm going to say something about logging.

A valuable lesson in talking to loggers was learned at the Pacific Logging Congress in Vancouver, B.C., about 1924. We had Prohibition here in those days but the more enlightened citizens up north suffered no such restraint on their social habits. When our loggers hit town they were eager to take advantage of this marvelous situation. With commendable foresight they prepared themselves against snake bite in case the lobby of the Vancouver Hotel suddenly should become infested with rattlers. Some characters indeed applied themselves to this happy task so vigorously that they proofed themselves with preventive medicine for 2-3 years ahead. As a result, come the opening session next morning you never in all your life saw such swivel-nosed, cross-eyed, wobble-kneed rigging slingers. First man on the program lurched up to the speaker's table, missed, fell flat on the floor, snuggled down comfortably in the deep carpet and promptly went to sleep. Both of the members of the audience still able to speak hollered "leave him lay." So the chairman did and called the next speaker. This was a terrible

mistake because this man knew nothing about his subject, and with great determination shared his ignorance in every last detail with members of the Congress. On and on and on, he read a miserably dry paper, never once looking at the audience. After what seemed a lifetime, he quit, and the chairman innocently asked one of the natives, a dour old Scotsman to comment on it. Said the old man, "that was a damn poor paper and it was damn poorly read."

This was a valuable lesson. First: speakers should confine their talk to things that they know, and second, it's time to quit before the audience dies on the vine.

Thinking about logging history, the years go by so fast that suddenly you find you've been standing in the middle of history without recognizing it. For example, the first summer I was in the woods, sailing vessels were loading lumber in West Coast ports; kerosene locomotive headlights were on sale in Portland; the Booth-Kelly Lumber Company of Eugene was advertising Oregon pine, meaning Douglas-fir; an employers' organization was urging all operators to quote "combat the plague of the IWW with a YMCA in every camp to preach the doctrine of a purer and better life". The IWW meant International Woodworkers of the World, a very militant labor group with far left ideas. At the same time an artificial limb company was offering to replace lost arms and legs with wooden ones just as good; loggers were wondering how the opening of the Panama Canal would affect freight rates on West Coast lumber. All this is so fresh in mind it seems only yesterday, but it was 1913.

Personal acquaintance with men and methods of the woods in those days came by working in a tie camp, on a river drive in the northern interior, in cedar pole camps using horses, and for a short time as assistant superintendent of a steam logging camp in the coastal fir. In all these jobs there were pleasant associations with men who were big loggers in the early days. One of them put camp-run logs into Puget Sound for \$4 and thought he was doing all right. Camps were rugged, full of fleas, and many things that went on there differed somewhat from Sunday School classes.

I can't be quite as specific about the early ox team logging, because it started before 1850, and I was less active in the woods at that time. The first recorded use of ox teams was in Mendocino County in Northern California in the summer of 1844.

Early logging was indeed a quaint operation by today's standards. Cross-cut saws were at first unknown, axes were used for falling, and redwood choppers must have been men of great strength and skill. Logs were cut into very short lengths. Some were slowly dragged as you would pull a heavy trunk along on the ground; some were par-buckled, like rolling a tremendous great barrel.

It didn't take long for the ancient loggers to realize they'd never get anywhere at this slow pace, and they commenced dragging logs end on short skids laid across a road. The big logs were quartered, first by black powder, later by saws. Whether quarter or whole log, dragging on skids was a great improvement over rolling the short pieces, and the skidroad was a wonderful contribution to logging.

At this point another use of the word skidroad should be clearly defined. It has a second meaning, a street in the tougher parts of West Coast towns where loggers hang out. Careless reporters with dirt in their ears did not hear properly and have written skid row r-o-w so often that this miserable phoney term is accepted by the ignorant. There's no such damn thing as skid row and there never was. The street of saloons, card rooms, flop houses, sporting houses, etc. is the skidroad, r-o-a-d. The present day use came from the famous skidroad built by Henry Yesler to skid logs from the woods to his mill on the Seattle Waterfront in 1852. After it was no longer used for skidding it became just a road, and stores, saloons, and other establishments dear to the hearts of loggers grew up alongside. So when the crews hit town they headed first for the skidroad. Much of Yesler's old road remains in Seattle today but is known by the more genteel name of Yesler Way.

In the woods, the most important man on the skidroad was variously known as a hair-pounder, bull puncher, or teamster. He was a man of great ability, agility, and profanity. All these talents were needed in great quantity daily. Some days it was

very tough to be an ox. If the puncher had a hangover, or a liver complaint, or some other disagreement with the world, he was like as not to take several washers off the end of his goad stick so it would jab deeper into the bulls. While this certainly pained the bulls, it did haul a lot of footage in a hurry.

Exploits of bull punchers are legendary but too mixed up with faulty memory, exaggeration, and just plain lies to cite any particular feat of skidding as a record. However, one skidroad operation must be recognized. Malcolm MacFarland operating on the lower Columbia did establish a record for an extraordinary kind of ox team skidroad. Around 1890 he built a good big tunnel to shorten the haul for his prized yoke of bulls. This tunnel is still in reasonable repair alongside U.S. 30 a couple of miles toward Portland from Westport. You can see it without getting out of your car.

After the discovery that it was easier to skid logs than to roll them, the next change in the woods was made by a seafaring man. He was Dolbeer, of the famous Dolbeer and Carson firm in Eureka. For his logging operations on the northern California coast he brought ashore a little steam engine. It was hardly big enough to be rated in horsepower so it was called a donkey engine. It turned a capstan, a vertical spool on which were wound several turns of Manila rope. By keeping the line tight on the capstan it was possible to pull in logs a few hundred feet. From the donkey, the bulls could then take over and haul logs down the skidroad. A so-called line horse pulled the rope or line back out to the logs.

We don't know the pulling power of the early donkeys, but Manila rope soon proved too feeble for big logs and wire rope was introduced. The man known as the spool tender used a stick to keep this wire rope feeding smoothly on the spool. Sometimes he became so expert he could kick it into place, instead of using the stick; then later after he got back from the hospital he would sometimes gingerly use his new wooden leg for the same purpose.

A real step forward was made when the donkey spool was turned over to run horizontally, and widened out to hold line, instead of merely pulling it. With this large

drum capacity it was possible to reach out long distances and some big wide-face road donkeys held 8,000 feet of line. Once you established the principle of having a line coming in on one drum, it was a natural to think of paying it out on another. Some smart logger did so, and the two-drum donkey then handled a haulback as well as a main line. This development changed overnight the future of ox teams as Stewart Holbrook said, "from harness to hamburger." They were all through.

Here was the beginning of a second revolution in logging, just as Dolbeer sparked the first with his capstan. The two drum donkey contributed half the change and the spar tree provided the other half. Logging by bull team, Dolbeer, or other early donkey had always meant the frustrating, exasperating, cumbersome ground lead, with logs forever hung up on rocks, stumps, and rough ground. When the two drum donkey and the spar tree teamed up to make the high lead possible, that is to say yarding with the ends of the logs off the ground, logging became the slam-bang highball show which it is today.

One of the first recorded high lead operations was on Discovery Bay in Washington in 1906. I have heard that the spar was an adaptation of a mast and rigging originally used by a Captain Robertson to build log rafts in the Columbia; can't prove any part of this story. Appreciative loggers latched onto his idea with glee, and soon the whole West Coast logging woods was using spars. However, it turned out that Captain Robertson had thoughtfully patented his idea and so it is said, he sued almost the entire logging industry of Western North America for this infringement. Luckily the loggers, with commendable foresight, had tied up the best legal counsel in the land. This formidable array of talent convinced the judge that the spar tree conferred a universal benefit on mankind, like the sun by day, and therefore it could not be patented. The captain was understandably unenthusiastic about this verdict.

At first loggers used the spar only on the far end of the line as a yarder tree, and logs were pulled along a fore-and-aft road (a trough made of logs) by road donkeys. A string of 3 or 4 steam road donkeys displaced the oxen formerly used on the skidroad.

This was a slow and costly system and it soon became evident that you had to get wheels or water under logs as quickly as possible. Roaders went out of the picture, and railroad spurs were built right to the yarders. Then followed an era of big men and big camps in big timber. With his customary inventive genius the logger quickly developed 3 and 4 and more drums on donkeys, eventually winding up with 20 drum monsters of skidders which yarded and loaded at the same time. Some skidders were so big that the yarding engineer on one end had to pack a lunch if he wanted to visit the loading engineer on the other end. The high lead spar tree was parlayed into a bewildering array of skylines, slacklines, North Bend, South Bend, O'Gorman, and other pet systems too numerous to mention. Nothing was too tough to try and loggers persistently worked out ways to log every conceivable kind of show. Paralleling donkey development, railroad engines grew from the original 6 ton "Ant" in Mason County, Washinton, to 125 ton mallets.

Bigger and better and stronger machinery was the cry, especially bigger. Enormous machines were built, and because of size, like the dinosaurs, eventually they ran out of hay. Camps which had to support flocks of skidders and as many as 20 locomotives were surely bound to run out of enough big timber to keep them running. The steam era in the woods was doomed by diesels anyway, but sheer hypnotism with bigness killed it off faster.

Things are different now. Smaller and faster diesel cats, donkeys, and trucks are operating profitably in timber stands considered untouchable by steam standards.

Now let's take a look ahead. When the big old-growth timber is gone, the managed stands which replace them will be logged when younger and smaller, if for no other reason than taxation. Smaller timber will drastically affect machinery needs. The fate which overtook steam skidders and mallets will eventually overtake cats 3 stories high and other gigantic equipment. A drug store can't peddle prescriptions in a ten ton truck.

The future will see another revolution in logging mechanics with as great a wallop

as the Dolbeer and the high lead in their day. There will be smaller, lighter, faster, more economical machines in the woods, and new devices yet unknown; logs may be scaled with guns which use radio-active isotopes; there will be marvelous mechanical advances to make the eyes of old ox team loggers fall right out of their heads. Probably the sky will be used as a skidroad. There are no taxes to pay on this right of way and it needs no ballast, bridges, or maintenance. Helicopters, and tail blocks or butt ^{Rigging} ~~loggers~~ tied to balloons have already been tried experimentally. Jet propulsion will be adapted to many purposes where piston power is used today.

The equipment developments of the future will be terrific, judged by today's standards. None the less their impact on logging will not be as emphatic as the prodigious population explosion now underway.

Historically there has always been a marked increase in birth rate following wars. Nature appears to restore war time losses by making females more willing and males more urgent. The flood of small fry now in schools is evidence that this method works. However, quite unlike previous post-war periods, the bumper crop of babies still continues. It is apparent that the opportunistic American male is getting a lot of mileage out of World War II. This has a most important bearing on the future of logging.

In the 300 years behind us, loggers could always retreat into the back country to get away from people; to interior New England, to the far edges of the Lake States, to the Northwest Coastal areas, and finally to the last stand of the logging pioneer, northern California and southern Oregon. Now we are fresh out of back country. Already people are so numerous it is almost impossible for any man to find a remote place where he can be lonely in comfort. Loggers in the future will be bothered no end by people; there will be veritable parades of house trailers on logging roads; there will be insatiable demands for hunting and camping privileges to an extent undreamed of today. Belligerent people will watch every little creek for siltation which they blame on loggers; crafty people will slyly transfer their own taxes to forest lands. People in a hundred other ways will make life irksome for the careful as well as the careless logger.

The biggest factor governing logging decisions in the future therefore will not be machinery, or roads, or timber sale clauses, but the tremendous problems caused by millions more people in the woods.

So let us be warned--the next revolution in the timber will involve people--all of them with a vote. We will have to solve the operating problems which affect the public adversely, if we are to survive in the years ahead. We will be watched more critically than ever before, because we won't be working in the empty back country. We'll be right smack in the public eye, because the public eye will be everywhere. Loggers tomorrow must promote public understanding of loggers' difficulties; and we will have to operate so as to justify public cooperation in solving those problems.

If we do not succeed in these things then the huge public majority will impose its uninformed and unsympathetic decisions upon the small logging minority. Self-discipline is required in the logging woods to avoid the heavy hand of uninformed public disciplines. The actions of a very few can give the industry an enormous headache. Therefore, if we ever could--

(1) We can no longer afford to use streams as roads and refuse dumps.

We ought not to brag about how we can tear hell out of rivers with a cat, as was done in a recent equipment film and in a recent advertisement in a lumber journal. This spits in the eye of the fish people and they will spit right back--with justification.

If we ever could--

(2) We can no longer afford to use the air as a great big garbage can and fill it with dirt, fly ash, cinders, and other noxious by-products of industrial operations.

If we ever could--

(3) We can no longer afford the loss of soil and water which follows a carelessly torn up forest floor.

If we ever could--

(4) We can no longer afford to throw away tomorrow's logs by mashing down today's reproduction.

(5) Finally, I repeat that we can no longer afford to be careless about public opinion. There will be far too much of it to be ignored.

In the future we must not only move faster but think faster; use the forest better, make better use of all its products, and give thought to public interest as we do. In so doing, we can earn public acceptance of our practices and public cooperation in solving our problems.

Opinions From The Hill



Dr. Walter F. McCulloch joined the faculty of Oregon State University in 1937 as assistant professor of forest management. In 1943 he accepted the job of assistant state forester, returning to OSU in 1945 to become head of the forestry management department. In 1965, Dr. McCulloch was appointed dean of the school of forestry. He also is associate director of the forest research division, agricultural experiment station.

Dr. McCulloch was graduated from the University of British Columbia with a B.A. degree in 1935, from Syracuse (New York State College of Forestry) with a M.S. degree in 1940 and from the University of Oregon in 1947 with a Ph.D. in education.

The author of numerous technical articles and bulletins, Dr. McCulloch also has written several books, including "Woods Words." He has served on many state, regional and national committees in the forestry field.

In The Middle Of History

by

Dr. Walter F. McCulloch

Dean, School of Forestry
Oregon State University

The face of the land is hatched with multi-billion dollar bulldozer tracks as men and machines briskly change wild rivers into managed waterways, Indian trails into four-barrel freeways, and frontier hamlets into urban sprawls. In the process, bulldozers shove aside, demolish, or bury many of the historic beginnings which laid the earliest foundations for today's progress.

In many regions the efforts of pioneers have been thoroughly layered over with asphalt or housing developments and it is no longer possible to appreciate a sense of pioneer days. Fortunately Oregon's historic past is not far distant, the state is not yet swamped with people and structures, so it is still possible here to stand in the middle of history. Some examples are noted below.

The State Highway department has done a great service by showing on annual road maps the route of the Old Oregon Trail and by marking its crossing of present highways. The secondary road from Vale to Adrian runs over a height of land, and at this low pass the deep ruts of the Trail are still visible, as they are at some other points in Eastern Oregon. The Highway department has also published a fine Oregon Trail bulletin showing the location in careful detail.

Greatly renowned among western woodsmen was the bull team tunnel built by Malcolm McFarland, a famous Lower Columbia logger, in the 1880's. He dug the tunnel to avoid a long detour around a rocky point. It is still there, right along the south side of U.S. 30 a short distance east of Westport. After bulls were succeeded by steam engines the tunnel was used by a logging railroad.

There are many other interesting remnants of early day railroading. The railroad known as the Corvallis and Eastern, Oregon Pacific, and other names now continues to run to Toledo, but once it had big shops and docks at Yaquina, where its steamers picked up train passengers for San Francisco. High in the Cascades are remnants of the railroad's high ambitions where trains never ran. On the Santiam highway rounding Hogg Rock, look up the hill a little east of the Three Fingered Jack marker. There are several stretches of handsome stonework laboriously laid up like a big wall to carry the roadbed. At the end of construction there is a historical marker on the north side of the road, just a little west of the Hoodoo Ski Lodge.

Short distance west of Drain are four big concrete bridge abutments, part of an ambitious scheme to run a railroad from the S.P. main line to the coast. Farther west are two vine-covered abutments south of the highway, standing forlornly in a field. Same hoped-for railroad. Before reaching Elkton, highway 38 runs through a substantial tunnel, built for trains, not cars. Those early railroaders were apparently short on cash but they were sure long on work.

One of the most notable railroads in Oregon was the famed Sumpter Valley, a narrow gauge line which ran from Prairie City across several summits of the Blue Mountains to join the Union Pacific at Baker. Whitney, now a ghost town consisting of a few weathered buildings and a sheepherder, was once properly referred to as one of the more important railroad centers in Oregon. The station still stands at Prairie City.

There were many well known roads and trails in the early years but not much of them can be identified today. Trails left a fleeting impression on the land, and if the roads followed an acceptable line of travel they were absorbed in the state's road building program. In the foothills west of Corvallis passed the Portland and Umpqua Valley Military road, the Hudson's Bay Company trail to a fur-buying outpost, and the Applegate trail bringing pioneers. The Applegate party came from the Humboldt county of Nevada through Surprise Valley, that little lost corner of northeast California, then across Goose Lake bed, and via Klamath and Southern Oregon, leaving their name on the Applegate river. Women of the party brought small fruit trees in tubs all the way from the east, at times going thirsty to make sure that the precious trees survived.

The end of the line for the Lewis and Clark travellers has recently been re-established south of Astoria as Fort Clatsop National Monument, and well repays a visit. Too late now to visit Celilo Falls where Indians conducted their fishery for over 100 years, based on a treaty with Lewis and Clark.

There is still time, and a visit is recommended, to the McLoughlin House, another National Monument, in Oregon City. Here are preserved possessions of Dr. John McLoughlin, chief factor of the Hudson's Bay Company. He was almost a feudal governor without portfolio, rendering judgment over a large part of the Northwest. In those days beaver were of prime importance in the Beaver State, and the Hudson's Bay fur business was very big business indeed. McLoughlin was also our pioneer lumberman. In 1827 he shipped to the Sandwich Islands the first cargo of boards from a tiny waterpower mill at Fort Vancouver.

These brief illustrations are a few examples of the richness of Oregon history available to those who will take time to read, and to look. They can read more readily, and look with greater reward, by joining the Oregon Historical Society, 235 S.W. Market street, Portland. The Society is not just a collector of ancient artifacts, it is a preserver of the early beginnings of the great Oregon country; it is a publisher of repute; it is a fine library; it is a service agency without parallel, and it merits the support of all who have a regard for this state.

Example of Editing

QUESTIONS FOR MAC

PAGE NUMBER

LINE

✓ 36

9

Evan? Evenden

✓ 37 -

3

summer school where?

*USC and Oregon
top of p. 39*

✓ 38 -

11, 14,

same page--Your degree and University of Oregon correct?

✓ 39 -

5

Also--can you name some of the deans ?
"course" or "exam"?

✓ 42 -

7

name of Canadian firm

✓ 58 -

8

Bill Wheeler
Phil-Leader? bottom line.

Also--fill in blank at beginning of that paragraph. It may refer to another department that took the lead in student personnel work.

✓ 59 -

1

Dr. _____, Syracuse?

✓ 64 -

~~12~~

Is the membership of the FPCC stated correctly? Some words may be omitted.

✓ 65 -

21

--a House ^{yes} committee? Do you know first names of Preston and Shirley off the top of your head? If you're not sure, we'll look them up here.

✓

also line 3--right word? Also date of McIntyre-Stennis program. 1962

✓ 68 -

10

--spelling of John Aram?
also l. 5 and 6: Is this what you said?

✓ 48 -

83

from bottom: Governor Sprague's first name?
If you don't have it, we'll look it up.
- also on p. 45

✓ 53 -

20

--this was transcribed wrong, and I may have guessed wrong. Please write in your correct sentence.

72 -

near bottom--Can't hear the word. Also--I filled in "1954"--date given in "50 Years of Forestry". But is that the research division (Forest Experiment Station) you mean?

✓ 73 -

6 lines from bottom: correct phrase in parentheses? also line 4 from bottom. Who is "he"? (Write this on attached yellow sheet.)

✓ 74 -

5

--legislators for people?
also, is that middle paragraph accurate the way it reads now?

✓ 88 -

middle:

spelling Dean Lemon? Also, word is missing 6 lines below.

change

Amelia R. Fry

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

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

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

Writes professional articles for journals and historical magazines.

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

