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Myron E. Krueger

FORESTRY AND TECHNOLOGY IN NORTHERN CALIFORNIA
1925-1965

Richard A. Colgan

FORESTRY IN THE CALIFORNIA PINE REGION

Interviews Conducted by

Amelia R. Fry

Berkeley
1968

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

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

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

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

Willa Klug Baum, Head
Regional Oral History Office

Regional Oral History Office
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INTRODUCTION

MYRON KRUEGER and RICHARD COLGAN

The two interviews which are bound together in this volume are part of a series on forestry in California which was an attempt to document some of the earliest private forestry efforts. The Twenties-to-the Fifties is the period in which the timber industry turned a corner in California, from hit-and-miss management that rarely led to the creation of permanent timber supplies, to responsible, economically feasible operations that allowed enough forest regeneration to supply the mills indefinitely. These two interviews offer first a bird's-eye-view of the period, and then an on-the-ground example of the essence of the change.

Myron Krueger, professor of forestry at the University of California, Berkeley, was chosen as the one who could best contribute an informed and sweeping picture of forestry developments over the timberlands of the state; Dick Colgan is one who, as a long-time forester for Diamond Match Company, could give a specific picture of the progress of sound forest management in an operation that utilized better cutting practices earlier than most others.

Professor Krueger's career covers achievements in logging engineering; in teaching at Berkeley from 1925 to 1955, and running the summer camp; and such quasi-governmental posts as senior lumber code examiner under the NRA in 1934 and as an advisor on forestry matters to Assistant Secretary of Agriculture Earl Coke at the beginning of the Eisenhower administration.

His bibliography is a long one with topics ranging from his early studies on costs of truck and tractor logging to a comprehensive volume on land use, on which he collaborated with Samuel T. Dana—California Lands: Ownership and Management (1958). One of his major contributions is to the development of the profession of forestry: From 1946 to 1955 Krueger served on the Society of American Foresters' Accrediting Committee, most of that time as its
chairman. The work of the committee led not only to a clarification and expansion criteria, but to the negotiation of a working relationship between the accreditation efforts of the Society and the regional accrediting agencies for higher educational institutions as a whole.

Mr. Krueger and I met on the Berkeley campus before Christmas in 1965 and discussed the selection of topics for a taped interview. The recording session itself took place the following month in his home, an apartment in a retirement community near Walnut Creek, California. The two-story building, of natural-finish redwood, was set with others of its kind on gently rolling ground whose natural landscaping takes advantage of creeks and trees. In his living room, sliding glass doors provided access to a generous balcony which overlooked canyons and hills. Inside there were warm period furniture with bright flowery brocades, an oriental chest, several paintings, and a large bookcase highboy in one corner. As if to attest to the fact that his life still extended far beyond the bounds of his so-called "retirement residence," the telephone's urgent ring frequently interrupted the interview.

Krueger, wearing a soft plaid shirt and a bolo tie caught with an Indian turquoise arrowhead, appeared relaxed but his mind moved with the precision of the man whose "rigorous field engineering assignments" had often been the horror of student railroad location surveyors at summer camp. He was fully cooperative in our efforts to record a true picture, and we moved swiftly but concisely through our outline. To the regret of both of us, the sun set, signaling the close of our interview, before we could discuss his experiences with Assistant Agriculture Secretary Coke.

That is another story, concerning more the relationships within the Forest Service and the Department of Agriculture than the development of forestry techniques in California, but the professor has given permission to place in the appendix the notes from our pre-interview conference on this phase of his career.
Mr. Colgan’s interview took place April 12, 1966, in his friend Rex Black’s home in Palo Alto, where he was visiting for the occasion. In fact, it was retired CPPA* Secretary Black who, after his own interview was finished, made it possible to start a similar project with Mr. Colgan: Black sent to the Regional Oral History Office a grant which funded the recording and transcribing. After that was accomplished, the Forest History Society stepped in and supported the editing and finishing with a grant from the Hill Family Foundation fund, the source of support for the Krueger interview, also.

Mr. Colgan’s interview was recorded in the quiet of Rex Black’s study in two stints: one before lunch and one after lunch—a repast that is still memorable for its good California food, and wines from both France and the Golden State.

A graduate forester from Michigan State, Colgan forsook the Forest Service temporarily when, in 1914, he passed the test at a time when there were no vacancies. Then, while working in California, his boss, F.E. Olmsted, was asked to check a timber estimate on 25,000 acres of Diamond land—and he put Colgan in charge for the summer. This was Colgan’s introduction to the Diamond Match enterprise. After World War I Olmsted became forester for Diamond and called on Colgan to assist, specifically in the Idaho area. In 1922 Colgan came to Chico, California, to manage Diamond’s lands after a showdown between Olmsted and the man who was contracting logging to independent—and frequently destructive—"gypos."

Here Colgan’s story concerns the efforts required of an early day forester superintendent to make forestry pay: from cost studies to the equipment adaptation necessary in pre-tractor days. The discovery that the Diamond areas had been burning over every forty-two years led to greater efforts in fire protection and the establishment of the unique and effective North Butte Protective Association made up of the Forest Service, the State Division of Forestry, and Diamond.

For further information relating to material in Colgan’s interview, the reader is referred to other interviews in this series, specifically those of S. Rexford Black and William P. Schofield. Also recommended is a 399-page

*CPPA: California Forest Protective Association.
corporation history of Diamond Match, written by William H. Hutchinson and published by the Company in 1957.

Both Colgan and Krueger received rough-edited transcripts to which they added further corrections and then returned them to this office for final typing, indexing, and assembling. During a visit by the interviewer to the Colgans' summer home in the California pine country, Dick rounded up a number of pictures to illustrate his transcripts, then conducted a tour through the second-growth Diamond forests which he and the ingenious logging boss, Dana Bailey, had nurtured by protective logging methods.

These two men, then, give accounts that hopefully will sharpen the picture for a historian searching for material on the years when forestry first came to California.

Amelia R. Fry
Interviewer

March 1969
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SECTION ONE

Myron E. Krueger

FORESTRY AND TECHNOLOGY IN NORTHERN CALIFORNIA
1925-1965
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Request for permission to quote for publication should be addressed to the Regional Oral History Office, 486 Library, and should include identification of the specific passages to be quoted, anticipated use of the passages, and identification of the user. The legal agreement with Myron E. Krueger requires that he be notified of the request and allowed thirty days in which to respond.
MYRON KRUEGER - Chronology

Born - Glenville, New York: June 15, 1890

1914  
   B.S., Union College  
   B.S.A., Cornell University

1916  
   With Professor Bruce on field and office aspects of time studies in logging--pine and redwood.

1917  
   M.S., University of California

1917  
   Spring to Fall: U.S.F.S. Assistant Ranger - Sawyer's Bar.

1917  
   October: Army in Landes region of France, cruising.

After War:  
   Modoc National Forest for a short time.

Then:  
   Six years as logging engineer in redwoods for Pacific Lumber Company at Scotia and the Northern Redwood Lumber Company of Korbel.

1925  
   Professor of Logging and Forest Engineering, University of California, and summer camps after Fritz.

1934  
   Senior lumber code examiner under N.R.A.

1938-1941  
   On Council of S.A.F.

1946-1955  
   On Accrediting Committee of S.A.F.; Chairman after 1948.
TECHNOLOGICAL DEVELOPMENTS IN LOGGING

Tractors

Fry: Would you like to tell about the mechanical devices for logging and the development of these?

Krueger: As background, I want to bring out that the mechanical devices for logging, between the use of animal power (oxen, horses, and mules) and modern tractors, consisted primarily of steam donkeys which activated steel cables. Here you had devices that pulled logs in straight lines. With the introduction of the tractor, you had devices that no longer had to pull in straight lines.

Also as a background for the consideration of tractors, particularly, the term "yarding," "roading," and "long-distance transportation" need to be defined. For example, all movement of the log from the time you get the tree down and severed into logs until it lands in the sawmill is "transportation." But they normally have considered the first, initial, short distance movement of the log as "yarding" or skidding. The secondary, somewhat longer distance is termed "roading." Finally, the long distance transportation from the woods to the mill is usually referred to merely as "transportation," but as I have pointed out, it's really all transportation once you get the tree down and severed (bucked) into logs.

With that as a background, let us consider tractors. They were first used in long distance transportation, as a form of roading device in some cases, or in bona fide long distance transportation in connection with trucks. I'm not referring to auto trucks, but the old type of trucks which were in a sense glorified wagons, with the steam tractors hauling these wagons--sometimes only one, sometimes two or three connected together.
Fry: Was this in any particular part of the timber region, such as Douglas fir?

Krueger: I think I should confine my remarks primarily to California, because I'm not too familiar with all of the historical development of the entire Douglas fir region.

In California, I think that the early use of steam tractors for roading or long distance transportation with wagons occurred in the southern Sierras, and some of it in the vicinity of Hume where they did some early day logging of inland Sequoia (Sequoiadendron giganteum). (This is now a part of King's Canyon National Park. The community of Hume, no longer in existence, was located along what is now State Highway 180.)

But the first application of internal combustion tractors to logging occurred in the early Twenties. In 1925 and 1926, when I first came to the University of California, they were coming into considerable use in the pine region of California which is in the northern Sierra region.

Fry: This was still as long distance transportation?

Krueger: More correctly they were used as roading devices because the logs, in some cases, were still bunched together with horses or with small tractors or rolled into piles by means of a "cross-haul," which is simply the loggers' way of saying a parbuckle. A parbuckle is simply a line which comes from a fixed point, toward which the log is going to be rolled, and goes down under the log and then back up over again to the team or other power source which rolls it up an incline. As I say, in some cases the logs were bunched by horses and in other cases they were beginning, in 1926, to be bunched by tractors.

But when they once were in the pile, then they had devices which were hauled by the tractor and referred to as "big wheels," because that's what they were: big wheels. Big wheels had been used with horse logging. The big wheels as used with horse logging were sometimes fifteen feet in diameter, but the big wheels as developed initially for tractors were not over ten feet in diameter. They had a hydraulic lift device, which was
Krueger: connected to a hydraulic pump on the tractor, which would pump oil up into a cylinder which, in turn, elevated the logs off the ground for easier transportation. Then they were hauled into the landing to be loaded, usually on railroad cars. In short, the sequence was either horses or tractors for yarding, tractors plus the big wheels (or the hydraulic big wheels) for roading, and finally railroads for the long distance transportation.

The next development was to substitute arches for the big wheels. They were actually no longer "wheels" in that they were no longer circular. The arches possessed "rolling" mobility because of a track-laying type of device similar to the track of the tractor. A line ran from a drum on the tractor up through a fair-lead at the top of the arch. They would attach lines, called chokers, to several logs and pull them up under the arch, and then proceed to the landing with them. So the tractor became not only a yarding device, but also a roading device in one continuous operation.

The next development was the inevitable increase in size of units and later the application of diesel power, rather than gasoline. It should be explained, perhaps (and this will be evident to anyone who is an engineer) that with gasoline internal combustion engines you secure your detonation of the combustive material by electrical spark; but in a true diesel engine, the fuel is ignited under the heat of compression. So originally they had to have enormous weights of material to withstand the heat of compression. It was for this reason that the first applications of diesel power were in water transportation—that is, in ships or stationary units—because weight was not a problem in either case. As the metalurgists developed better metal alloys, permitting greater strength with less weight, the diesel principle could be applied to mobile equipment such as tractors.

It finally should be pointed out that tractors remain essentially a downhill logging device. That is, they don't have the power to pull very large loads up very steep hills. This has had some significance when used on ground that is very easily eroded. In some cases, timber operators
Krueger: have reverted back to high lead donkeys or skylines, so that they can pull logs uphill. The significance of this from the standpoint of forestry is that in pulling logs downhill to a fixed landing for loading onto either trucks or railroad cars, the converging lines of travel go downhill toward a central point. Therefore there is a concentration of water flow from the hillside. On the other hand, in pulling logs uphill to a central point, the downhill travel of water is dispersed. Therefore they have found that in some cases it is advantageous to go back to the high lead donkeys, or the skylines to prevent erosion.

But in general, it must be admitted that in reasonably good terrain, tractors are much more easily adapted to the practice of forestry, because of the thing which I pointed out initially: that the tractor can travel around clumps of trees that have to be protected. Have I covered the subject of tractors?

Fry: I did want to ask you about some specific companies, and thought you might be able to comment on their contribution in the use of tractors in California, such as the Sugar Pine Lumber Company in Pinedale. I think you had mentioned before I turned on the recorder that they had a man there named Mr. Murray who was instrumental in getting his company to use tractors.

Krueger: I should add to your statement: and good logging practices.

The first companies that I recall that were using tractors, as I have described them, were the Red River Lumber Company at Westwood, the Weed Lumber Company at Weed, the Fruit Growers Supply Company at Susanville; those were the main large companies that were using them that early. I think that the Sugar Pine Lumber Company at Pinedale came into the use of tractors somewhat later than these companies that I've mentioned. They did not, as I recall it, adopt tractors for logging for their yarding as early as the other companies that I have mentioned; however, they adopted certain practices in the use of steam donkeys which permitted very good logging. I
Krueger: should have mentioned also that the Diamond Match Company, which is now the Diamond National Corporation, also adopted tractors fairly early, but not as early as the companies that I mentioned previously.

Fry: Do you want to give us the same kind of run-down on trucks?

Krueger: I should explain that a truck, as we know it now, consists of a tractor unit or hauling power unit. It has the usual two front wheels and either one or two axles at the rear. It is very short-coupled. Attached to the truck is a semi-trailer which contains the body of the truck and on which the logs are loaded. The wheels of the semi-trailer again may have one or two axles depending upon the size of the loads which are to be hauled.

So when we're speaking about trucks, it isn't just an automobile-type device with front wheels and rear wheels. It's a series of axles: the front axle, one or two axles for the rear portion of the tractor unit, and one or two axles for the semi-trailer.

They were used first in longer distance transportation, to my knowledge, in northern California by a lumber company which operated at Castella, which is in the Sacramento Canyon. (This is in the vicinity of Castle Crags.) It's very steep country, very rough terrain. Even though they were using logging railroads for their transportation initially, the railroad construction must have been very expensive. So, back in 1921, at the Pacific Logging Congress, one of the men from this company (and I have forgotten the name of the company, it's no longer in existence) described their experience. He said that they were able to get logs out of areas where nothing else would have been economically feasible, but that the difficulty was with the hard rubber tires with smooth surfaces. The trucks were practically
Krueger: unusable in even a very light rain. That was the first use of trucks for logging of which I am aware in California.

Fry: I suppose this was written up in the proceedings of the Pacific Logging Congress?

Krueger: Correct.

Three things are basic to the development and increased use of trucks in logging. One was the development of heavy-duty pneumatic tires, so that you no longer had this difficulty of their becoming quite ineffective in wet weather. Another was the development of better highways or roads, which permitted fairly good-sized loads to be hauled on the public highways. And the third is the development of diesel power, which produced a greater pulling capacity. Here again, it must be pointed out that the improvements in metallurgy permitted detonation of fuel under heat of compression in a diesel engine with lesser weight of metal.

Truck transportation has developed now to the point where a very small percentage of the logs are being transported by rail in northern California. Offhand, I can't think of any at present. There may be a few operations. Possibly a few logs are being hauled by the McCloud River Lumber Company, at McCloud near Mt. Shasta, because they have very long distance transportation, sometimes hauling forty or fifty miles. But, again, trucks would be used as feeder device to the head of the railroad, with the logs being transferred from the trucks onto railroad cars.

Fry: So tractors and trucks formed a pretty complete revolution.

Krueger: Oh, yes. To get greater efficiency out of the trucks, so that the truck and the truck driver (that is the tractor unit of the complete trucking unit and the truck driver) are not delayed, many companies have gone to what they call pre-loading. That is, they place the trailer unit where it can be loaded by the logging crew, with a sort of temporary support device under the front end of the trailer unit. It is then loaded. When the truck driver gets back from his trip, he simply hooks onto this tractor unit and moves out; and
The returning trailer is put in position. So there is no delay.

Another ingenious application was used by the Ivory Pine Company, now the Sequoia Forest Products Company, with a sawmill at Dinuba. The logging operations were along the highway leading into Sequoia National Park. The logging operations were so located as to require hauling logs up a very steep road to get to the main highway. From this point it was all downhill haul to Dinuba. They used large heavy-duty motors on the truck tractor units to haul up to this point. Here there was a transfer point at which they would drop the trailer unit, and a smaller-motored tractor unit would hook on to it and take it down to Dinuba.

It must be remembered that when hauling logs on the public highways, either county or state, there are limits first of all in the width of the load. The portion of the trailer on which the logs rest is termed a bunk, and the bunks cannot be over eight feet in length; so this limits the width of the truck-trailer unit. Then, too, there is a limit on the number of pounds of pressure on the pavement, per wheel. This is overcome to a certain extent by putting dual axles on the rear of the tractor unit, dual axles on the trailer unit, and dual tires on each end of all but the front axle. Increasing the number of wheels decreases the number of pounds of pressure exerted by each wheel. There were other adaptations for meeting the differences between off-highway and on-highway use.

On off-highway use there is no limitation on wheel weight. Some of the companies have developed up to thirteen-foot bunks. I think there is one company in the Douglas fir region that is using sixteen-foot bunks. It is my recollection that one company in Idaho had sixteen-foot bunks for off-highway use. They would load the logs in two packages, each eight feet wide, and put them on a trailer unit for hauling considerable distances on a private road to a transfer point from which they were going to use the public highway. Here they would lift off each package and put it on a trailer unit with eight-foot bunks for hauling to the mill.
Fry: So there was great flexibility of use in all of this.

Krueger: Certainly.

And the significance as to forestry practice is that the development of trucks has enabled smaller companies to go into the business, because even one truck can give them some output. But of course one truck is somewhat inefficient in that there are occasional breakdowns. When you have a one-truck operation, when it is broken down, you have no production.

Fry: This really is a hazard, isn't it, in the development of voluntary, private forestry in small companies?

Krueger: Yes, and, as I pointed out to you in our discussion of a few weeks ago, a small company is frequently a family-type company, and therefore upon the death of the prime owner, or head of the family, the death taxes, or inheritance taxes, frequently tend to cause liquidation in order to satisfy the inheritance taxes. Therefore, the large company with widely held stock would probably be in a better shape to practice forestry.

However, there may be certain situations in which a man who wished to practice forestry on his small ownership could do so through the use of only one small truck, because he probably wouldn't have an operation which would be working throughout twelve months of the year anyway. Under these circumstances he'd always have a nonproductive period in which to work on the mechanical functioning of his truck. Do you think of any other questions with reference to trucks?

Fry: I can't think of any right now, but I am anxious to hear about the very early attempts to plant redwoods. This must have been rather significant.
PRIVATE FORESTRY IN THE REDWOODS

Krueger: I think it's true that in every forested region of the country, the tendency has been to start out with forest nurseries, because nurseries have publicity value. I know that in the southern pine region (cotton south) where forestry has been practiced now, pretty effectively, for some thirty years, some of the first companies to inaugurate forestry practice there put in what they called "show-cases" out along the road. Usually these consisted of a small nursery to show the people that they were growing trees from seed then planting them on the cutover lands. But planting, if it has to be resorted to (and sometimes it is a perfectly good forestry practice) is rather expensive. So if you can avoid it, you attempt to do so.

But in keeping with many other regions, it must be admitted that the first applications of forestry in the redwood region were the proverbial nurseries. And the very first one established, which must have been some time in 1920, was the Union Lumber Company, Fort Bragg, Mendocino County. The interest in developing forestry in the redwood region was started by Mr. David T. Mason.

Fry: This was with Union Lumber Company?

Krueger: Yes, with Union Lumber Company. He had spent a number of years as Assistant Regional Forester of the U.S. Forest Service at Missoula, Montana, then came to the University of California in 1915 for a short period, and during the World War I years was located in France as a U.S. Army major of one of the forestry battalions in the Landes region of France.

Upon his return to this country, he very shortly had a position which called for examination
Krueger: (I think it was for the Bureau of Internal Revenue) of the books of lumber companies. From that he later branched out as a consulting forester, and one of the first clients he had was the Union Lumber Company at Fort Bragg. They immediately established a forest nursery.

Mr. Virgil Davis, who later went with the United States Forest Service at New Orleans, Louisiana, and has now retired, was the first forester of the company. The second installation, and the second client of Mr. Mason was The Pacific Lumber Company at Scotia, California. I was working there in the logging engineering department, and Mr. Mason asked that I be made the forester. And we went through the same steps of establishing a nursery, just south of Scotia, for the company lands. However, before we harvested the first crop of seedlings, I left the company and went with the Northern Redwood Lumber Company at Korbel.

One of the prime movers in securing reproduction in the redwoods without the use of nurseries was Professor E. Fritz, who determined that planting in the redwoods is unnecessary. I know that the nursery which I established at the Pacific Lumber Company has long since been abandoned. I can't tell you just how many years it was in operation. I'm quite sure, also, that the nursery of the Union Lumber Company at Fort Bragg has been abandoned. At least it is not used in the forestry practices of the company.

Fry: I'd like to ask you more about the operations of the Union Lumber Company and also Pacific. Do you know anything about how the decision was made to bring in a forester?

Krueger: To begin with, the man who was the original president of the Union Lumber Company, Mr. C.R. Johnson, was a rather civic-minded individual, a very fine gentleman. I think that he was somewhat intrigued by the idea that here his company was located in a region with abundant moisture and with good growing conditions in general, and that forestry is a financially feasible possibility. I think Mr. Mason, who is a very well-educated professional forester, was able to convince him of this. Here you have a company with fairly
Krueger: widely held stock but now with the third-generation member of the Johnson family as president of the company. So, I would say that was the situation with reference to the Union Lumber Company.

With reference to the Pacific Lumber Company, the influential stockholders in the company were members of the Murphy family. The Murphys had started logging originally in the state of Maine. Just what their progress was, whether or not there was an intervening stage in which they had logging operations in the Lake states, I do not know. But they eventually landed out here on the Pacific coast with an interest in the redwoods. And the Murphy family impressed me always as being interested in civic things and in the long pull for forestry operations.

But possibly they were attracted to forestry by the activities, in about 1919 or 1920, of the Save-the-Redwoods League, which the officers and stockholders of the company knew would affect their timber holdings, lying quite largely along what is now U.S. Highway 101. They perhaps adopted forestry, or at least the willingness to put in a nursery, as sort of window-dressing. But I may be wrong in this supposition.

I think, too, from a hard business standpoint, a lot of the larger timber operators in California, and also in the Douglas fir region, came to the realization that lumbering proceeded from the Northeast to the Lake states to the cotton south to the Pacific coast, from which there was no other place to go, unless they went to some other country completely. So this may have had an influence in creating a willingness to think about forestry for continuing their operations.

Fry: It must have been quite a financial outlay for a company to do this, so that the decision to do it was an important one.

Krueger: I wouldn't say that there was any heavy financial outlay for the nursery. That was not too consequential. They had the land; I as forester did most of the work. That was true of Virgil Davis at Union Lumber Company, and it was also true of Willis Corbitt, who succeeded me as forester for The Pacific Lumber Company. With the addition of
Krueger: only a modest amount of extra help you can grow quite a few seedlings. And also with the redwood species, the growth from the seedling to a plantable size is very rapid.

My recollection is that you plant the redwood seed and at the end of about six, maybe eight, months you run a blade underneath the seed bed to root-prune the seedlings. That is, redwood seedlings develop a very long taproot, and by severing that taproot you encourage the development of a more diversified root system. Normally, with such a slow-growing species as spruce, for example, you might have to grow them in the seed bed for two years, and then perhaps two additional years in a transplant bed. Whereas in redwoods, you thin out the seedlings, root-prune them, and they are usually ready for planting in the field at the end of one year. So there isn't a big financial outlay for operating a redwood nursery.

Fry: They never did get to the point of actually taking these small redwood plants out into the forest and planting them, did they?

Krueger: In a very limited way.

For example, the company by which I was later employed, the Northern Redwood Lumber Company, bought some seedlings from The Pacific Lumber Company. These were planted on a cutover area which had been rather heavily grazed. They were trying out all sorts of species—Douglas fir, redwood, Sitka spruce. We made plantations in two different areas, one at Korbel and the other about two miles distant. At Korbel we found that Sitka spruce had the very best survival. As I recall it, Douglas fir was the next best in survival, and redwood had only about a thirty-five percent survival. This poor survival probably is due to the fact that redwoods do not develop quite as diversified a root system. And it may be true, too, that being the initial planting, which had to be done with railroad maintenance gangs rather than more experienced planters, that the planting was not done too well.

Fry: So you didn't have trained personnel.

Krueger: Correct.
Fry: There is some difference between laying a track and planting a redwood tree. [Laughter] Let's go on to the NRA [National Recovery Act].
THE LUMBER CODE OF THE NRA, 1934-35

Krueger: The Lumber Code, with reference to the forestry provisions, was largely a quid pro quo arrangement. In return for being allowed certain liberties in marketing and price control, the operators had to follow certain forestry practices. This was arranged very amicably with the operators.

In California Mr. T.D. Woodbury, in charge of timber management for the U.S. Forest Service in California, was instrumental in having us develop practices that were not so onerous that if the NRA Code were later declared unconstitutional, the lumber companies would feel, not obligated, but desirous of continuing these forestry practices. That is what happened when it was declared unconstitutional. I think T.D. Woodbury in California deserves a lot of credit for having been wise enough to do that.

Fry: Was he in charge of timber management?

Krueger: Yes, he was Assistant Regional Forester in charge of timber management for Region Five.

But, probably coupled with that, there was the introduction of tractors, which made it easier to practice selective logging, and also an emerging forestry attitude of the large operators, to which I have just referred. That is, they were beginning to think in terms of forestry for continuing their life. So there are a number of things that worked favorably on this.

Fry: It might be interesting to get a glimpse of exactly what someone did in your position as an NRA forester.

Krueger: The U.S. Forest Service acted as the inspection unit to check compliance of the companies under the NRA Code. It was our job to visit all the lumber companies to see how well they were carrying on their forestry practices. There were
Krueger: two things that we were looking for. One was, were they treating their residual stands with reasonable respect, and not just knocking them down? Secondly, did they have good provision for fighting fires, if one started, such as a supply of shovels and other small hand tools at each landing, and did they have fire trucks to put out fires at some distance from the current logging?

Fry: Under Article Ten, if you did find that a company needed to improve, what powers did you have, and how did you proceed?

Krueger: As I recall it--remember I was with the U.S. Forest Service on Code enforcement for only four months--two things were at work here. One, the NRA Code was declared unconstitutional quite early. Secondly, I was allowed by Professor Mulford, who was head of the Department of Forestry, to take only a four-month assignment. And therefore, in four months we hadn't much more than made a complete inspection of the lumber companies and decided on which things needed bolstering.

But you raise a very good point. If the NRA Code had not been declared unconstitutional, I suppose the punitive measures would have involved taking away their privileges for marketing and price control.

Fry: Later on, when this became a more voluntary thing, under Article Ten, all you could do then was just encourage them in self-policing. Is that correct?

Krueger: Correct. Of course, about this time the first Forest Practice Rules came into effect under the Forest Practice Act, 1945, by the state of California. The initial Forest Practice Rules, it must be admitted, had no punitive measures connected with them. But as one man pointed out at the time, it was a big step forward to think that the lumber companies agreed to have such laws set up. I think the more responsible lumber companies were thinking in terms of "It's to our advantage to have some of the less responsible companies forced to do these things, as well as for us."
Krueger: The initial Forest Practices Act lacked teeth. But recently at a meeting, I heard Mr. DeWitt Nelson, who is head of the State Department of Conservation, make the remark that since more recent changes in the laws, they do actually have teeth for enforcement. So, I think the man was right who originally said that the initial Forest Practice Rules, while they were somewhat innocuous in themselves, got the lumber companies thinking in terms of a modest amount of regulation as to forestry practices. These might be considered somewhat of an outgrowth of the NRA Code.

Fry: Would you want to mention some specific lumber companies who made great efforts in this particular line?

Krueger: I hesitate due to the fact that I can't think of any one company. But I would say that one company which did a lot of work right at the start, because they figured they might as well practice good forestry as do poor logging, was the old Diamond Match Company (now Diamond National Company). They had a woods superintendent by the name of Dana Bailey, who prided himself on the good-looking residual stands on the company's lands, even in spite of the fact that they were using steam donkeys for logging.

Fry: This was even before the NRA days, is that right?

Krueger: It started a little bit before the NRA days, but they were in a very receptive mood and complied very well from a voluntary standpoint.

Later, one of the companies which did a tremendous amount of work was the Collins Pine Company up at Chester. They started out with the idea of practicing selective logging from a stand sanitation standpoint. It was known that much of the pine stands that were mature and overmature were quite susceptible to damage by the Dendroctonus beetles and that if they could remove these very susceptible trees from the stand, they would then put their stand in a much healthier condition for forestry operation.

Fry: So they removed these trees first.
Krueger: Yes. And the criteria of those trees to be left was the length and the appearance of the needles, and so forth.

Fry: The regional advisory committees which were formed to set standards under Article Ten, I understand were made up of several organizations interested in forestry: industry, the Forest Service, and some of the trade organizations. Is that right?

Krueger: Correct.

Fry: I wonder how these representatives worked together in the committees.

Krueger: They worked together very well, and I think it's indicative of the fact that they did work together well because this "joint committee," you might say, continued to function after the NRA Code was thrown out.

Fry: You mentioned off the tape a story in which the McCloud River Lumber Company felt that the Forest Service was trying to exert too much influence at one of these meetings.

Krueger: What I hoped I had said was that they had a meeting at a camp of the McCloud River Lumber Company. (These meetings used to be rotated; sometimes they were held in Sacramento, some of them in San Francisco, and some at the camps of different interested lumber companies.) It so happened that the day they met at the camp of the McCloud River Lumber Company, there seemed to be an overabundance of men from the United States Forest Service. I think that the tendency of the Forest Service to load the meeting with too many men led to the abandonment of this voluntary committee. But I think it made a contribution at the time it was functioning. The objection of the McCloud River Lumber Company was to the fact that every time he'd tell the cook, "We will now have ten extra," he'd have to go to him again and say, "Now we'll have fifteen extra." And finally, I think, there were over twenty or twenty-five there. So, he was objecting quite largely from the standpoint of the fact that the cook was likely to get mad at him.
Fry: I wonder if you'd want to comment on the role of Rex Black's organization, the California Forest Protective Association.

Krueger: Rex Black, of course, is no longer connected with the California Forest Protective Association.

Fry: Yes, he has retired. Wasn't he on that committee at the time?

Krueger: Yes he was, and a very prominent member and a very effective member of the committee. He is in business down at Santa Clara or Palo Alto, or somewhere in that vicinity. If you have the opportunity, he would be able to make an excellent contribution.
THE ACCREDITING COMMITTEE OF THE SOCIETY OF AMERICAN FORESTERS

Fry: I believe that you were on a committee of the Society of American Foresters called the Accrediting Committee, and that for quite a long period you were chairman of this committee.

Krueger: Chairman of the committee, that is correct.

Fry: You were chairman after 1948, and you were on it from 1946 to 1955, according to my note.

Krueger: That would be right. To give you a little background, the initial forestry education in the United States was at Cornell University at Ithaca, New York. They started there in about 1899 or 1900, soon after Yale offered forestry. All I can do now is give you some of the other institutions: there was Iowa State, Washington University, Syracuse University, Oregon State, University of Idaho, and the University of California. This list is not by any means complete. The University of Maine and the University of Massachusetts put in forestry curricula. One very important one is the University of Michigan. Also, Michigan State University.

Because of the large number of institutions that were establishing forestry curricula, everything was fine so long as they were strong institutions. But eventually it became evident that there was a tendency to proliferate curricula just because some institution wanted to say, "We have a Forestry Department," but without any realization of what the financial needs were to maintain a good, strong forestry department.

This led to accrediting some time in the late Twenties or early Thirties. I can't recall just when this started. A strong contribution in this direction was made by Professor H.H. Chapman of Yale. He was chairman of the committee for many years. When Professor Mulford withdrew from the committee in 1946, I became a member, replacing
Professor Chapman, who is a very extremely hard worker, contributed a tremendous amount of groundwork in setting up this committee and digging into the whole subject of accrediting in general. He had the misfortune of getting into an argument with President Tigert of the University of Florida, and I was later informed that Professor Chapman was in the right. But Professor Chapman was an individual with rather bulldog tenacity and liked a fight of that sort. He took on Professor Tigert and had a good case for proving that Tigert didn’t know what he was talking about.

I can’t recall just what the squabble was, but it put the Society of American Foresters, and Professor Chapman, in somewhat of a bad light with the heads of institutions. They thought that the Society was trying to dominate too largely the whole matter of accrediting. There were certain other fields that had similar squabbles. I think, for instance, one outstanding example was in the field of nursing where two different accrediting organizations claimed the right to accredit nursing curricula. I think the same thing held true for journalism. At least, the situation finally got to the point where the educators decided that something must be done. It was getting too burdensome for the universities to participate in accrediting with many of these organizations. So, under the leadership of Chancellor Gustavson of the University of Nebraska they had a number of meetings at which this was to be brought under control.

The rule was finally adopted. They didn’t ask for comments. They just said, "This is the way it’s going to be handled." And I think, in general, it was fair. The various accrediting organizations would have to operate through the regional educational associations, such as the Northwest Association for Higher and Secondary Education. That was set up, and since it has been instituted, I think we have not had any difficulty in the Society of American Foresters.
Krueger: in cooperating with them.

One thing that made our cooperation a little easier to attain was that the Society of American Foresters has never levied any charge on the institution for examination. For example, when the regional associations such as the Northwest Association for Higher and Secondary Education go in to examine an institution, the institution has to assume the expenses for all of these people that come in. It must pay their transportation and all expenses during the period of the examination. The charge is quite heavy. The Society of American Foresters has felt that this is the contribution that they should make to forestry education, and therefore have never made any charge.

Fry: I don't quite understand how the S.A.F. committee functions through the Northwestern Association. Do you have a forester on their accrediting team?

Krueger: The Society would send two foresters in to function with the team. One thing that we did—and I'm familiar with this because I was on the examining committee when we examined the University of Idaho—I asked if we could have one or two members of the Northwest Association participate with me in examining the forestry curriculum so we'd get the benefit of the things that they were interested in, particularly general education. That was done. The President of the University of Seattle was one of those cooperators. I think the other man was from the University of Montana, but I can't for the life of me think of what field he was in. On the other hand, I think that we were asked to participate with some of the other men of the Northwestern Association on some of the general aspects of education. So, it has worked out fairly well. We've cooperated fairly well.

The thing that must be remembered in accrediting, and this was the argument of Mr. Gustavson, he said, "At best, accrediting can only emphasize minimal requirements." Which is true. That is, you can't set up the perfect, and say that all of them must be perfect. You set up the absolute bedrock minimum and say, "This is what you have to comply with to be accredited." His feeling was
Krueger: that no strong institution would need that, with which I certainly am in agreement. When I was talking this thing over with Dean Hutchison, who was then dean of the college of agriculture at Berkeley, he brought out as an example that when they started to establish the school of veterinary medicine at Davis, some of the men came to him and said, "Now, we need this, and we need that because that is what will be demanded by the accrediting organization for veterinary medicine." And he said, "Forget that. We want the best school of veterinary medicine in the country. What is needed to set that up? Forget what the requirements are. Let's make the best school of veterinary medicine we can."

If all institutions were of that attitude, you wouldn't need an accrediting organization. But you do have a lot of these weak institutions who want to have a variety of curricula, and they haven't the financial means to support this variety of curricula. Therefore you have a weakening of some of them. Of course, that forces the necessity of accrediting and setting up minimal standards.

What happens is—and I personally, when I was chairman of the committee, warned a couple of institutions: I said, "At best, you're going to be very close to the line, and the standards that we have established are going to change; they are going to get more strict as time goes on. Can you meet them?" They were sure they could. Without mentioning names of any institutions, two of them that were just on the ragged edge are no longer accredited because they couldn't keep up the pace.

So, accrediting does have a value in making the weaker institutions try to keep up to minimal standards, or at least makes them stop to think that they perhaps should not establish a curriculum in the first place.

The Southern institutions, where you have a lack of finances in most cases (when I say "Southern," I mean the cotton South, the Southeast), have established some sort of compact whereby—it seems to me there were thirteen institutions that agreed—they would not establish any new departments
Krueger: without first clearing with the organization. Then, perhaps, one institution might establish a curriculum in, let us say, veterinary medicine; another one might establish a curriculum in forestry. And they would have an exchange of students at a minimum cost to the several affected states. I haven't followed that in the last ten years, but it seemed to me at the time that they were getting on the right track.

Fry: I wanted to find out how you set the minimum standards.

Krueger: As I implied, you had to have a constant re-evaluation of standards. The original standards were established by Professor Chapman. When I became chairman of the committee, the thing that we did was to attempt to evaluate the faculties in supporting departments, or cooperating departments; for instance, departments of botany, English, mathematics, chemistry, and so forth. I'll admit we had to use a very questionable standard: we had to use the Ph.D., which is admittedly a weak criterion all by itself. But we did use other criteria as amount of publication by professors and so forth. And we used the same standards with reference to the forestry faculty.

Then the other thing which I was instrumental in doing was to evaluate the libraries, which Professor Chapman had put purely on a volume basis. For example, Yale has, let us say, 100,000 volumes in its forestry library and therefore it is assumed to be twice as good as an institution which has 50,000 volumes. But I made a survey by contacting all the forestry schools and asked what were their outstanding publications and books in the field of silviculture, in the field of engineering, in the field of ecology, and in various fields connected with forestry. From that I made a sort of a table that certain books were in category one, certain books were in category two, and certain books were in category three. Then the institution that had all of the books in category one, regardless of the total number of books, would be considered as having a strong forestry library, from an undergraduate standpoint. And that's what we were evaluating, the undergraduate curricula.
That brings up another point, that two institutions, Yale and Duke, had forestry curricula for which you qualified for entrance by having the bachelor's degree. But, as I pointed out one day to Dean Garrett of Yale, I said, "You don't make any assessment of what the subject matter is that that student has had. For example, an undergraduate who has gone to a land-grant college and has had an excellent course in soils and an excellent course in botany may be much better qualified than a man who has gotten a liberal arts degree from some other institution."

The point I was trying to make with him was that a student who got a Bachelor of Science degree in forestry at let us say the University of California, or perhaps the University of Washington, might be a better trained forester than the fellow who went to Yale and got his Master of Forestry degree there.

He wouldn't agree with me, and I think he was right in one respect. I wanted to needle him a little bit. But it did bring up this matter of how difficult it is to take two different standards of forestry. Here you had two schools of forestry, Yale and Duke, which were graduate institutions. And all the other curricula were on the undergraduate level. Now try to evaluate them from the standpoint of accrediting. It so happened that neither Yale nor Duke was a weak institution and therefore there was no question about accrediting. I haven't followed up on this aspect.

I don't know what the Accrediting Committee have done recently. The question brings up the whole subject of graduate work: shouldn't we accredit an institution from the standpoint of its ability to offer effective work to the Ph.D., for example. Whether that's ever been tackled or not, I don't know.

I don't have a list here of the names of some of the members of your committee.

The committee changes. At the time that I was chairman of the committee, it consisted of the head of the forestry curriculum at Michigan State College at East Lansing, Michigan; the head of the forestry curriculum at Colorado State College at
Krueger: Fort Collins; the head of the forestry curriculum at North Carolina State College at Raleigh. There was one other member whose name I cannot recall.

Fry: You don't have anyone from the Pacific area.

Krueger: Well, I was. I represented the Pacific area.

Fry: That was you. Anybody from New England? Yale?

Krueger: I don't think so. I was trying to think if there were any other Southern members of the committee. I can't think of a one there, because, outside of Duke, most of the Southern institutions were rather weak.

Fry: But you did have the North Carolina State man. Were these members chosen on a basis of regional representation?

Krueger: In part, yes. But they wanted to get men who were members of curricula at the stronger institutions. I should have listed North Carolina State as one of the strong institutions.

Fry: What about Dean Dana from Michigan? Was he active in this at that time?

Krueger: I don't recall under Chapman's committee whether he was a member at any time or not. I can't recall.
March 28, 1969

Mrs. Amelia R. Fry  
Regional Oral History Office  
General Library - Room 486  
University Of California  
Berkeley, California 94720

Dear Mrs. Fry:

Many thanks for your note and enclosure of March 24.

Your notes with reference to my work with Earl Coke are being returned herewith with some changes and corrections. You are at liberty to use them as you think best.

I shall look forward to receiving a copy of the interview.

Sincerely,

Myron Krueger
NOTES
MYRON KRUEGER'S WORK WITH EARL COKE
EISENHOWER ADMINISTRATION

From a Conference with Krueger held December 20, 1965. Retyped with additions April 1969.

Krueger worked in Washington in 1953 with Earl Coke (later a vice president of Bank of America in San Francisco, and later head of agriculture agency under Governor Reagan). Before becoming Assistant Secretary of Agriculture under Benson, Coke was head of Agriculture Extension Service, University of California at Berkeley. With Forest Service under his wing, he needed some orientation to this field—and that was Krueger's job.

Coke was upset over "Stumps for Stumpage" program of the Forest Service, felt that in most states in the West the Forest Service had an appreciable amount of land already, that Stumps for Stumpage was a subterfuge to acquire more acreage.

Frank Heintzleman (became Governor of Alaska in 1953) worked with Lee Kneipp (in charge of Forest Service land planning, acquisition) on Stumps for Stumpage; it was Kneipp's idea. Kneipp didn't want to acquire heavily wooded land, neither did Heintzleman, for fear, in part, the National Park Service would take away such a forested area. One reason the efforts to have a large redwood national forest under the Forest Service did not materialize—except for the Yuroc Forest. (Heintzleman was Regional Forester, Alaska.) (Yuroc Forest may be traded for private lands as part of the deal for a Redwood National Park.)

Coke was a nut for efficiency....

Regarding Crafts (first head of Bureau of Outdoor Recreation—had been one of those next in line for Chief of Forest Service after McArdle): Coke said that when Crafts came in to talk to him, he had well-marshalled thoughts, would get his business done and leave in 15 minutes. Chief McArdle, on the other hand, would talk for an hour and still not get the idea across to Coke. However, McArdle saw that he still had within the Forest Service some men who "had a mistaken idea of what Pinchot meant"—the pro-federal-regulationists (Earle Clapp—a former Acting Chief, and Loveridge, among others). Coke wanted less anti-industry, more liaison between industry and the Forest Service. McArdle was caught in the middle because he would have a small rebellion on his hands from these men still in Forest Service; McArdle wanted to wait until they retired before instituting the change in policies desired under Republican administration. This was the idea that he was trying to get across to Coke, without being too outspoken.

See letter to TIME magazine criticizing Crafts—about May 1962, and Senator Anderson's rousing reply.
SECTION TWO

Richard A. Colgan

FORESTRY IN THE CALIFORNIA PINE REGION
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Richard A. Colgan, Jr.
BACKGROUND AND EDUCATION

Colgan: I was born in Berwyn, Pennsylvania, and grew up on a stock farm, which my father managed. He raised thoroughbred horses and registered cattle and sheep, purebred hackney and crossbred hunters and jumpers. My father was a second-generation Irishman. My mother was a Kentucky rebel, so I had rebels and Democrats on both sides.

Fry: That sort of left you free to choose, I guess.

Colgan: Well, no it didn't. It was a cardinal sin with both my parents to be anything but a Democrat, and I've been lots of things but not a Democrat. I'm a Republican. Oh, sure, if they were alive, they wouldn't object to it now. They were very sensible.

Fry: What year were you born?

Colgan: February 2, 1891.

Fry: Did you go to school in Berwyn?

Colgan: Yes. The high school was in Berwyn, and it was called the Tredefrin East Town High School.

Fry: According to my notes, you graduated from there and you spent your whole school career in the same school system. Do you remember any teacher especially as important to your later life?

Colgan: No. My mother was the most important thing, I think, in my life. She gave us ambition, my brothers and myself.

Fry: How many children were there?

Colgan: Well, there were six of us, and the two girls died at a very early age. I had two older brothers and one younger. After high school, however, we were widely separated. I went to Michigan State University, and graduated from there in 1913, and
Colgan: then immediately came to California and lived in the Sierras for twenty-five or thirty years, with just occasional contacts with the rest of the family.

Fry: At what point did you get interested in forestry--after growing up on a stock farm?

Colgan: Well, I went from Eastern Pennsylvania to Michigan in order to study forestry, because I had the idea I'd wear a big Stetson hat and pack a gun. I've had a nice life to lead, but I haven't got the gun yet. [Laughter]

Fry: How did you first get acquainted with the idea of being a forester?

Colgan: Oh, I suppose because it was the time of Chief Forester Gifford Pinchot and all the conservation issues were just getting into the papers. It was the time when Gifford Pinchot was doing his best to ruin forestry and the growing of timber by persuading people that it was a sin to use lumber.

Fry: You mean there was some over-education done there?

Colgan: Of course, if you grow trees, you have to sell lumber. There's no other philosophy about that. You can't just go out and grow trees for the fun of it, because it's a very expensive operation. You have to figure out some way to pay for growing those trees.

Fry: It is an economic process, too.

Colgan: It's all economic, I think, unless you want to grow a park, or some trees for landscaping; you have to have an end to it.

Fry: At the time you were in college, was it the Gifford Pinchot atmosphere that really made you interested in forestry?

Colgan: Well, I think it was the publicity and the lure of getting out in the open.

Fry: So right from the first, in college, you studied forestry?

Colgan: Yes. A straight four years of it.
By and large men were entering the Forest Service when they graduated. Did you take the Forest Service exam?

Yes. But I didn't pass it the first time. The examination was so much different from my conception of what I thought it was going to be. And sometimes I can be a little hard on the courses we had: they were very sketchy, and so forth.

Was the exam then of the more practical nature--how to fix a pack on a mule or...?

Oh, I took the examination in 1913, and then again in 1914, and I passed it very easily then, because I was in my second year of working in the woods in California, and I knew what a fire-trail looked like.

It was knowing the on-the-grounds activities you missed out on in Michigan.
WORK IN THE U.S. FOREST SERVICE

Fry: When did you first come to California?

Colgan: Between my junior and senior years in 1912. I had a year in cruising timber for the Forest Service here in California.

Fry: Where did you do that?

Colgan: On the Plumas, out of the Sierra Valley. It was around the summit of what we called in those days, and still do, red fir, which partially surrounded the...the Abies magnificia, you call it. They called Douglas fir "red fir" in those days in California. There's quite a lot of mixed nomenclature.

And then the next year, there weren't any jobs available for foresters, so I went back on the same job, only we were a little farther north. Still in Plumas.

Fry: This was in the Forest Service?

Colgan: Yes.

Fry: After your senior year?

Colgan: Yes. Then I stayed here.

Fry: So the work in the red fir area was sort of a summertime temporary job while you were a student, and immediately after graduation also.

Colgan: Yes. Timber cruising generally is summertime work in California, because of the weather conditions.

I did pass the test in 1914 and got my ratings while I was on the second job up in Last Chance Country of Plumas.

Fry: I have on my notes that you worked at Madison Forest Products Laboratory.
Colgan: On account of this arm. It was broken when I was three years old, and I couldn't get in the army, so I got a job there during World War I.

Fry: What were you doing between the time you were cruising on the Plumas and working in the Laboratory?

Colgan: Quite a bit. [Laughter] I starved for four years.

Fry: As an assistant?

Colgan: No. I was looking for a job, mostly.

Fry: Let's go back to the time just after you passed the test. When you were classified as a forest assistant in the Forest Service, where did you go?

Colgan: Didn't go anywhere. I remained on the Plumas, and there was no money available for more forest assistants, so I had to go look for a job, and I spent a winter over in Mill Valley working for Olmsted. I don't know whether S. Rexford Black* told you about Olmsted or not?

Fry: He was a very outstanding landscape architect, wasn't he?

Colgan: No. That's another one. This was F.E. Olmsted, in 1907 a forester for the federal government; the first regional forester in San Francisco. He went back to Boston and opened a consulting foresters service. It was a failure. He came back here. There was a threesome back there, but he was back here on his own.

His brother-in-law, Regional Forester [Region Five] Coert dy Bois recommended him to a job on Mount Tamalpais after a big fire over there; I think the fire happened in 1912 or '13, and it was quite disastrous. They had to call out the Navy and there were big headlines and so forth. So he gave me enough to keep me alive there.

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Fry: What did you do for him?

Colgan: Oh, I dug foot trails, manual work out there. I suppose Rex told you about his job over there? I was a little ahead of him on that.

And then Olmsted got a job, on contract, to check cruise 25,000 acres of Diamond Match land. And, not knowing anybody else who'd ever been a cruiser, he put me in charge of the job of cruising, which kept me alive for three summers. I spent the winters mostly in Mill Valley.

Fry: Working for Olmsted in the winter?

Colgan: No. Just not working at all in the winter. It was kind of hard. Then the war came along, and that's when I went to Madison. Olmsted knew somebody back there, and knew that they were, like everybody else, hard up for any kind of trained personnel, so I went back as a--I don't know what my title was--but I wound up in charge of testing glue for airplane parts.

Fry: How was this testing done?

Colgan: Oh, by pulling laminated pieces apart, and machines measured per square inch the pressure it took to pull them apart.

Fry: Then this was not chemical testing [Laughter].

Colgan: You thought maybe I was doing it by taste? [Laughter]

Fry: That would have kept you out of the army for even longer!

Colgan: I think 1919 was the year I was transferred by the Forest Service from Madison to Quincy in Plumas County National Forest.

Fry: So you were back on the Plumas. Had you asked for this?

Colgan: Well, I had asked for a transfer back to California. I wasn't very much interested in the prospects in the Laboratory. I did want to get back to California.
Fry: And you preferred actual forest operations to research?

Colgan: Very much so, compared with the research that was going on there. I'd been on the Plumas before, and knew some of the personnel.

Fry: Who was in charge at the Madison Lab at that time?

Colgan: "Cap" Winslow.

Fry: What were your impressions of him?

Colgan: [Laughter] I'd rather not say.

Fry: Do you want to move on to a discussion of your job on the Plumas?

Colgan: Yes. I was a forest examiner and assistant to Ray Orr, who was in charge of timber sales and timber marking practices, and I carried on with that for a few months. I guess I was in charge of about four or five small sales.

Fry: It sounds like you were there for just a short while.
Some cut over lands of The Diamond Match Company near Lyonsville, California, logged since 1910. Photo 1934.

State Forester Pratt and Inspector Fowler examining one of the donkeys of the Diamond Match Co. with R. Colgan who find it fully up to standard set by State Fire Law. Jones Spark Arrester made in Chico. 1925.

Jones Spark Arrester - 1926
Colgan: I think in about October, Olmsted was called to Diamond and asked to be their forester, and I was asked to be his assistant. I started out as a company forester for their operations in the panhandle of Idaho.

Fry: What did this include? Fire protection primarily?

Colgan: Not primarily. Idaho has had fire protection organizations where timber owners pay in their share. And they either combine with the State of Idaho or the Forest Service lands, or both, and they have a fire-fighting organization outside of the companies.

Fry: So the companies didn't have to handle this themselves?

Colgan: No, I represented the Diamond Match Company on one of those fire-fighting organizations as a director of whatever they called them. I didn't have any responsibility for the work in the fields.

Fry: What other major companies were up there near the Diamond Match lands?

Colgan: Humbird Lumber Company, Northern Pacific, and I believe Weyerhaeuser was interested through Potlatch. I think those three were the main ones.

Fry: So you four were probably the major ones in that fire-protection organization?

Colgan: Yes. Up around Priest Lake.

Fry: How did this work out? Fairly equitably for everybody concerned?

Colgan: Well, yes. I think it did. They still have that system up there.

Fry: It was in its early days when you went up there?

Colgan: Well, I guess they had been in existence for about ten years. I think they started after the big fires of about 1910. Their success depended
Colgan: a lot on whom they had as manager, who was really their chief fire fighter, and the weather; if the weather was bad, no matter how good he was, he couldn't do much.

Fry: Do you remember who the manager was when you were there?

Colgan: One year, a man by the name of Baker, who came from the Forest Service. He was not a success. He talked too much, and dreamed too much, and I don't know just what he did. I wasn't there. I didn't work in personal contact with the fire chief there. During his tenure I was transferred down to Chico, California, shortly for part of that season, just temporarily.

Fry: Were your duties with the company also in some other area than fire protection?

Colgan: I never found out. [Laughter] We did timber cruising and that kind of work, before I found out. And they didn't know. I think they...

Fry: They didn't know how to use you?

Colgan: No.

Fry: Or what forestry was really for, is this what you mean?

Colgan: That's what I mean. And before I found out that they didn't know yet, they sent me an assistant that I didn't know what to do with. [Laughter] But we found some mapping and cruise work to do. I kept myself a little busy, but not very.

Fry: At this time, did they have any idea of laying out any plans for sustained yield production?

Colgan: No. Not up there. It wasn't possible. The main thing we tried to do was a feeble attempt to do something about cleaning up the slash and so forth. We found it was easier, during the summertime, to let the fires to it, anyhow. [Laughter]

Fry: Let one problem take care of another.

I wanted to ask you one more question about the fire organizations in Idaho. Did they ever
Fry: have a permanent fire crew?

Colgan: Well, not as we know them now. They had guards and lookouts, and the manager, and a supply of tools and those things, but they got their fire fighters from towns all over.

Fry: Yes, that's the way it was everywhere. Then they transferred you back to Chico, California.

Colgan: Yes. Late 1920, '21. I guess it was '22 that I really was transferred.

Fry: Can you tell us what you did in Chico. Was this a promotion of some sort? Looks like you were already pretty well promoted.

Colgan: No. It looks like the president of the company had suggested to Olmsted that they should have a forester in California as well as in Idaho. And they were going to designate a man by the name of Compton, who was the chief civil engineer at Stirling City, and give him the title of forester. And I said, "I don't think you should do that. I know more about California timber and I think I should have that. You could do away with a position up here which I think is of very little importance, and I could leave my assistant here to let this develop." And he did, in about the same way that I suggested.

I was designated as a staff officer for the Diamond Match and supposedly reported directly to the New York office of the Diamond Match. So I was on my own, and had to find out what to do, and I became the chief fire-fighter, among other things. Since they had a few gyppos* contracted to work on the logs in Stirling City and had a contractor running all things, who wasn't interested in anything outside of where he was making his money, I gradually worked my way into supervising the gyppos.

Fry: You had the cooperation of the New York office on this?

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*Gyppos: contract loggers.
Colgan: That's a kindly word to use, but I was paid by the New York office, and I really can truthfully say that they didn't know what I was doing. And I had to make friends with the rest of the management and men there and get along as best I could.

Fry: Well, who was manager of all the California operations of Diamond Match at that time?

Colgan: There wasn't any. But W.B. Dean was manager of the retail yards. And Thatcher had a contract to run the sawmill and produce the logs and lumber. I took over the rest of it.

Fry: So you were in charge of all their timber operations, without anybody above you in California.

Colgan: That's right. Nobody below me either.

Fry: As a forester, you could make all the decisions about where the cutting would be done?

Colgan: No. They were made by the contract which the president, Fairburn, had made with Thatcher to cut and saw certain timber on a certain tract out there. Fairburn was the only one who could change the contract or do anything about what Thatcher did.

Fry: Fairburn was in New York?

Colgan: Yes.

Fry: So that Thatcher, then, actually had the power to decide where the cutting occurred?

Colgan: On that area that was under contract. But he didn't say anything about the northern tract or other places. It wasn't anybody's responsibility, so I accepted it.

Fry: And did you bring in gyppos?

Colgan: No. The gyppos were already in. And later on I brought some in.

Fry: Were you eventually able to control the cutting decisions which previously Thatcher had under the contract?
Colgan: Yes, but not until a little after that. Thatcher was—well, he had his men logging in a very destructive manner, and Olmsted tried to do something with the president about it, and they had quite a brawl about it, and it wound up in 1922, or sometime in there, that they dismissed Olmsted, and left me alone there.

Fry: So Olmsted was kind of bearing the brunt of this controversy within the company.

Colgan: Yes. Well, he was a very outspoken person.

Fry: He didn't shrink from this fight?

Colgan: No. He just loved it. He wrote some very, very strong letters and Fairburn had to make a decision between Olmsted and Thatcher.

Fry: So he chose Thatcher. This left you to cope with Thatcher then?

Colgan: Yes. I had to get along with Thatcher.

Fry: Instead of making a big issue of this, then, you went ahead and tried to work with him?

Colgan: Yes.

Fry: And were you actually able to influence his logging methods with the gypos?

Colgan: Not very much. No. I influenced the fire-protection work, and things like that.

But in 1922 Fairburn came out for an inspection. He stayed for a week or so in Stirling City. I think if he had done that before, Olmsted would not have been dismissed, because he saw what an inefficient operation it was.

Fry: It was the usual problem of top management being so far away and not really knowing what was going on. When he came out here, were you the one to show him around?

Colgan: No, I let him see for himself.

Fry: But you did get to talk to him?
Colgan: Oh yes, I talked to him. He brought his family out, and I was asked to entertain them and show them around.

Fry: What was your impression of him, at the time?

Colgan: Very good. Of course, I was a little awed--a man of that importance even talking to me!

Fry: So you stayed on. In the other lands, such as those in the north, where you didn't have Thatcher's contracts to contend with, what sort of operations were you able to develop?

Colgan: Well, there weren't any operations in those lands. We had an agreement with the Forest Service to do the fire-protection work on them; we were paying them a quarter-cent an acre. [Laughter] And that was all it was worth at the time, too, because they didn't have a much better organization than we did.

Fry: And then there wasn't anything else happening in the north?

Colgan: No.

Fry: I get the impression, then, that you more or less carved out your job, independently?

Colgan: After Fairburn was through with his inspection, he decided to end Thatcher's contract. It ran out in '22, so he switched over and made it a Diamond Match operation, with Compton, the engineer I spoke of, as superintendent. He gave W.B. Dean the title of general manager of the retail yards and lumber production and timber lands.

Fry: So Dean was more or less his California manager?

Colgan: Yes. And I was left with the same title.

Fry: Did you have to report to Dean, or were you still reporting to Fairburn in New York?

Colgan: Well, I had to report to Dean because there wasn't anybody else to report to, and I wasn't writing any reports. I was fighting fire in the summertime and bringing maps up to date in the winter time, and doing the tax work in winter, too, and after this went on for a time, I realized
Colgan: that I wasn't in a very strong economic position, because I couldn't produce anything for the company as a forester. There wasn't anybody doing any work on the allocation of cost and on the logging and milling operations. So I got to working and put in some cost figures. I used to take the timekeeper's books in the evenings, and I got a pretty good idea of what it was costing to do this logging and sawmilling.

Fry: You were able, then, to work up this more or less statistical study of man-hours and costs involved in timber operations?

Colgan: Well, you're giving it a later definition of cost-keeping. My method was very fundamental. It was how much it cost to fell timber, how much to yard it, and I broke it down in all operations—no costs per hour, just the costs of doing it.

Fry: Were any changes made as a result of this?

Colgan: Well, we had quite a lot of discussion between Dean and Fairburn, and Fairburn sent a man down to make a study.

Fry: A similar study?

Colgan: A study of costs and how they could possibly make a better showing at Stirling City and the sawmill. And from that came the decision to make a change in management, and Dean, after a little argument with Fairburn, had me appointed as superintendent of the sawmill and works.

Fry: Dean did?

Colgan: Yes. He was on my side.

Fry: You were taking whose place?

Colgan: Compton's.

Fry: Would this be a good time for you to describe where the company employees were living at that time and what life was like around Stirling City?

Colgan: Well, Stirling City was a company town. And about half the people owned their own house and lot, and half of them rented from the Diamond
Match Company. We also had a cookhouse and boarding house where the unmarried sawmill workers and lumber workers stayed.

Did anyone ever just build his own house on company land?

There might have been an isolated case.

We also had construction camps, out in the woods. There were facilities for married couples in the camp but the main part of it was for the single man. The cookhouse was.

Were you married by this time? [1922-23]


So you stayed with the single men then?

No. I had a room in Stirling City and also a room in Chico. I was married in '26. In '28, when I became superintendent, we moved to Stirling City from Chico. In the summertime I had a house over at Butte Meadows.
Fry: Now, between 1929 and 1932 you were the Diamond Match representative on the North Butte Fire Protection organization?

Colgan: Yes. I had had my initial baptism in fire-fighting at Quincy, on the Plumas National Forest, and then I came over to Stirling City. After a year or so I had full responsibility for putting out all the fires, so I learned quite a bit about it and how to direct men and how to keep them working on it.

Fry: How did you set up the North Butte organization from the beginning?

Colgan: Oh, it just sort of fell into line. Of course, the loggers already knew how to put out fires, how to build trails and cut down trees. It was a problem of getting the right group of loggers at the right place at the right time and keeping them coordinated, and I learned to do it mostly by walking around the fire and kept walking around the fire and kept people where I thought it needed them.

Fry: So these must have been fires small enough to walk around. What did you do when they got too big for this?

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*"The Diamond Match Company again became involved in a special effort to prevent and reduce forest fire loss in this [Butte County] area in 1929 when the North Butte Fire Protection District was created by co-operative agreement between the company, the U.S. Forest Service, and State Division on Forestry. The parties each extended annual fire control expenditures to reach the combined sum of 10 cents per acre. Three cents was the approximate average cost at the time." Clar, C. Raymond: California Government and Forestry, Division of Forestry, Sacramento, 1959, p. 202 footnote.*
They didn't get too big. We could walk around pretty big fires. On one I walked for seventy-two hours.

I think that the answer to fire-protection was that whoever was in charge of it had to know what the fire was doing. I found that was lacking in most of the National Forest fire-fighting. The man in charge was usually back at camp, and you had to go back to camp to find out what he wanted done, or send somebody back, and by the time he got back to the fire, the situation was so far changed that you had to do something else and it began all over again. So that's the reason the Forest Service fires got so big.

I started thinking about sustained yield in the late '20's, did a little research which, because of the inavailability of records, was not complete. It was extensive but you had to assume a lot of things. I found that the land around Diamond Match had been burning over the entire area once every forty years, and there was no use trying to start any sustained production of trees, or sustained yield if it burned over once in every forty years. So I was asked to make a little talk on industrial forestry at a Society of American Foresters section meeting down at San Francisco one time. Instead of talking about the trials and tribulations of an industrial forester, I gave what I thought was pretty strong criticism of the fire protection in California and the lack of it in our area, and I mentioned that forestry wouldn't amount to anything until we started putting out fires.

And from that, and with the help of Rex Black and Bill Rider from the State Division of Forestry, we got the North Butte Fire Protection District started. This organization covered about 300,000 acres, of which we assumed Diamond Match had 100,000, and the Forest Service had 100,000, and outside of that, was another 100,000 acres or so of unprotected privately-owned timber for which the State Division of Forestry became liable. So we each put in one-third of the cost in either manpower or equipment or something else and really started intensive fire protection in there. It turned out to be quite successful. We had one of the first pre-suppression fire fighting crews with
Colgan: a fire truck which had water and a hose on it which Rex Black, through the California Forest Protective Association, furnished. Three of us furnished the men for it, and it was quite successful.

It was the first one--there may have been one more like it before that--but it was the first one that had been tested on a designated area. And that's the history of the North Butte Protective Association. That was around '30 or '31.

Fry: Let me show you some notes and minutes here for you to review; then I'll ask you some more questions.

[machine off, then on]

Was this plan originally promoted by any particular agency, such as the Forest Service or the State Division of Forestry?

Colgan: Well, the Forest Service was under contract to us. We were paying in something per acre, but their fires were burning away from the National Forest and getting over onto our land, and they were doing considerable damage and of course we couldn't sue them or anything. In 1924 it was terrific. I was out on a fire practically every day during the summer season.

Fry: And a high percentage of these came from Forest Service lands?

Colgan: Very many of them, yes. And then in '26 or '27 they had one came out of Mill Creek that destroyed 125,000,000 board feet of our timber in Tehama County. You must have an indication that there was considerable ideological and political controversy going on then. The leaders of the Forest Service were doing every possible thing they could to get a law passed that would give them the power to control the cutting of timber in private lands. If that had happened, of course, there would be no private lands left. So we were doing everything we could in good forestry, and it was open warfare between industrial foresters and timber owners and loggers on one hand, and the Forest Service on the other hand. And when things happened like that 125,000,000 board feet loss, why we made the most of it.
Colgan: We did do quite a bit, and then Rex was trying to build the State Division of Forestry up, so that they could do things. I can remember that sometime between '22 and '28 the State Division of Forestry appropriation was $50,000 for two years. It's over $22,000,000 a year now.

So that was the time that we were trying to get things done. The Forest Service had the conception that they were God and knew how to do everything, in the way of fire protection and timber managing and everything, and they did think that they could write a forest management plan and enforce it by edict. We were sure they couldn't, and they've demonstrated it so far. It's pretty hard to get anybody to write a plan for 50,000 acres now, without spending $10 to $25,000 to survey the area and mark the trees and do everything else, get the fire protection record and so forth. And they had the temerity to say that they could write a federal law to take over the management of all lands. So we had a pretty intensive fight, and it had a lot to do with everything that happened, too.

Fry: In setting up the North Butte organization, did this difference of opinion on federal regulation affect your operations, even though this didn't have much to do with fire fighting?

Colgan: There was this, that if you criticized the Forest Service they said, "We don't get enough appropriations." If the state was criticized, they didn't have enough appropriations. And I was criticized for not getting the men from the mill quick enough in a fire or something like that. So, after all this talking (and these minutes you've shown me cover a very, very small portion of what we said outside the meetings and what Rex said), we agreed that Diamond Match would put $100,000 into wages and the State would do the same; we agreed to let the Forest Service put a ranger in charge who would dispense the money and manage the personnel and be head of the fire department. And the State agreed to put a deputy in.

Fry: Full time?

Colgan: Yes, full time. The Forest Service put Reuben Box in, and the State put in Hufford. They moved into
Colgan: Stirling City and had headquarters there. Hufford did most of the physical work and management, under Box's supervision. I was in Stirling City then, as superintendent. We got along very nicely for quite a number of years. Then the Forest Service wanted to move Box out, and we wanted Hufford to go in his place. But they used the excuse that no one except the Forest Service officer could spend federal government money, so we had to come back and accept a Forest Service man, although we knew that Hufford was the man for the job.

Then the CCC camps came along and threw everything out of balance because of their manpower and the work they were doing. The North Butte Fire Protection District gradually faded.

Fry: You mean that this whole operation was taken over by CCC?

Colgan: Yes. Well, the CCC personnel were under the Forest Service, and they took it over. But we had the State fire fighting crews available, that is the pre-suppression crews. The foundation for trained fire fighting crews had been established and it went on, too.

Fry: But after CCC came in, you did not maintain your pre-suppression crews and your fire fighting crews?

Colgan: I think we continued to have a crew on the Diamond fire truck at Stirling City. We also had a fire truck at our logging camp and had men assigned to that who acted as a suppression crew.

We had five or six CCC camps, that had probably at least 200 men each, in the vicinity of our lands, who were ready to fight fires at any time. That was their main job. They were out digging roads and doing other things, but as soon as a fire started everybody went into that. The small crews that we had would have been so far outnumbered in importance that we depended on the CCC.

Fry: The Board of Forestry minutes for May of 1929* mention that Vice-chairman Walter Mulford was

*See appendix.
Fry: hoping that this Butte plan could be made workable so that in a couple of years it would be good supporting evidence to request more money for other places from a future legislature. I was wondering if you felt that up to the time of CCC this was indeed proving itself a workable plan.

Colgan: I know it was. I bragged in my annual report of the downward curve of the fires. Oh, yes. It was very impressive.

Fry: I hope that you still have some of these annual reports and the speech that you made before the S.A.F. section.

Colgan: I certainly don't have the speech because I never wrote a speech in those days. I didn't have enough know-how to write a speech until many years later, and know that I could deliver much better from a typewritten script than I could off-the-cuff.

Fry: So that's lost. But maybe if you can dig up some of the reports from the North Butte Association, that would be good to deposit along with the transcript.

Colgan: The reports that I mentioned were reports that I made to Fairburn of the Diamond Match Company.

Fry: Did your Idaho experience have anything to do with it?

Colgan: No.

Fry: How did Stevenot, who was the Natural Resources Director, react?

Colgan: I'm surprised that I don't remember. I remember the name, but I don't remember having had a thing to do with him. Probably, if it wasn't at a Board Meeting, Rex talked to him quite a bit, as head of the California Forest Protective Association. I remember Rex mentioning him quite a bit.

Fry: Actually, this organization was pushed along pretty well by CFPA?

Colgan: Yes, by Rex and Deputy State Forester W.B. Rider. I say that we "shamed" the Forest Service or "dared" them into coming along with us. We said, "Here's
Colgan: two of us who will go. Do you want to let this drop because you won't come along? They had a lot of objections about regulations and laws and everything, but we really shamed them into it.

Fry: They seemed to worry about having the funds to join you.

Colgan: Well, they had them if they wanted to put them in there. They came along fine after we got it started. Marvelous cooperation.

Fry: Was Bevier Show the Regional Forester then?

Colgan: Yes.

Fry: Did he drag his feet, or did he know what was going on?

Colgan: He knew what was going on, and after we got it started he went along very good but until then they just thought, "This is going too good. We're getting a little adverse publicity here because here's private timber land doing better in its fire record than our National Forest next to it." So they dragged their feet and insisted that it be run by the Forest Service.

Fry: The whole thing?

Colgan: No. We agreed in the beginning and left it that way, that the boss should be a Forest Service official, and the State man would be the deputy.

Fry: What was your position in this?

Colgan: I was manager of the Diamond Match lands, which was about a third of it. It was all about in equal thirds, give or take a bit. We had 120,000 acres down there; there were about 300,000 acres in the total area, but some of our 120,000 were not in the district; they were on the fringes of it.

Fry: Why was this set up there and not on some other land somewhere else?

Colgan: Because we thought of it.

Fry: "We" meaning whom? Diamond Match?
Colgan: Diamond Match and California Forest Protective Association, and the State Division of Forestry.

Fry: I was wondering why some of the other members of California Protective Association didn't raise their voices in protest and say, "We want this on our lands, too." Mr. Black was supposed to represent them, too.

Colgan: Yes. Well--he said, "If you want it, we'll start working on it."

Fry: But this means financial outlay on their part?

Colgan: Oh yes.

Fry: So you feel that the financial contribution was critical, and Diamond Match was willing?

Colgan: Rex and I thought it up and started working on it. Of course, Rex couldn't work on Swift Berry. He didn't have the problem there [Berry was forester for Michigan-California Company], and he wasn't especially prepared to take it. Before it was all over, they had the CCC. It never occurred to me or I've never heard anybody say anything about somebody else in the Protective Association wanting a similar project.

At that time Rex had the means to get a little money for things like trucks. He was gradually putting trucks into all the private logging areas that would accept them and could use them.

Fry: Was this done under some kind of Clarke-McNary rebate funds, too?

Colgan: He got the money from Clarke-McNary and used it for trucks.

Fry: Was any of the North Butte Protective Association a part of the Clarke-McNary agreement?

Colgan: No.
IMPROVED FOREST PRACTICES IN DIAMOND MATCH COMPANY

Colgan: I think we can pretty well cover this subject by a little statement. I had been working to improve logging practices in relation to the problem of loggers knocking down remaining reproduction and immature trees. I had talked and preached to all the loggers and the logging bosses, and so forth, but they were measuring their bread and butter by the number and quantity of logs that they delivered per day, and it was pretty hard to make them believe that they could do anything if it might in any way diminish the production of logs per day. I made some progress.

And I made some progress in fire protection equipment, on donkey engines and on having equipment--shovels and axes--in boxes around. Rex was very helpful in bringing suggestions in from other places. And he helped get a law passed after we started this, and it spread all through the California Forest Protective Association's operators. The law was passed practically requiring everybody to have what two or three of the larger ones, like Diamond Match, had on their donkey engines, and so forth.

Fry: These were the spark arresters?

Colgan: Yes. Rex did a lot of work on making spark arresters more efficient. Whenever we would get an improvement, we would put it on and try it out or adopt it as ours. We had big red boxes at all the donkey engines, with 225 shovels, and hatchets, and water bags, and all that. Then we put pumps on our donkey engines with hose that we could put out. That went along pretty good.

But I had trouble until after I became superintendent, and then I started working directly with our logging boss, Dana Bailey.

Where we could, we worked out logging with a high lead--and I can show you some of those areas.
Colgan: We left reproduction and seed trees, and everything in a satisfactory condition.

I have to go back a little bit and say that we introduced tractors. Sixty-power caterpillar tractors came into the woods as yarders, substituting for the donkey, in or about 1925. They were first tried out in our area by a gyppo who goes way back to the beginning. This gyppo was already working for Diamond Match when I first started, and he had a little old tractor. We looked at it and watched it. So we got three sixty-power caterpillar tractors and started hauling logs downhill with them. They were much less destructive than the old donkeys. But we had so much logging below the track that the caterpillar couldn't pull uphill, we just had to have the donkeys to get logs from those areas.

Fry: When you were logging downhill from the area where you were yarding, you mean?

Colgan: Yes. We worked out a way that we could save timber and save wear and tear on the engines, and save the wire rope, which was very expensive in logging. Through Bailey and myself, most everybody in camp was just as proud of walking away from a logging setting, or a logging chance, and leaving saying, "Here is enough left on the ground so that we're sure we are going to have good reproduction and we're going to protect it from fire."

I'd send out a mimeograph every year on why we protected it from fire, and who was fire boss; I was first if I was there; if somebody else was first on the scene, he was boss, and so on down the line; then the duties.

Fry: Kind of a little handbook for your company?

Colgan: It was a paper on the bulletin board. I remember one rule was that if you see a fire, it doesn't matter who's there or where it is: drop everything and go put the fire out. It used to be that if a faller saw a fire going, he'd go on falling, not pay any attention to it. That wasn't his job. But we made it everybody's job. That was very successful. Then, we made it everybody's job to save a little tree in logging if it could be saved.
Fry: Dana Bailey apparently was the kind of a logging superintendent who could see eye to eye with you on this.

Colgan: Very much so. We worked together very well.

Fry: This seems to be where some of the biggest problems in forestry lie: in actually getting a logging superintendent to go along and follow up on what the forester tells him to do.

Colgan: That was it exactly.

Fry: What made Dana Bailey different?

Colgan: I was superintendent, not forester.

Fry: And you were literally his boss.

Colgan: Yes. And also, it was common sense. From 1926 (it really started in '28, but you can go back to '26) we reduced the direct cost of lumber from $22.50 down to $10.50 per one thousand board feet.

Fry: This happened between what years?

Colgan: 1928 and '35. In 1935 the NRA Code came in and forced us to raise wages. It broke the comparison there. But we kept it going down, anyway, up until the war came.

Fry: When the unions came in, and NRA, and so forth, your wages--

Colgan: NRA came in and moved the minimum wage from 35¢ to 37.5¢ per hour. But it didn't do very much to the rest of our operation. I can't remember the year that the unions came in, but I think it was prior to '37. But the unions didn't make much difference in our wages, except at the box plant and the mill work plant at Chico. It wasn't until the war started in Europe and labor was scarce that the unions were really effective. The unions were never able to negotiate with our personnel department as high an hourly rate as I wanted them to have.

Fry: What do you mean?
Colgan: The company wouldn't pay what I thought they should pay or pay what was necessary to get sufficient labor.

Fry: During the Thirties up to the beginning of the European war, was this still primarily transient labor you were using or were you able to have rather permanent residents?

Colgan: Even after World War II, we had a very permanent core of men.

Fry: You mean you did all through the Thirties?

Colgan: All through the depression years, until it kind of got over. We had a good core of very well-satisfied men.

Fry: By "core" what do you mean?

Colgan: I mean our principal men. Hook tenders, choker setters, rigging setters. The only floating part we had at all was the common laborers.

Fry: Can you give us an explanation of how you managed to bring about selective cutting using a high lead, leaving the seed trees? This must have taken some doing.

Colgan: Siwash.

Fry: What's that?

Colgan: That's a technical term. There was a lot of mostly Douglas fir and some other trees that were visibly defective. We would select these trees ahead of time and run the main line around those trees. These trees would keep the line from knocking over the other trees. So it was a protective thing.

Fry: So the line didn't go straight down the hill?

Colgan: Not every time. If it had a curve in it, that was what was destructive about high lead. If there was a curve in where you picked the log up, the line would tend to straighten itself out and would knock everything down. We'd have strong trees to keep it from knocking everything down. It's simple. We called them "siwash" trees.
Fry: Your tractors came in rather early.

Colgan: The tractors were used by the Red River Lumber Company in hauling their high wheels in substitution of horses. Do you know what high wheels are?

Fry: No.

Colgan: They are wheels twelve or fifteen feet in diameter with a big axle between, and you'd just lift the front end of the logs up on this axle. Then you'd haul it in with just a few inches of the log dragging on the ground. It did away with a lot of friction. On level ground, I guess it was the best logging ever. Red River had some ground they could use it on.

They developed putting a sixty-power tractor in place of the two span of horses. That's the first place in California that I know of its being used. They tried them down at Sugar Pine, out of Fresno. Then we put them in at Stirling City.

Fry: How much did you have to do with actually deciding on how much timber the mill could use, and things like this?

Colgan: We only had one mill most of the time. The volume was decided by the ability of the sales department, which I at that time had very little to do with, and by the season. We were a seasonal mill in that we only had storage in the pond for about a month's logging. They hadn't devised any way to hold the logs like they do now. (They put them in these big decks and keep the water spray on them, and they can put all they want in.)

Then, the volume of cutting depended on a kind of a consensus between the sales department and the capacity of our mill, and the capacity of the railroad. If we got thirty-five to forty million board feet in, we were in pretty good shape, especially if we'd get forty in. You can spread a lot of cost over forty million as compared to thirty million.

Fry: Did you ever have any problems or run any tests on insect eradication or insect control?
Colgan: No. We had—in connection with our logging operation, and on the whole—very little insect damage, except we had one year of very bad insect damage in Douglas fir. But we didn't worry much about that because Douglas fir wasn't considered a commercially valuable species at that time. We had some other insect damage but it was low percentage. We would cut the infested trees down; and if we could use them we would, otherwise we'd just leave them there.

Fry: Did you find that the species that were considered usable varied during your career with Diamond Match? I thought maybe you could give us a picture of this.

Colgan: We cut all species from 1924 on. At times we had to be selective with the two firs, white fir and Douglas fir. At some time during the operation, the demand for white fir was so small and the price so small that we wouldn't cut any white fir. And there were many times when we would not cut white fir unless we could get one or two number one logs and nothing under number three. We did do a lot of selective cutting.

Fry: What was done in the way of plotting out cutting patterns for future years?

Colgan: Nothing. It was all in our head.

Fry: So there were no elaborate maps made with cutting patterns?

Colgan: Up until the time I left (1945), we were about fifty percent on railroad logging: you logged at the end of the railroad. If the market changed, you couldn't change with it very well. But since then truck logging has developed. We began truck logging about 1940 or '42, then we made a selection by opening up our Free Valley timber; we built a road over there and bought six trucks. It was high-grade timber. We started that to give us a better average; we were getting low-grade timber north of Butte Meadows.

Fry: Were you able to have any kind of growth studies?

Colgan: We had some growth plots and we did quite a few studies. The principal study that we made was
Colgan: during the NRA days. I made a study of growth and estimated volume, and presented quite a report to the NRA Code, showing that we were on a sustained yield basis, because of our growth studies in area and volume. I did that because the NRA Lumber Code gave you ten percent more volume in your cut if you were on a sustained yield. So it was economical to have that come about. We were the first company in America to get that.

Fry: Oh, you were. How were you able to be first?

Colgan: Oh, it didn't take long. It took three or four months to go out and get the samples and so forth.

Fry: At that time, what did you estimate a cutting cycle to be? How many years?

Colgan: I think we figured it on a maximum of 120 and a minimum of eighty years. I think about seventy million board feet a year was the figure that we could cut.

Fry: If my memory is correct, I believe a forester before your time—he began with Diamond in 1904—(in this little Diamond Match pamphlet here) estimated a thirty or forty year cycle.

Colgan: Did I say a 120-year cycle?

Fry: I thought that was what you said.

Colgan: I should have said rotation. A cycle is how often you can log in a given area. You might take a quarter of it every twenty-five years, and have a cutting cycle of twenty-five years, but a rotation of 120 years. It takes a tree eighty to a hundred years to grow to logging size.

Fry: Oh, well, I think this was referring to cycle; it says that "[Harvey C.] Stiles laid out a forest management program that involved a thirty-year cutting cycle...." That's in W.H. Hutchinson's book.*

*Hutchinson, William H., California Heritage, a History of Northern California Lumbering; published by Diamond National Corporation, p. 32, no date. (See appendix)
Colgan: No. Harvey Stiles became the first commercial forester in the Pacific Coast lumber industry when he assumed his duties for Diamond, about January, 1904. But that's all dressing.

Fry: Oh, it is?

Colgan: I think.

Fry: You don't think he really was much of a forester as you came to know about him?

Colgan: I never found anything in the files or maps or anything else that had his name on it, or I never heard of him until "Hutch" found him in the records that he looked through, in the newspapers or something back there. There was nothing in the company. Even Olmsted didn't have a plan developed.

Fry: And when you were forester, the plan was just something that you carried around in your head, and you knew what to cut and what not to?

Colgan: Right. I knew what I wanted to cut. I generally cut what I had to, though.

Fry: There was another little thing on the last page of this pamphlet which says that Diamond became the first Pacific Coast company to be certified by an agency of the federal government as a sustained yield operator of timber lands. Now, is that the NRA thing you were referring to?

Colgan: Yes.

Fry: Just before you left the company, the tree farm movement started. Did Diamond Match have anything to do with that?

Colgan: We were certified as a tree farm about 1943. We were the first in California.

Fry: This was a movement that Ed Stamm was quite closely connected with--Ed Stamm, the man at Crown Zellerbach. You said you knew him.

Colgan: I knew him quite well.

Fry: I'm very curious about how your philosophies in forestry differed, if they did.
Colgan:* He was in Douglas fir and I was in pine. We logged by selective cutting, and he logged by selective units. He cut the whole unit.

Fry: Clear cut?

Colgan: Clear cut. We didn't. I think that would be about the only difference.

Fry: Was this because your forests were mixed forests and his mostly were not?

Colgan: No, Douglas fir does much better reproducing if it is on clear cut land; it has the ability to produce in even-age stands, whereas in pine one tree will go out ahead and suppress the rest of them more than it does in Douglas fir--possibly because they have so much more moisture in the Douglas fir area; they have enough moisture for all the trees and enough food for all of them, where we don't have enough moisture and some of them get the best of it, the same as humans.

Fry: I meant to ask you if you had done anything on reseeding.

Colgan: We tried it. But wait till you see that land over there, you won't ask that question. We got plenty of second growth.

Fry: Without reseeding, you mean?

Colgan: Without reseeding.

Fry: So reseeding was no more efficient than just letting nature take its course?

Colgan: The only place you needed reseeding or replanting was on land that burnt over more than once in a five or ten year period. You can't stop the trees from growing in the pine region except by fire. You just can't stop them from growing. So, forestry in our area was principally helping nature and providing for the utilization of what nature gave us. You could go to school a thousand years and talk about seeding and rate of growth, but you just had to take what nature gave you. You could take what nature gave you and keep it going and you had good forestry. We planted on two or three burned-over areas, unsuccessfully. I think that if you get up to visit Butte Meadows, Dana Bailey can show them to you.
DEALING WITH THE U.S. FOREST SERVICE

Fry: I was going to ask you about the areas where you perhaps had a checkerboard ownership with the Forest Service. Did you have any areas like this?

Colgan: We had some.

Fry: I suppose you bid on Forest Service timber, and cut that along with your own in those situations. Could you give me some idea of how you worked with the Forest Service on this?

Colgan: Our Forest Service cutting was such a small percentage of our total that we would not be typical. The Forest Service program was effective where mills were dependent on National Forest land for at least fifty percent of their production. We would get a sale, maybe, of forty acres or eighty acres every year or two. During the war, and after I left, when white fir was more salable, we went above our elevation and took some pure white fir stands on government sales. We had very little trouble with them.

Fry: Was there ever much difference of opinion on what trees should be marked?

Colgan: Oh, on all government sales, there was quite a difference of opinion, but it was mostly economical in nature. They make you take trees that you don't believe you can make a living on, and they'll leave trees that could be the difference between a profit and a loss.

Fry: When you bid, do you know at that point what trees you can take and what trees you cannot?

Colgan: You know from experience what they usually will mark; and they should have a sample of their marking so you can look at it.

Fry: What was the recourse if your expectations proved too high?
Colgan: None. Since I've quit the business there've been several companies who even went so far as to form a Western Lumberman's Association, and their sole object is to make the Forest Service be more economically minded.

Partly it started from a sale to American Forest Products, down in Sierra or Sequoia. Anyhow, the Forest Service sold a ten-year cut on their estimate, and American Forest Products Company bought it and cut it according to their marking plan and came out with eight years' cut there instead of ten. In other words, the cruise was two years off, which was a long ways. They made quite a pitch to get it back, and that was one reason this Association was formed. They went to Washington and had hearings and everything. I don't believe they got anything out of it.

Fry: Has Western Lumber Association been more successful?

Colgan: Oh, no, I don't think they've accomplished very much. But they have done something. Of course, you keep pecking away. It might have been worse if they hadn't been there.
FORESTRY DEVELOPMENTS OVER THE STATE

Fry: Well, what do we have left on our outline?

Colgan: I think we have too much. [Laughter]

Fry: We're really trying to move through a lot of material here. Do you have some opinions about how the developments in forestry compare between the pine region, the Douglas fir region, and our redwood belt in California?

Colgan: I think we were ahead of both Douglas fir and redwood. After we were quite sure that the selective system in pine was the way to do it, redwood adopted it and quit. [telephone rings] The redwood companies did quite a little planting and some other similar things. But it was quite a few years after that, that they did. They have practiced selective cutting after tractors replaced donkey engines. I can't comment on the amount, or anything, because I just got it from hearsay. I haven't seen enough of it to say anything.

When you say redwood region, there's quite a difference between what the redwood region is since World War II and what it was before. Before the war it was nothing but redwood. And since the war they probably cut more Douglas fir than they do redwood. And I think that they have mostly cut on a system similar to that used in Oregon: block cutting. But I think some of it is selective. So I guess I really don't know enough about it.

I know it was many years after we were considering our selective cutting system when industry and forest conservation finally accepted the clear cutting by areas that they are doing in the Douglas fir region. I think, probably, tradewise the Douglas fir people have more timber under permanent productive system than we have down here. Way back somewhere, the State had a logging diameter limit put in. You couldn't log
any tree if it was under twenty inches, and that limit still exists in some areas. Then the Forest Practice Law came in, in 1945, and the diameter limit was more or less superseded. The diameter limit was acceptable to everybody because you couldn't make any money on those small trees anyhow.

Fry: So the twenty-inch limit worked out pretty well at that time?

Colgan: Yes. Then this twelve and three-quarters* came along shortly after that, in 1925, to assure the operators that if they did leave these above twenty inches and any more they wanted to, they would have forty years before the residual would be taxed, which I think was the most effective thing to encourage forest management that we have.

Fry: That was a real turning point?

Colgan: Oh, I think it was, very much so. I wouldn't exactly call it a turning point because it was a few years after that before there was enough difference in the taxing method for it to be actually felt. They weren't taxing timber on cut over lands anyhow.

Do you have something about the repeal of the compulsory fire law? Rex probably told you about that. It was a clumsy law as far as collections were concerned. It was taxing the timber owners for protection, when the State was actually protecting other lands without taxing them.

Fry: You mean the lower altitude lands of chaparral and grass got free protection while the timber owners had to pay?

Colgan: That's right. And the State couldn't afford to collect the taxes of the acreage as far as they had.

*Timber tax exemption amendment to the California Constitution, named from Section 12-3/4 in Constitution article.
Colgan: I don't recall this World War II fire protection legislation that's on the outline. I don't remember that.

Fry: I think this was when the new State plan went into effect, in which the entire system of fire protection in the state was worked out. I think Ray Clar had something to do with this plan; it designated which lands would be primarily under Forest Service protection, which would be--

Colgan: Oh, yes, they zoned the state areas into....

Fry: Watershed lands, and so forth.

Colgan: I'd rather not comment on that. I really don't know. All ours were under protection of the company.
GREELEY INVESTIGATION IN THE SOCIETY OF AMERICAN FORESTERS

Fry: I guess you got the notes that I sent you on the Society of American Foresters' investigation of Rex Black's* activities in trying to dislodge an inadequate state forester. Perhaps you can take up the story where Mr. Black and I left off, because you and Swift Berry, Clyde Martin, Bill Schofield, and T.K. Oliver asked for an investigation of President H.H. Chapman, after the Society had investigated Black.

Colgan: I think that was more or less a diversionary attack. We all thought, and I do now, that Chapman was over-zealous. He had to have been to attempt an investigation of such a scope with the facilities that he had and the time he had to do it.

I don't see mentioned in the notes at all that after Chapman's action, the local [Northern California] chapter of SAF voted and recommended to the national chapter that the action against Black be reassessed, and a more thorough study made and both sides of it be reviewed. William Greeley was the chairman of the committee that did the second study. He talked to me, and he talked to everybody else, and my memory is that they reversed Chapman's decision. Or at least Black was given the privilege of going back.

Fry: About this Greeley investigation: in the process of it, did Greeley talk to you?

Colgan: He talked to me, and more people; I don't know who besides myself. And I know that they reversed Chapman's opinion.

*See (1) Appendix, notes on investigation; (2) Black, Rexford, "Private and State Forestry in California, 1917 to 1960," typed transcript of a tape-recorded interview conducted by Amelia R. Fry, University of California Bancroft Library Regional Oral History Office (Berkeley, 1968).
Fry: This was at the instigation of the entire California section of SAF?

Colgan: Yes. Chapman's action had been taken, and we requested that the section do something, and they voted to petition the national SAF.

Fry: Was this primarily in response to a request from you and Berry?

Colgan: We were active on the floor in getting action. I wouldn't say that we were any more effective than a lot of others that were on the floor, and who didn't know what was going on until they were told at the next meeting. But I think it's something that would be well forgotten. It had very little to do with the results of forestry, I think.
Fry: What about the Pratt problem? Did you have much to do with the efforts to get him out of the office of State Forester and a more satisfactory man in?

Colgan: No, but I sided with Rex. Pratt was inefficient and wasn't the right man for the job; and I think ninety percent of the foresters in California would have to go along with that.

Fry: You mean industrial foresters?

Colgan: All of them. All of them would have to, knowing him as well as I did, and his ability. The thing that started Rex on his campaign was triggered by the fact that Rex was traveling around as a member of the State Board of Forestry, as chairman of it, with some of the deputy state foresters, and inspecting things, and he went up to look at a lookout up in Trinity County somewhere and found the lookout up there had covered all the windows on the sunny side with blankets. He said his eyes were sore and he couldn't stand the sunlight in there. Even after that Pratt wouldn't take that man out of there.

He had a fire lookout looking for fires started and he had the windows covered. So that's what started Rex. He knew Pratt had deficiencies but when Rex protested that, and Pratt wouldn't make a change, Rex thought it was time to do something.

Fry: Is there anything else that you'd like to add?
I think it would be good to make a special topic of the California Forest Protective Association in general. I could no more, under "CFPA legislative action and research" in our outline cover that in five times the time we've put on this. It's just too big a subject. Rex was very effective in getting satisfactory legislation and preventing adverse legislation. Rex got more new ideas in, that I know about, than all the other CFPA heads put together.

Bill Schofield,* who followed Rex, was especially good in preventing adverse legislation and in pushing through legislation that somebody else started. We haven't had Jack Callahan in office long enough to evaluate him.

But this started by encouragement from the Forest Service because they [the Forest Service] wanted someplace where they could go and discuss conditions and encourage industry to do something without going to all the industry.

The first head of the Forest Protective Association was a man by the name of Rhodes and then I think Swift Berry came in, and then Rex came in. You see all the legislation that's gone through that period? It would be impossible for me to give--I'd have to be so sketchy, and it would be all from memory. If that is, which I think it is, important to the history of forestry and fire protection, they should put somebody on it and research it for a year, go through the files and so forth.

Fry:  Did you actually work with the Legislature, too?

Colgan:  When Rex wanted me to, I'd go down and talk to them, and to my own legislator, and anybody else I happened to know, and go before committees, and all that.

Fry:  Do you think this is one of the areas Fritz had in mind when he says that you and Swift Berry and Rex Black worked together a great deal on the problems?*

Colgan:  No. He had in mind that our progress in forest management and cutting practices developed from mutual exchange of ideas and results; I'd go and look at Swift's and he'd come over and look at mine, and Rex and Swift and I'd get together. Every time we had a meeting in San Francisco, we'd spend the evening together and talk over what we were trying and what we didn't like and what we liked. That's what he meant by that.

Fry:  Did you have anything to do with that rash of legislation that led to the reorganization of the State Board of Forestry?

Colgan:  I can't say. I slightly remember, but I don't remember having much to do with it.

Fry:  Then there was the Forest Practice Act that came along afterwards in 1945. But I think this was just as you were about ready to go to Washington as head of the National Lumber Manufacturing Association.

EVALUATION OF THE FOREST PRACTICE ACT OF 1945

Colgan: I had quite a lot to do with the Forest Practice Act. I did everything I could to stop it, and wasn't very successful.

Fry: California Forest Protective Association supported it in its provisions, which listed minimum diameters and also set up the organization necessary to administrate and to write the recommended practice rules.

Colgan: They set up district committees. I think they had the north Sierra, the south Sierra, and the Coast Range; and they had a Forest Practice committee in each of those made up of lumbermen and timber owners, farmers and somebody else, to write their own rules and decide on management. The State Division of Forestry inspects the cutting to see whether they're up to standard. That was pushed by Bill Rosecrans, who was then chairman of the State Board of Forestry. I think he wanted something to leave....

Fry: Behind as his monument?

Colgan: Yes.

Fry: Can you give me specific objections to the Act?

Colgan: At the time I was just getting a reaction from this compulsory fire protection law, which required pumps and tools, spark arresters, fire lines around mills, and other things. We at Diamond Match were asked to support that when it went in, and we supported it on a basis that they said, "Eighty-five percent of the mills are satisfactory at the present time. All we want this law for is to be able to get the other fifteen percent in line." So they got it in without any objections. From then on they inspected the eighty-five percent that were doing a good job and let the fifteen percent who weren't alone, because they were small operators, and if they fined them or did anything, it would backfire.
Colgan: on them politically. I think, and was a very strong believer, that the forest practice rules would do the same thing, and I believe they have.

Fry: They tolerated the ones that are really violating it?

Colgan: Yes.

Fry: The smaller ones?

Colgan: Yes. And they're pretty hard to catch up with, too, with these forest practice rules, because they can go in and log for three or four months in summertime and the inspectors can't find them in the winter time. Now they're trying to amend it to catch these things, and they can't do it.

I noticed particularly that, when I left here in '45 to go to Washington, I thought we had a showplace everywhere. Why, we could take anybody into the woods anywhere, and the companies were doing a commendable job. When I came back I didn't find any of them that I could have approved; they had been under the forest practice rules for six years, and they weren't doing any kind of timber management that I would really approve of.

Fry: You felt that the standards actually fell, then?

Colgan: Yes, because they could sell smaller trees so trees were logged that should have been allowed to mature. It was economics, partly.

Fry: This was not done in conjunction just with thinning of stands, then?

Colgan: Oh, no. No. And they weren't allowed to do thinning under the Act. They did it in spite of the Act. They did it because it was economically feasible to do it. Before that we were doing a good job regardless of economics--well, not regardless of economics....

Fry: Regardless of legislation?

Colgan: Yes.

Fry: I think we have just about everything right down to the time when you leave for Washington, and
Fry: that's another story that I don't think we can get into here. Maybe it can be recorded at another time.

Colgan: I'd be glad to skip it.

[Laughter]
March 28, 1966

Mrs. Amelia Fry
Regional Oral History Office
Bancroft Library, Room 406
University of California
Berkeley, California 94720

Dear Mrs. Fry:

In paragraph three of your letter to me you pretty well covered broadly the items Mr. Colgan can detail for you.

As to spark arresters, following the CFPA study, reference was made to several brands of arrester. One used by the Diamond Match Company was improved by the manufacturer that I think was located at Oroville. The other consisted of mounting a tank of water on top of the machine and the stack was an inverted U with the belief that the pressure of the exhaust in the stack would drive sparks into the water. Mr. Colgan had one on a log loading machine, and it set a fire. I believe he had a larger tank made than the one furnished by the manufacturer after which the machine set no fires. He and his locomotive men also experimented with oil burning engines and were able to develop ways of improving their safety.

He made growth and yield studies in support of proving his company was on a sustained yield basis. They applied only to areas selectively logged. No plantings were made to my knowledge. I do not know the answer to the tree farm question.

The North Butte Forest Protection organization was Mr. Colgan's idea, and rather vaguely I seem to remember helping on that, but he will know for sure. As a result of it protection improved. There was greater efficiency with one man in charge of the entire area instead of three different groups. I think it helped build up the use of fire trucks with water, and preventive clearing along roads, etc. Again Mr. Colgan will remember the details much better than I. Would certainly ask Mr. Colgan about it.

Prior to the North Butte project Mr. Colgan's duties were pretty well limited to the logging operating area. On lands other than that, which were inside the National Forest, protection was handled by the Forest Service. On lands outside the boundaries of the National Forest protection was handled or mishandled by the State. During that period Mr. Colgan and his employees were the main source of labor for putting out fires in all of the above areas.

Mr. Colgan went with the Diamond Match Company before I joined the CFPA. Because of football injuries he could not get in the Army, but during that war period was at the Forest Experiment Station in Madison, Wisconsin. I do not know when he left the station to work in California.

In general it is my belief that Mr. Colgan did more to improve private forestry practices in the pine region of California than any other man in the employ of an operating lumber company.
Notes on State Board of Forestry Meetings

Regarding establishment of North Butte Forest Protection Organization

1929

March: Stevenot (Director of Natural Resources) suggests that in plans for next biennial budget (which next Board meeting would consider) a "preliminary report be prepared, which would include placing of men and trucks in the various counties, and which could be dissected by the board." Perhaps Eldorado or Nevada selected "to go the limit" for fire protection, as a demonstration of what could be accomplished in all counties.

Rider suggested Butte County (on account "of conditions there."). "...he felt sure the state could depend upon cooperation from the Diamond Match Company...."

District Forester Show also had a plan, Mulford pointed out, to fire proof one national forest.

State Forester Pratt directed to present a fire plan for the State at next meeting, if possible in cooperation with the USFS plan and in contiguous territory.

April: Apparently "skipped."

May: Plan presented by Mr. Hiram Wyman, who had prepared plan. (A "U. of Minnesota graduate forester" who had made a preliminary plan "through the agency of the California Forest Protective Association," and "Butte County had been selected as the one for which which to make the plan.")

Problem of administration discussed: Three agencies involved, the Forest Service, the State Board of Forestry, and the timber owners--with possibility of the County involved, too.

"It was Mr. Colgan's opinion that for the first season, or until the plan was partly established, the simplest way would be to have the work done by a U.S. Forest Ranger, under the direct supervision of the S. Division of Forestry."

Lackey: Have a man under permanent appointment with the U.S.F.S. to supervise work for the other agencies. (Lackey there in Show's place.) Funds would have to be deposited with and dispensed by U.S.F.S., in accordance with their regulations.

Cost Estimates: Lackey said U.S.F.S. "has only been able to show costs of average of 1½ per acre." Wyman's plan showed costs running between 7½ and 10½ per acre. Pardee wondered how a 100% plan could be worked out "unless there was a 10½ rate--7½% for prevention and 2½% for reserve fund." Gilman said certain areas in Southern California are as high as 3½% an acre, and even that has not really fireproofed the area.

More discussion of location: Mulford feels that Shasta County fires are "not as important" as those in Butte "because there is a better opportunity here (and all up and
down the Mother Lode) to convince the public of the importance of an intensified plan... in National Forest lands and in valuable second growth lands..." He said he would like to have the suggested plan for a couple of years, "and if it succeeds, he felt it would be the best supporting evidence we could bring to a request for more money for this sort of work from a future legislature."

Lackey says plan of USFS can be changed to an area adjacent to the one planned for the Division of Forestry, instead of using the Shasta National Forest. Mulford delegated to contact Show about this.

Those attending this meeting: Dr. Geo. C. Pardee (chairman)
Walter Mulford
H.S. Gilman
A. J. Mathews
Swift Berry
W.O. Blasingame
D. Eyman Huff
and
M.B. Pratt, Sec.
Richard E. Colgan
E.V. Lackey

June: with the following in attendance--Pratt, Price, Durbin, Colgan, Black, Young, Frost, O'Connell, Delaney.

The following was adopted: The USFS is "unable to increase expenditures for additional guards or lookouts in 1929, but will increase road and trail work within the unit." Telephone extensions to Bald Mountain; guard at Bottle creek to be moved to Bald Mountain as secondary lookout.

State of Calif. to place a patrolman atMacalia and a lookout on Saw Mill Peak. One on Cohasset Ridge in July. $3000 allotted for fire break construction in 1929 for four men as fire fighters on call of Delaney or Young. Their services paid for by agency using them. State's new truck to be in Auburn. Diamond Match Co. to furnish 2 patrolmen by June,15, plus financing telephone construction from West Branch to Platt Hill. (Patrolmen to be under supervision of U.S.F.S.) C.F.P.A. will finance telephone construction from Campbellville to Cohasset, up to $600.00, the construction work to be supervised by the U.S.F.S.

Black was asked to prepare a coop agreement providing for a plan to finance and administer a unified fire protection district with a single control system and a year-long fire chief in charge,for 1930.

Signed by S.R. Black, (CFPA); R.S. Colgan (Diamond Match); and Frank B. Delaney (U.S.F.S.)
BLACK CASE

Summary:

The charges against Black were signed by 7 people—names withheld—by E.H. McDaniel, Chairman of Columbia River Section, wrote to SAF Pres. Chapman that the section will study Black case with an eye to by-laws—adequate protection of the individual from unfounded or hasty action. (SAF Affairs, Feb., 1936, pp. 3-12)

Chapman answered in two parts: (1) Procedure in Constitution and By-Laws; Procedure actually followed.

Charges presented against Black were:
1. He secured a position on the State Board of Forestry by political means, and was elected chairman at the request of Gov. Rolph for the purpose of getting Pratt dismissed.
2. He tried, without sanction of the Board, to get Gov. Rolph to dismiss Pratt for "in-competency and political activity." Gov. thought that Black had the approval of Board.
3. Black has discredited Pratt to his supervisors, to the public, and subordinates.
4. Black has usurped the authority of the state forester.
5. About same as above.
6. He failed to call meetings for Board of Forestry, usurped the prerogatives of the State Board.
7. When the initiative was won to put the State Forester under the protection of Civil Service, Black tried to get the Board of Forestry to dismiss him in the interim, which Black could have done with the new Board member (Fritz's) vote. But Fritz caught on and would not accept the appointment.

Chapman, with Black's okay (according to Chapman), sent a copy of these charges to CFFA directors. Swift Berry and Mr. Noir accused Chapman of "broadcasting the charges." Chapman says that also Black "gave me no names of persons to write to corroborate his statements made in his reply (defense) of July 18." However, Swift Berry and Richard Colgan sent in pro-Black statements.
The case was sent to each member beginning Sept 2d—100 pages, single spaces. Only four copies, so each member mailed in his vote then forwarded the case testimony to another member. Black was expelled.

Black's answer to charges: He had requested that Chapman have charges published in Journal, but this could not be done because of Black's attack on Pratt in his own defense.

Chapman defends countercharge that the U.S.F.S. men wanted Pratt retained, since "lumbermen" wanted him fired. Chapman says that Berry intimated the opposite point of view.

Charges against Chapman were signed by: Swift, Berry, R.A. Colgan, Clyde S. Martin, T.K. Oliver, and W.R. Schofield.

FROM S.A.F. Affairs, March, 1936,
Volume 2, No. 3, pp. 19-20:

"Petition in the Case of S. Rexford Black"

From the California Section, and the two Pacific Northwest Sections. Petition dated December 12, 1935—a month before the charges against Black were formally presented to the national S.A.F. Council. The Council agreed on January 25 to grant a review of the Black case. Greeley was probably chairman of the review committee.

Mr. De Witt Nelson
Deputy Director of Natural Resources
Acting State Forester
State Office Building No. 1
Sacramento, California

Re: Dedication of Western Pine Tree Farms in the California Pine Region

Dear Mr. Nelson:

You are familiar with the Western Pine Tree Farm movement which as you know is a private initiative and backed by private industry. The Tree Farm program is designed to advance the lumber industry’s conservation program and to demonstrate to the public that the forest owners and timber operators are protecting and managing their forest properties to assure future forest crops.

Registration of Tree Farms in the National Tree Farm System is under the sponsorship and direction of the National Lumber Manufacturers Association. The Western Pine Association, which is affiliated with the N.L.M.A., cooperates in the development of the Tree Farm project, and acts through its Forest Conservation Committee, Forest Practice Committees in the various states and its Forestry Staff as the sponsor in the Western Pine Region of the 11 Western States.

The accompanying Western Pine Association Circular, No. 2705, gives in more details the formulation of the Tree Farm system.

Registration of qualified tree farms is not limited to Association members only; the policy of the Association is to admit non-members to Tree Farm certification after review of their applications, inspection of their forest properties and favorable action by the Association Forest Practice Committee and Forest Conservation Committee.

The Tree Farm movement has developed rapidly since its adoption. At the present time, more than two million acres of privately owned forest lands in the Western Pine Region are registered under the Tree Farm system as indicated by roadside signs along highways and forest roads. In the California Pine Region more than four hundred thousand acres have been approved for certification as Tree Farms.

The significance and the development of tree farms for the conservation of forest resources through management for continuous production of forest crops have been the ground for dedication programs in the States of Oregon and Washington. Because of the major role played by the forest resources, and the forward step in forestry by the establishment of Tree Farms, the Chief Executives of Oregon and Washington honored the occasion by dedicating, in person, the Tree Farms in those states.
No such dedication has taken place in California. The increasing public interest in the forest resources and forest lands of the State of California, and the recent approval of applications for certification as Western Pine Tree Farms of fifteen small El Dorado County forest properties in the all important second growth timber belt of the foothills of the forest holdings of the Michigan-California Lumber Company in El Dorado County and of the Winton Lumber Company in adjacent Amador County, centers of great lumbering activities, present an opportune time for such a dedication. Furthermore, a dedication will offer a great opportunity to publicize the important forest legislation now in process in the State Legislature.

The attached copy of the report of the secretary of the sub-committee of the Association's California Forest Practice Committee on the inspection of the forest areas of the fifteen farms contains a resolution recommending that the Forestry Staff of the Association make all necessary arrangements for a formal dedication of the El Dorado group of Tree Farms.

As a Tree Farm is a cooperative enterprise, which depends for its success on sound understanding and working relationship between private enterprise, the public and local, state and federal governments, our appearance before the State Board of Forestry at its meeting on March 16, 1945 to request the Board's cooperation in furthering this program is greatly appreciated.

Enclosed are a program of the dedication of the first Western Pine Tree Farm at Klamath Falls, Oregon, and a booklet containing the remarks made by the speakers in connection with the formal dedication. A similar dedication was held at Omak, Washington, where the Governor of Washington dedicated, in person, the Tree Farm of the Biles-Coleman Lumber Company.

An outline of a tentative program of a dedication subject to revisions, dependent upon the participants, is also enclosed.

It has been suggested that the dedication be held at Placerville, California, between June 11 and 19, 1945, preferably on or after June 15. As a trip to some of the tree farm areas and the placing of signs is planned, the weather will be more stable and the roads in better condition for traveling at that time. Too, State forestry legislation will have been enacted. The Chief Forester of the Soil Conservation Service will be in the West at that time and he has expressed his desire to attend the dedication. The Soil Conservation Service has done excellent work in fostering farm forestry in El Dorado County.

Your cooperation will be greatly appreciated and we would like to have your valuable advice and assistance in planning this program.

Yours very truly,

C. W. Zaayer, District Forest Engineer
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September 24, 1969

Mrs. Amelia R. Fry
Room 486 Bancroft Library
University of California
Berkeley, California 94720

Dear Mrs. Fry:

Many thanks for making the Krueger-Colgan volume of the Oral Regional History available to me. You have done an excellent job.

Naturally in speaking to a dictating machine, there is always much awkwardness of speech. Such mild bloopers make the oral history sound more authentic. There are only two items that I think should be augmented on an ERRATA sheet. On page 17, seventh line from the bottom in the statement "...........every time he'd tell the cook....". This would be more complete if it were to say: "...... every time he'd (Elmer Hall, the Woods Superintendent) tell the cook ........". On page 19 is a more serious error. In my second statement, The third sentence should be: "They started there in about 1899 or 1900." This should be followed by an extra sentence: "Soon after Yale offered forestry."

I have in my files an item from Mrs. Willa Baum referring to a "permission to deposit your interview". I have in my files no other item.

Again with thanks and best wishes.

Cordially yours,

Myron Krueger

Myron Krueger
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.