Call from Don Gedney of PNW Station, Nov. 29 '77--

Wants to hire me for editing project on 40 pp. (my est., 10,000 words) of researcher's rough draft. Says it's done on mag cards, whatever they are, and that my editing can go on them, I won't need to provide finished ms. Told him it sounded to me like a week's work, with day-trip to Portland besides. He asked for ballpark figure on cost, we hacked around to $100 a day; think I should try up that to $110 or so for inflation. Agreed we'd be in touch after 1st of year.
Call from Don Gedney: wants to change terms of editing to $100/day, obviously in hope it'll take me less than 5 days; my intuition is that 3 1/2-4 days is what he wants. Says the text is 23 pp. Also, the per diem rate can include a trip to Portland, to talk with author.

From Gedney call last week: author is Dan Oswald; phone 234-3361, ext. 4935. Editing will need to be done likely in 1st week of Jan., and done promptly.
To take the rough draft report titled "Forests and Timber Resources of California's Central Coast," by Daniel D. Oswald and rewrite as necessary a finished report suitable for publication in terms understandable to laymen as well as technical people, in accordance with attached Job Specifications.

Not to exceed $490.00.

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BILLING INSTRUCTIONS:

Furnish invoice with our ORDER NUMBER to:

U.S. DEPARTMENT OF AGRICULTURE
National Finance Center
P.O. Box 60075
New Orleans, Louisiana 70160.

FAILURE TO SHOW OUR PURCHASE ORDER NUMBER ON INVOICE WILL DELAY PAYMENT

FREIGHT CHARGE OVER $25 REQUIRES BILL OF LADING
The following terms and conditions apply to purchase orders only when "Purchase Order" is checked on the front of this form. Supplies or services shall be furnished in accordance with the terms specified on both sides of this order and on the attached sheets, if any.

1. INSPECTION AND ACCEPTANCE. Inspection and acceptance shall be at destination, unless otherwise provided. Until delivery and acceptance, and after any rejections, risk of loss will be on the Contractor unless loss results from negligence of the Government.

2. VARIATION IN QUANTITY. No variation in the quantity of any item called for by this contract will be accepted unless such variation has been caused by conditions of loading, shipping, or packing, or allowances in manufacturing processes, and then only to the extent, if any, specified elsewhere in this contract.

3. DISCOUNTS. Discount time will be computed from date of delivery at place of acceptance or from receipt of correct invoice at the office specified by the Government, whichever is later. Payment is made, for discount purposes, when check is mailed.

4. DISPUTES. (a) Except as otherwise provided in this contract any dispute concerning a question of fact arising under this contract which is not disposed of by agreement shall be decided by the Contracting Officer, who shall mail or otherwise furnish a copy thereof to the Contractor. This decision shall be final and conclusive within 30 days from the date of receipt of such copy, the Contractor mails or otherwise furnishes to the Contracting Officer a written appeal addressed to the Head of the Agency. The decision of the Head of the Agency or his duly authorized representative for the determination of such appeals shall be final and conclusive unless determined to have been fraudulent, capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence. The Contractor shall be afforded an opportunity to be heard and to offer evidence in support of his appeal. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the contract and in accordance with the Contracting Officer's decision. (b) This "Disputes" clause does not preclude consideration of law questions in connection with decisions provided for in (a) above; provided, that nothing in this contract shall be construed as making final the decision of any administrative official, representative or board on a question of law.

5. FOREIGN SUPPLIES. This contract is subject to the Buy American Act (41 U.S.C. 10-1d) as implemented by Executive Order 10582 of December 17, 1954 and any restrictions in appropriation acts on the procurement of foreign supplies.

6. CONVICT LABOR. In connection with the performance of work under this contract, the Contractor agrees not to employ any person undergoing sentence of imprisonment except as provided by Public Law 94-176, September 10, 1965 (81 U.S.C. 4065 (c) (2)) and Executive Order 11755, December 29, 1973.

7. OFFICIALS NOT TO BENEFIT. No member of or delegate to Congress or resident commissioner, shall be admitted to any share or part of this contract, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with any corporation for its general benefit.

8. COVENANT AGAINST CONTINGENT FEES. The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon any agreement or understanding for a commission, percentage, brokerage, or contingent fees, excepting bona fide employees or brokerage established commercial or selling agencies maintained by the Contractor pursuant to the practice of securing business. For breach or violation of this warranty the Government shall have the right to annul this contract without liability or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission percentage, brokerage, or contingent fees.

9. FEDERAL, STATE, AND LOCAL TAXES. Except as may be otherwise provided in this contract, the contract price includes all applicable Federal, State and local taxes and duties in effect on the date of this contract but does not include any taxes from which the Government, the Contractor or this transaction is exempt. Upon request of the Contractor, the Government shall furnish a tax exemption certificate or similar evidence of exemption with respect to any such tax not included in the contract price, pursuant to the laws of the United States.

For the purpose of this clause, the term "date of this contract" means the date of the contractor's quotation or, if no quotation, the date of this purchase order.

10. SERVICE CONTRACT ACT OF 1965. Applies only to contracts for services unless excepted by the regulations of the Department of Labor—Except to the extent that an exemption, variation, or tolerance would apply pursuant to 29 CFR 4.6 if this were a contract in excess of $2500, the contractor and any subcontractor hereunder shall pay all of his employees engaged in performing work on this contract not less than the minimum wage specified under section 6(a) (1) of the Fair Labor Standards Act of 1938, as amended. All regulations and interpretations of the Fair Labor Standards Act which are incorporated in 29 CFR Part 4 are hereby incorporated by reference in this contract.

11. CHANGES. The Contracting Officer may at any time, by a written order, and without notice to the sureties, make changes within the general scope of this contract, in any one or more of the following: (i) (or parts of) (a) drawings, designs or specifications, where the supplier is to be furnished material fabricated for the Government in accordance therewith, (b) method of shipment or packing, and (c) place of delivery; (ii) for services: (a) specifications (including drawings and designs), (b) method or manner of performance of the work, (c) Government furnished facilities, equipment, materials, services, or site, or (d) directing acceleration in the performance of the work; if any such change causes an increase or decrease in the cost of, or the time required for, the performance of any part of the work under this contract, whether changed or not changed by any such order, an equitable adjustment shall be made in the contract price or delivery schedule, or both, and the contract shall be modified in writing accordingly. Any claim by the Contractor for adjustment under this clause must be asserted within 30 days from the date of receipt by the Contractor of the direction of change. Provided, however, that the Contracting Officer, if he decides that the facts justify such action, may receive and act upon any such claim asserted at any time prior to final payment under this contract. Where the cost of property made obsolete or excess as a result of a change is included in the Contractor's claim for adjustment, the Contracting Officer shall have the right to prescribe the manner of disposition of such property. Failure to agree to any adjustment shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled 'Disputes.' Nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

12. TERMINATION FOR DEFAULT. The Contracting Officer, by written notice, may terminate this contract, in whole or in part, for default, for failure of the Contractor to perform any of the provisions hereof. In such event the Contractor shall be liable for damages, including the excess cost of procuring similar supplies or services, provided that, if (i) it is determined for any reason that the Contractor was not in default or (ii) the Contractor's failure to perform is without his and his subcontractor's control, fault or negligence the termination shall be a termination for convenience under paragraph 13.

13. TERMINATION FOR CONVENIENCE. The Contracting Officer, by written notice, may terminate this contract, in whole or in part, when it is in the best interest of the Government. If this contract is for supplies and is so terminated, the Contractor shall be compensated in accordance with Part 1-6 of the Federal Procurement Regulations (41 CFR 1-6), in effect at the time the contract is completed. If this contract is for services and is so terminated, the Government shall be liable only for payment in accordance with the payment provisions of this contract for services rendered prior to the effective date of termination.

14. ASSIGNMENT OF CLAIMS. Claims for monies due or to become due under this contract shall be assigned only pursuant to the Assignment of Claims Act of 1940, as amended (31 U.S.C. 203. 41 U.S.C. 15). This Purchase Order, may not be assigned unless or until the supplier has been requested to and has accepted this order by executing an Acceptance hereof.

15. CLAUSES INCORPORATED BY REFERENCE. If the amount of this Purchase Order exceeds $2,500 the following clauses form a part of the contract price of this Purchase Order and are hereby incorporated by reference. Citations refer to the Federal Procurement Regulations. Text of the clauses may be obtained from the Contracting Officer, Examination of Records by the Comptroller General (1-7.103-3) Listing of Employment Openings (1-12.102-1) Employment Opportunities (1-12.102-1) Contract Work Hours and Safety Standards Act (1-12.102-1) Service Contract Act of 1946 (1-12.904-1) (when applicable this clause takes precedence over paragraph 10 above) (The following clauses apply if the amount of this Purchase Order exceeds $5,000) Utilization of Small Business Concerns (1-12.101-3) Utilization of Labor Surplus Area Concerns (1-12.101-3) Utilization of Minority Business Enterprises (1-12.101-3)
SPECIFICATIONS FOR PREPARATION OF A FINISHED REPORT FROM THE DRAFT TITLED "FORESTS AND TIMBER RESOURCES OF CALIFORNIA'S CENTRAL COAST"

SCOPE

The goal of this effort is to produce a very readable and understandable report, rewriting as necessary the draft report referred to above. It is not anticipated that major text revision is necessary; it is desired the character of the original report be retained and as much of the original writing kept as possible. The work of the professional writer should be directed toward achieving greater acuity in the report and making the writing straightforward and forceful.

Writing must be done in clear, concise terms understandable to laymen as well as technical people.

Rewriting shall be limited to that part of the text up to, but not including Literature Cited, approximately 28 pages.

TIME

The time will begin the day the manuscript is received by the writer and shall be completed and returned to the author at the Station within 8 days. The manuscript will be sent to the writer no later than January 4.

THE WRITER WILL

1. Furnish the Forest Service a technical rewrite of the previously referred to manuscript with comments clearly presented on the draft report or in inserted pages. This shall be in a format suitable for use as typing copy.
2. Travel to Portland, if necessary, to discuss editing problems with the author.

3. Provide the Forest Service, to the nearest hour, the time expended.

**THE FOREST SERVICE WILL**

1. Make available to the writer two double-spaced copies of the original report.

2. Make available to the writer suitable time with the author if consultation is necessary.

**INSPECTION AND ACCEPTANCE**

Acceptance of the rewritten report will be determined by the Head of the Resource Analysis Section of the Renewable Resources Evaluation Project.

**PAYMENT**

Upon acceptance, the writer is entitled to receive payment at the rate of $100 per 8-hour day, or fraction thereof. Travel time to Portland for author consultation is considered chargeable time. Total cost cannot exceed $490.00.
Dear Ivan:

Thanks for your review of Dan Oswald's manuscript. It accomplished what I wanted, and I am pleased with the results. Getting between an author and someone reviewing the author's manuscript can be potentially hazardous to one's health. Fortunately it worked out just fine.

I have approved payment of the purchase order for this job, and when all processing is completed in the hopefully not too distant future, you should receive payment of $262.50.

I don't think it will be necessary for you to come to Portland, and thanks for your help.

Sincerely,

DONALD R. GEDNEY
Principal Resource Analyst
Renewable Resources Evaluation
12 January 1978

Donald R. Gedrey
Principal Resources Analyst
Renewable Resources Evaluation
PNW Forest and Range Experiment Station
PO Box 3141
Portland, OR 97208

Dear Don--

I'm glad to hear that my work on Dan Oswald's manuscript worked out okay for you. I'd much appreciate a couple of copies when it reaches print.

Someone called me from the Station, I suppose from Jim Travis's domain, about how to submit an invoice to New Orleans for my fee, and I'm enclosing a carbon copy for you, to be sure that I invented the proper paperwork. I'm sending the original off to New Orleans at the same time I mail this to you.

Thanks for thinking of me for the job. See you sometime.

regards
INVOICE

Order number: 40-0b52-8-20h
Purchaser: PNW Forest and Range Exp. Stn.
PO Box 3141
Portland, OR 97208

For editing and rewriting of rough draft report titled "Forests and Timber Resources of California's Central Coast," by Daniel D. Oswald, as per USDA purchase order # 40-0b52-8-20h, dated 12-23-77:

2 and 5/8 days @ $100/day..................$262.50

payable to: Ivan Doig
17021 10th Ave. NW
Seattle, WA 98177

12 January 1978

cc: PNW Forest and Range Exp. Stn.
1 January 1977

Donald Gedney
Renewable Resources Evaluation Project
PNW Forest and Range Experiment Station
PO Box 3111
Portland, OR 97208

Dear Don--

Enclosed is my editing job on "Forest and Timber Resources of California's Central Coast." As agreed, most of my changes were to recast sentences, and occasionally their sequence, to make the content clearer for the layman. I'm attaching a page to explain any of my changes that don't explain themselves. And it might be noted that in a few cases where major transpositions or extensive editing were involved, I've retyped the material and pasted it in place. Otherwise, I did everything in pencil.

My time on this so far, Don, is two days and five hours. If you and Dan Oswald see the need for me to come to Portland, I'd appreciate knowing the possible date pronto, for the sake of my own scheduling.

best regards
Research summary, page B, lines 19-20: portion about ownership objectives omitted because it's duplicated on lines 5-8 of page E

Page C: edited out "hypothetical" as redundancy on "potential" in line 10; in line 3, "nontimber values" sounds to a layman like jargon, and I think "uses other than timber harvest" is clearer; same reasoning in line 4 changes, "harvest" to "cutting" and "operators to maintain stand health" to "stand maintenance."

Page D, lines 5-6: if young forests contain "almost half of the Region's sawtimber", the older forests automatically account for "over half", it and it seemed to me a truism to say so, which is why I changed the language to "remainder".

Introduction, p. 1--Perhaps there's some scientific reason I'm unaware of why, in line 2, the Central Coast can't be called a "littoral" instead of a region. But the area seems to fit dictionary definitions of "littoral", and using the word avoids the confusion of region (geographic) and Region (administrative). In line 17, I changed "timbering" to "logging" because to a layman, "timbering" I think means putting up timbers--and isn't "logging" the historically accepted word?

p. 4, lines 7-8: recommend deleting the sentence beginning "It is hoped..." because the point seems self-evident, having been made in the previous sentences.

p. 5, line 23: the point seemed to me not that forests are "too few" to produce significant timber, but that they are "too small": that is, couldn't just one forest, if it were sizable enough, produce "significant quantities of timber"? If I misread here, I apologize, but this is how it comes across to a layman.

p. 6, line 22: "disjunct" needs some explanation. I'm not clear myself whether it's a species growing out of its accustomed area, or growing in concentrations apart from other species, or just what.

p. 7, line 11: again, I harked back to "logging" as the term generally accepted among the public.

p. 11, line 2: The data referred to here would seem to me to be "comparable"--able to be compared--rather than "comparative"--based on comparison. That is, if the data for '53 and '73 has to be judged as fit for comparison, then it is "comparable" and deserves mention as such; if the data has a sameness which automatically can be compared, then it is "comparative", and the entire phrase "according to the comparative data" is unnecessary because the first part of the sentence self-evidently has done such comparing. Much ado about a nuance, but it is a point of accuracy.

p. 12, line 18: exact date of first redwood park would be stronger than "long ago".

p. 14, lines 22-3: sentence beginning "The cubic volume..." was transposed to keep all material about sawtimber together, in logical sequence.

p. 20, lines 11-12: transposition similar to previous one was made to group material about productivity and reforestation.
p. 20, line 24: it seems that a "modest amount" is being talked about here rather than a "modest rate": that is, the measure of 114,000 acres of partial harvest in 5 years is set against "the entire inventory of unreserved forests"—which would seem to me a comparison of amounts rather than rates. If I've misread, and the point actually is to compare the 77,000 acres of "partial harvest in the present stands" with the 5-year rate of 114,000 acres of partial harvest, then the phrase "considering the entire inventory of unreserved forests" seems to confuse the issue.
FORESTS AND TIMBER RESOURCES OF
CALIFORNIA'S CENTRAL COAST

by
Daniel D. Oswald

December 1977

PACIFIC NORTHWEST FOREST AND RANGE EXPERIMENT STATION
Forest Service    Portland, Oregon
REFERENCE ABSTRACT

Oswald, Daniel D.


This report summarizes the findings of a recent inventory of the forest land area and timber resources of a 10-county area on California's Central Coast. Included are detailed tables of forest area, timber volume, timber growth and harvest, and mortality. The report includes a discussion of the current timber resources, and some potential limitations on their availability.

KEYWORDS: Forest surveys (coastal California), resources (forest), statistics (timber).
RESEARCH SUMMARY

California's Central Coast is a mountainous region with forests totaling 2.3 million acres, over one-third of the land area. But the region's forests that are capable of producing commercial crops of timber account for only 339,000 acres of the forested area, and of this total, 79,000 acres have been reserved (in parks, watersheds, and Wilderness) from commercial timber operations.
The 260,000 acre area of unreserved commercial forest land is concentrated in five counties (Marin, Monterey, San Mateo, Santa Clara, and Santa Cruz). The center for commercial timber operations in the Central Coast is a 365 square mile commercial forest area in the Santa Cruz Mountains of San Mateo, Santa Clara, and Santa Cruz Counties. Within this area, 301 square miles of unreserved commercial forests offer the potential for continued timber growing and harvesting on a commercial scale, in harmony with other forest resource uses.

An estimated 6.1 billion board feet (Scribner rule) of sawtimber, 93 percent of it in softwood species, is contained within the Central Coast's 260,000 acres of unreserved commercial forests. Redwood and Douglas-fir account for most of the softwood volume. Current annual growth in the Region's forests totals 26 million cubic feet (128 million board feet). Commercial forests average 24,000 board feet of sawtimber volume per acre, with net annual growth of 550 board feet, ranking it first among the State's forested regions in per-acre volume and growth.

Most (217,000 acres) of the commercial timberland is privately owned. Most of the private timberlands are owned by miscellaneous private owners, whose objectives for ownership are numerous, but often not directed at timber production. Forest industries own approximately 10,000 acres of timberlands in the Region.
Public timberlands total only 43,000 acres, three-fourths of which are in the Los Padres National Forest in Monterey County. The Los Padres timberlands are managed primarily for non-timber values, and cutting is limited to salvage and operations to maintain stand health. The potential productivity of Central Coast's commercial forests have high productive potential. Of 221,000 acres for which productivity data are available, 89 percent is capable of producing 120 cubic feet or more of industrial wood per acre each year. The average potential for this area exceeds 175 cubic feet per acre per year. Current annual growth is about two-thirds of this hypothetical potential.

There are two forest types of commercial importance in the Region. Redwood is the predominant species on 127,000 acres. These forests contain 4.3 billion board feet of sawtimber, and are accruing 82 million board feet of growth annually. Douglas-fir predominates on 27,000 acres, this type accounts for almost one billion board feet of sawtimber. Hardwoods are the predominant vegetation on 68,000 acres.
Three-fourths of the current forest is less than 100 years old.

The Region's forests are the natural result of the early exploitation of the virgin timber stands, and fires that swept much of the area. Three-fourths of the current forest is less than 100 years old. These young forests contain almost half of the Region's sawtimber. The older forests (100 years plus) although much smaller in aggregate area, account for over half of the sawtimber volume. These "old" forests include isolated uncut stands, partially harvested stands, and some that likely became established after early timbering in the Region.
Production from

The Central Coast's commercial timberlands have a number of limitations on use for timber production. These include economic limitations, such as lack of economic concentrations of timber, species of marginal value, and lack of processing facilities. Perhaps the most important limitation, however, is the ownership placed by its owners. Most of the timberland is owned by miscellaneous private owners. Although this owner group does sell timber, many of the owners have primary objectives other than timber production, which limit timber output.

Forest practices regulations designed to insure that a substantial stand is left after harvest also limit the Region's timber output. The Central Coast, due in large part to its urban-suburban nature and the multiple uses made of its forests, has the most stringently enforced set of forest practices regulations in the State. The regulations are designed to insure that a substantial stand is left after harvest. A brief analysis conducted to determine the impact of these regulations on availability of timber volume found that the percent of required reserved stand in terms of volume varied widely. On the average, 40 percent of the standing softwood sawtimber volume would likely be reserved from cutting, under existing regulations.
This report presents the findings of the recent inventory of forests and timber resources conducted in a 10-county area on California's Central Coast. The counties included are: Alameda, Contra Costa, Marin, Monterey, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, and Solano. The forests of this Region were last inventoried in the late 1940's, and reported on in several publications (USDA Forest Service, 1954, 1953; Baker and Poli 1954, 1953).

The inventory summarized herein was conducted in most of the forested area of the region in the summer of 1972. The lands of the Los Padres National Forest in Monterey County were inventoried in 1974. These inventories have not been updated; they are reported as of the inventory date.

Most of the forested area in this region has experienced little change since these inventories. In Monterey County, however, the catastrophic Marble Cone fire burned 175,000 acres of wildlands in the summer of 1977. The fire burned much of the area of the Los Padres National Forest, including most of the Ventura Wilderness.

A preliminary appraisal of the impacts of that fire made by Los Padres National Forest personnel indicates little impact on commercial timber stands; heavy damage is likely only on 2,000 acres of Coulter pine. But in the Wilderness area, 6,000 acres of ponderosa pine sustained heavy damage. The greatest loss was the destruction of protective vegetation on tens of thousands of acres of Monterey County's watershed lands.
As a consequence of the fire, the inventory findings pertaining to vegetative cover in Monterey County and on National Forest land no longer reflect the current status of those resources.
INTRODUCTION

California's Central Coast is a unique forested region consisting of 10 counties on or near the California Coast. This region stretches southward across a total of 260 miles from Marin County north of San Francisco Bay, south to Monterey County (Figure 1). This area, like California's major forest regions, is largely mountainous, and 37 percent of its 6.24 million acres is forested. The uniqueness of this region's forests stems from their isolation from the State's major forested regions, the complexity of their makeup, and their existence in close proximity with the Region's 5 million residents.

Figure 1. The counties of California's Central Coast.

Because the nearness of most of the Region's commercial timberlands to San Francisco Bay and its surrounding communities, led to early exploitation and rapid depletion of virgin timber as those old forests fell to the saw and ax, they were reborn in the structures of early San Francisco, Oakland, and San Jose. Man's activities in those early years, and the fires that followed, did much to shape the Central Coast's current forests.
Figure 1.—The counties of California's Central Coast
Today, the needs and desires of the Region's populace with respect to the forests have changed. Watershed protection has become a paramount concern in the management and protection of the Region's forests. And the recreational value of the forests has played a prominent part in decisions regarding their allocation and use.

Little noticed by many of the Region's residents and visitors, timber harvesting continues on a commercial scale on some of the timberlands. This harvesting activity supports local sawmills, as it has for over 125 years. Of course, the commercial timber enterprise is much scaled down from its heyday, but it supports local sawmills as it has for more than 125 years. Planners in the two most important timber counties in the Region--San Mateo and Santa Cruz--believe that commercial timber operations will continue in those counties at levels compatible with other forest resource uses.

The forest inventory reported upon herein provides a glimpse of the different Region's forests as they exist today. These forests differ in many respects from the Region's past forests. Some of the important trends evident in the forests have been identified and will be discussed.
This Region's timber values are often overlooked due to changing priorities evident in the forests' uses. But planners, land managers, and others who make decisions about forest resource allocations affect commodity use of the Region's forests should know of the potential for timber outputs, as well as the current level of commodity use. Given this information, costs associated with forest land allocation decisions can be more effectively identified. It is hoped that the Central Coast forest inventory will provide information that will contribute to informed decisionmaking in allocation of the Region's forest resources.

THE FORESTS CHARACTERIZED

California's 10 Central Coast counties contain 2.3 million acres of forest land. Through the Region is 37 percent forested, the extent

1/ The terms used in this report are defined in "Definition of Terms," page .

of the forests varies widely from county to county. At one extreme is San Francisco, the only county of the group that has no forest land. Solano County, with only 7 percent of its area forested; at the other, Santa Cruz is two-thirds forested.
Though much of the Region is forested, areas supporting or having the potential to support commercially valuable stands of timber are limited. Only 339,000 acres of forested land are classified as having such potential. And of that area, almost one-fourth has been formally reserved from commercial timber operations. Unreserved commercial forest land totals 260,000 acres, and is found in only 5 of the Region's 10 counties.

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<th>County</th>
<th>Commercial Forest Area (thousand acres)</th>
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<td>Marin</td>
<td>7</td>
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<td>Monterey</td>
<td>60</td>
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<td>San Mateo</td>
<td>44</td>
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<td>San Clara</td>
<td>14</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>135</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>260</strong></td>
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The unreserved commercial forests of Marin County are but a remnant of the County's 30,000 acres of productive forests. The Marin forests are an isolated "island" of redwood and Douglas-fir separated by many miles from the redwood forests of Sonoma County to the north, and those of San Mateo to the south. In recent years, most of this County's productive forests have been reserved from commercial timber operations by inclusion in the Point Reyes National Seashore, the Golden Gate National Recreation Area, and the County's protected watersheds. The remaining unreserved commercial forests are too small to produce significant quantities of timber in the future.
Monterey, the Central Coast's largest county, has vast areas of mountainous forested land. But the areas containing commercially valuable conifers, which are in the Santa Lucia Mountains, are scattered and small in size. Consequently, commercial timber operations are infrequent in Monterey's coniferous forests. These forests are unique in several respects. The redwood forests, which account for most of the commercial forest area, occur in the canyon bottoms of many small coastal streams. On the south coast of this county, redwood reaches its southernmost point.

Monterey pine, which is found in natural occurrence only in three isolated locations on California's coast, is most abundant on the Monterey Peninsula. Coulter pine and ponderosa pine are found in many areas of the county; sugar pine and bishop pine are rare and isolated in occurrence. Though small amounts of redwood and Monterey pine are occasionally harvested, this county's scattered coniferous forests do not lend themselves to large-scale commercial harvest.

The U.S. Forest Service, which manages over half of Monterey County's commercial forest area (as part of the Los Padres National Forest), has classed those lands as "unregulated," i.e., lands not suited or desirable for sustained timber production. The management of these lands is for retention of vegetation, and for recreation. Redwood, ponderosa pine, and Coulter pine are harvested only to recover mortality or to maintain health of stands. Sugar pine is protected as a "disjunct" species.
The most significant commercial stands of timber in the Region are the redwood and Douglas-fir forests of the Santa Cruz Mountains. These forests, intermingled with stands of hardwoods, occupy a mostly contiguous area of 365 square miles in San Mateo, Santa Clara, and Santa Cruz Counties (figure 2). Within this area are approximately 301 square miles of commercial forest land not formally reserved from timber production; the remainder of the area has been set aside, primarily in parks. The redwood forests of the Santa Cruz Mountains, site of some of California's earliest commercial timber operations, continues to be the center of such activity in the Region, and is the only area within the Central Coast Region where such operations are likely to continue on a commercial scale.

Figure 2. Commercial forest area of California's Central Coast.
Figure 2.—Commercial forest area of California's Central Coast
RECENT CHANGES IN FOREST AREA

The forests of the Central Coast were last inventoried in 1948, and updated to 1953 (USDA Forest Service 1954). Although the current inventory is independent of that earlier effort, and there are differences in inventory design and some of the standards, some inferences can be drawn by comparing the Region's forest areas as characterized by the two inventories for different points in time. In some cases, the reasons for differences can be identified.

<table>
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<td>forest land</td>
<td>2,598</td>
<td>2,293</td>
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<td>unproductive</td>
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</tr>
<tr>
<td>productive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>reserved</td>
<td>20</td>
<td>79</td>
</tr>
<tr>
<td>commercial</td>
<td>257</td>
<td>260</td>
</tr>
</tbody>
</table>

The major element in the apparent 12 percent decrease in forest land area is the decrease in estimated area of unproductive forest land. A change in land use and vegetative cover has been considerable.

From 1953 through 1972, 122,000 acres of brushland were burned under permit for range improvement in the Central Coast (California Division of Forestry 1954-1973). This program was centered on Monterey, Santa Clara, and San Benito Counties. An additional 164,000 acres of noncommercial forest burned in wildfires on State-protected lands in the Central Coast from 1953 through 1972; some of this area has likely been converted to a non-forest condition by grazing following the fires (California Division of Forestry 1953-1972).
Besides actual changes in forest area by intent or catastrophe, some of the apparent change in acreage is due to changes in classification of areas that have not physically changed. For example, some woodland grass areas that were classed as noncommercial forest in 1953 became classified as nonforest in the recent inventory due to change in the size of the minimum area classified. There is a minimum account of the minimum area classified. Of course, error associated with our sample-based estimates of area could be responsible for some of the apparent decrease in forest area in the region.

There has been considerable shifting of acreage within the area that was called forest land on both inventory occasions. These shifts have resulted from classification changes or sampling error; none derived from physical changes. Productive forest land--both commercial and reserved--increased 62,000 acres from 1953 to 1973, due largely to small parcels of timber and minor conifers which were included in the recent inventory but not the one of 1953. Similarly, in 1953 stringers of timber in canyon bottoms often received the same noncommercial classification as the surrounding area; with its smaller minimum, the new inventory allows such stringer stands to be classified in their own right. The old inventory also classed Coulter pine and other minor conifers, and the land they grow on, as noncommercial. The recent inventory includes many of these areas as commercial. Although these minor conifer areas--mostly in Monterey County--meet our definition of commercial forest land, their value for producing timber as a crop is marginal and is unlikely that they will be developed for commodity production.
Productive forest land in reserved status has increased from 20,000 acres in 1953 to 79,000 acres in 1973, according to the\n\nmost of this actual as a matter of definition\n
data. The increase is largely real rather than definitional; it reflects the\n
dedication of formerly unreserved lands to uses that preclude timber pro-
duction. Considering the limited size of the timbered forest resource\n
area in the Central Coast, these increases are substantial. They indicate\n
as detail and discussion will show,\n
indication of the trend in priorities for the use of the Region's timber-
lands. Some detail and discussion of these increases follows:

Productive Forest Land Reserved From Timber Production

<table>
<thead>
<tr>
<th>County</th>
<th>1953</th>
<th>1973</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marin</td>
<td>1</td>
<td>23</td>
</tr>
<tr>
<td>Monterey</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>San Mateo</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>Santa Clara</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>Other Counties</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
<td><strong>79</strong></td>
</tr>
</tbody>
</table>

In Marin County, municipal watershed lands have been set aside from\ncommercial timber operations. Beyond that, the creation of Point Reyes National\nSeashore and the Golden Gate National Recreation Area have resulted in\nwithdrawal of most of the remaining productive forests in this County.
San Mateo County's increased area of productive forest land resulted from expansion of State parks, creation of new county parks, and the dedication of San Francisco's San Mateo watershed lands as an open space and recreation preserve.

The increase in productive reserved land in San Cruz County is due to expansion of State parks, and creation of the Santa Cruz Campus of the University of California, increases in productive reserved land in other counties as well.

Other counties resulted in part from park expansion. New information on the forest cover of parks that already existed within these other counties in 1953 contributed to their apparent increases in reserved acreage.

Although the exact magnitude of real versus apparent increase in productive reserved acreage cannot be determined, most of the apparent change is accounted for by accretions to reserved forest area; changes in inventory techniques or definitions account for little of the total increase in this land use category. The then, document increases reflect a continuing effort in this Region to reserve timbered forests for uses other than timber production, an effort that started long ago with the establishment of the State's first redwood park.
The area of commercial timberlands potentially available for timber production appears to be essentially unchanged from the earlier estimate, in fact, but we know that a substantial acreage has been dedicated to noncommodity uses since the earlier inventory. In Santa Cruz and Monterey Counties, however, areas classed as noncommercial in the earlier inventory have now been identified as having potential for timber production. These areas are of three types: (1) Small isolated patches or stringers of timber, presently, because of fires, and (3) Areas with minor conifers of marginal commercial value, primarily Coulter and knobcone pines. Although these areas meet the current definitions of commercial forest land, their prospects for commercial timber operations and management are poor. So, although they appear to have offset the productive acres that have been dedicated to parks, they do not. In actuality, the manageable commercial forest base has in reality decreased.

A summary of the unreserved commercial forest area at the two inventory occasions, with reasons for change, follows:

<table>
<thead>
<tr>
<th>County</th>
<th>1953</th>
<th>1973</th>
<th>Reason(s) for change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marin</td>
<td>31</td>
<td>7</td>
<td>Status change to reserved</td>
</tr>
<tr>
<td>Monterey</td>
<td>16</td>
<td>60</td>
<td>Procedures and classification</td>
</tr>
<tr>
<td>San Mateo</td>
<td>59</td>
<td>44</td>
<td>Status change to reserved</td>
</tr>
<tr>
<td>Santa Clara</td>
<td>25</td>
<td>14</td>
<td>Status change/classification</td>
</tr>
<tr>
<td>Santa Cruz</td>
<td>125</td>
<td>135</td>
<td>Status change/classification</td>
</tr>
<tr>
<td>Total</td>
<td>256</td>
<td>260</td>
<td></td>
</tr>
</tbody>
</table>
Both

of the status changes to reserved resulted in decreases in
acreage, changes due to inventory procedures and classification resulted
in apparent increases in Monterey and Santa Cruz, and a decrease in
Santa Clara.

THE REGION'S TIMBERLANDS AND TIMBER RESOURCES

This section of the report is a discussion of the Central Coast's
unreserved commercial forest land and timber resources. The tables at
the end of the text should be consulted for detailed statistics.

A caution is in order here:

Readers are cautioned that in the following discussions of timber
resource characteristics, some descriptive elements were not available
for the entire resource. For example, information on site class and
stand age were not available for the 33,000 acres of commercial forests
on the Los Padres National Forest, and a 6,000 acre area of privately-
owned Monterey pine on the Monterey Peninsula. (Since timber values in
both of these areas are of secondary concern, the lack of details of
these resources is not important.) In the following discussion of area,
volume, and growth, the base for comparisons and proportions varies,
depending on availability of data for these two areas. Missing data are
indicated in footnotes of the applicable tables.

The Central Coast's 260,000 acres of unreserved commercial forests
contain an estimated 6.1 billion board feet (Scribner rule) of saw-
timber. The cubic volume of all growing stock trees totals
1.3 billion cubic feet. The sawtimber volume in the Central Coast is
concentrated in coniferous species which account for 93 percent
(5.7 billion board feet) of all sawtimber volume. Seventy-one percent
of the conifer sawtimber volume is redwood, 24 percent Douglas-fir.
Tanoak and madrone are the most abundant hardwoods in the Region's commercial forest, accounting for about three-fourths of the hardwood volume on commercial forest land. The hardwood volume estimates reported herein, however, poorly serve those interested in volume of hardwoods in the Central Coast. The consumptive use of this Region's hardwoods is for fuel and pulp chips. The hardwood resources that can and do support these uses occur largely on noncommercial forest land, and were not inventoried due to volume. The total hardwood resource in the Central Coast likely is several times the hardwood volume found on the Region's commercial timberlands.

Current net annual growth on the Region's commercial forests is estimated at 26 million cubic feet. Sawtimber growth is 128 million board feet, 95 percent of which is conifer species—mostly redwood and Douglas-fir.

The average acre in the Central Coast has 24,000 board feet of sawtimber and is growing 550 board feet per year. These averages indicate that compared with California's other timbered regions, the Central Coast's forests have relatively high sawtimber volume, and high annual growth.
Ownership

The timberlands of the Central Coast are essentially a privately-owned resource. This Region's many private owners control 217,000 acres, or 83 percent of the Region's timberlands, and 83 percent of the sawtimber volume. Of this area, forest industry owns only about 10,000 acres. Two-thirds of the privately-owned timberlands are controlled by individual owners of small tracts and farmers, and 29 percent is owned by corporate owners not involved in wood products manufacture. The latter category includes banks, land developers, and investment trust companies. Most of the private timberland in the Region is controlled by owners who apparently are not holding their land for the primary objective of timber production. The Region's per-acre timber output, 115 board feet per year, is an indication that many of the owners are not interested in producing and marketing timber: this is a low per-acre output level, especially considering the high average sawtimber volume and growth on the Central Coast's timberlands, the Region's per-acre timber output is a low 115 board-feet per year.

Public owners account for 17 percent of the Region's commercial forests and sawtimber volume. The portion of the Los Padres National Forest in Monterey County contains an estimated 33,000 acres of timberland. These lands, however, are marginal timber-producing lands. Over half the area occurs as isolated stringers of redwood in canyon bottoms, and 30 percent is in open stands of Coulter pine, a species with little commercial use. As mentioned earlier, these lands are not managed for timber production.
Public timberlands other than National Forest total only 10,000 acres. These lands are mostly in county or municipal ownership. The municipal watersheds of Santa Cruz County are actively managed for timber as well as water production.

Productivity of the Forest Land

Timberlands vary as to potential for wood production. The timberlands of the Central Coast have been classed according to their potential productivity and placed in cubic-foot site classes. This classification is based upon potential mean annual growth (per acre) in fully-stocked natural timber stands. Although the classes don't reflect yield of the existing stands or what might be produced in managed stands, they provide a relative measure useful for rating timberlands.

Of the 21,000 acres rated as to productivity in the Central Coast, 89 percent is capable of producing 120 cubic feet or more per acre per year. The average cubic-foot site class for this Region exceeds 175, making it potentially the most productive timber Region—on a per-acre basis—in California. Although other regions in the State have high-site timberlands, they also have large areas of low productivity; except for Monterey County, most of which was not classed as to productivity, the Central Coast has essentially no timberland of low productivity.

The 21,000-acre area rated for productivity has an average net annual growth of 115 cubic feet per acre, about two-thirds of the rated potential for the area. Considering the voluntary origins of the stands, varied stocking, and uneven age classes, a high proportion of the estimated (unmanaged) potential of the Region's forests has been realized with the existing stands.
Forest Types

The forests of the Central Coast include many tree species. But one conifer—coastal redwood—is most in evidence in the commercial forests of the region. The predominant species on 127,000 acres, half of the region's commercial forest land, this species supported early development of the forest industries, and continues to be the primary commercial resource. This redwood "forest type" contains 70 percent (4.3 billion board feet) of the region's sawtimber volume, and accounts for 64 percent (82 million board feet) of the region's current sawtimber growth. Although the volume in this type is mostly redwood, Douglas-fir and hardwoods are present on much of this area.

The other important commercial conifer in the region, Douglas-fir, predominates on 27,000 acres. This forest type contains almost one billion board feet of sawtimber and has a current annual growth of 17 million board feet.

Pines—Coulter, knobcone, ponderosa, or Monterey—predominate on a total of 38,000 acres in the Central Coast. These pine forests, which are scattered and not in large concentrations, have 292 million board feet of sawtimber, and account for 11 percent (14 million board feet) of the region's sawtimber growth.
Tanoak, Pacific madrone, and several other hardwoods, singly or in combination, are the predominant tree species on about one-quarter (68,000 acres) of the Region's commercial timberlands. These hardwood forests contain almost 600 million board feet of sawtimber, of which more than three-fourths is softwoods. This apparent anomaly—hardwood forest type with sawtimber mostly in softwoods—results because forest type is determined by trees of all sizes. These hardwood stands are often characterized by a scattering of large conifers, and many small hardwoods, the latter accounting for more stocking but providing little sawtimber volume. The hardwood forests account for 14 million board feet of current growth, most of which occurs on the conifer component of the stands.

Stocking

Stocking is a measure of the degree to which the existing stand is utilizing the capability of the site to grow trees (a measure of how effectively the land is being used, from the timber-production standpoint).

In the Central Coast, stocking was separated into two components; (1) softwood growing stock, which is considered the desirable component, with respect to timber values, and (2) hardwoods and cull softwoods, which could be considered an impediment to timber production. From the standpoint of watershed protection, wildlife habitat, recreation, and other nontimber values, this differentiation is likely of little value.
We found no commercial forest lands in the Central Coast unstocked with forest trees. The areas that were lightly stocked or nonstocked with softwood growing stock were at least moderately stocked with hardwoods. Conversely, areas with few hardwoods were moderately to fully stocked with softwood growing stock.

Of the 221,000-acre area for which we have stocking information, 71 percent is moderately to fully stocked with growing stock softwoods; 24 percent is lightly stocked, 5 percent nonstocked. The impressive stocking condition of the Central Coast's commercial forests is due to a combination of factors. As was earlier mentioned, the Region's forest lands are of high productivity. And in most years moisture is not a limiting factor in stand establishment. Redwood, the predominant coniferous species, readily sprouts after cutting, and the Region's hardwoods are aggressive in occupying areas where vegetation has been removed. Since initial harvests in the Region and the fires that followed, the young forests have developed with relatively little disturbance.

The industry that has depended on the young timber resource in recent decades has been small in scale, resulting in harvest of a small acreage annually. And the harvest methods used in recent years have usually left a stand of forest trees after harvest. Our inventory indicated that 77,000 acres had experienced partial harvest in the present stands; about 14,000 acres experienced partial harvest in the 5 years before inventory. This is a modest area for partial harvest, considering the entire inventory of unreserved forests.
Of the area partially harvested, only one-fourth is stocked predominantly with hardwoods, and all of these areas have some softwood stocking. It doesn't appear that the partial harvest practices in the Central Coast have resulted in conversion of softwood stands to hardwoods.

Stand Age

As a consequence of the extensive harvests of virgin timber and the massive fires that were characteristic of this Region in the latter part of the nineteenth century and the early years of this century, young forests predominate in the Central Coast. Three-fourths of the Region's timberland has forest stands less than 100 years old, 92,000 acres in stands less than 50 years old; and 71,000 acres with stands 50 to 100 years old.

These young stands collectively contain 2.5 billion board feet of sawtimber, and account for two-thirds (84 million board feet) of the Region's sawtimber growth, and almost three-fourths of its cubic growing stock growth. Within the young forests, two-thirds of the sawtimber volume is concentrated in the 50 to 100 year stands.

The 58,000 acres of stands over 100 years old are of several origins. Some are stands slightly over 100 years old, and probably originated after early logging. Others are ancient stands that show no evidence of past harvest; and yet others (22,000 acres) are partially harvested stands of mature timber. These old stands, because of their higher volume concentrations, account for over half (2.8 billion board feet) of the Region's sawtimber, even though they occupy only one-fourth of the commercial forest area.
In contrast with the young stands, which average about 15,000 board feet of sawtimber per acre, the old stands average 48,000 board feet per acre, and some exceed 90,000 board feet per acre. The current annual growth in these old stands is 768 board feet per acre, against 512 board feet in the young stands.

In summary, the Central Coast’s commercial forests can be characterized as rapidly growing young forests. They are mixed species composition, but redwood or hardwoods (Pacific madrone and tanoak) most often predominate. On almost the entire commercial forest area, both hardwoods and conifers are present. The impression one gets flying over or traveling through the Region’s forests is that the tree cover is continuous almost unbroken. The clearcutting and massive fires of decades ago left in their wake extensive areas that are now vegetated with mixed forests of hardwoods and conifers. The fire protection of recent decades, and the practice of partial harvests, prevalent in recent decades and now mandated by forest practices regulations, have fostered the continuous forest cover that is characteristic of the Central Coast region today.
THE POTENTIAL IMPACTS OF HARVEST LIMITATIONS

There are a number of limitations that may affect the availability of timber in the Central Coast. They fall into several categories. The first group of limitations are economic in nature. They include low-value species, low-volume concentrations, inaccessibility, and lack of processing facilities. Much of the scattered timber in Monterey County has one or more of these "economic" limitations.

Another limitation, perhaps more important than any other in this region, is timberland ownership and related owner objectives. The Central Coast's timberlands are owned primarily by many owners of small woodland tracts (Baker and Poll 1953, 1954). Their reasons for ownership are varied. Although no survey of owner intent has been made in this region, the ownership pattern suggests that much—perhaps most—of the forested area is owned for reasons other than the production of timber. Many of these owners sell timber at one time or another, at any given time, much of the timber is not available regardless of market conditions (demand). Moreover, investments in timber growing are likely minimal in most cases. The ownership pattern in this region is probably one major reason for the small scale of the resident forest industry. One consequence of the ownership pattern, owner objectives, and small scale of industry, is the buildup of timber in the Central Coast have built up until stocks. This Region has the highest average per-acre concentration of sawtimber of all timber-producing regions in California.

24

25
Another type of limitation on availability is local government zoning regulations, which might restrict the types of uses on lands within well-defined geographic boundaries. The impacts of such zoning limitations on timberlands were not investigated in this inventory. The intensification of land-use planning efforts that can be anticipated with expanding population in this Region will likely result in zoning impacts on some of the commercial forest land.

A most important set of limitations on the availability of timber is local and State forest practices regulations. These regulations affect the availability of timber on almost all of the Region's timberlands. These regulations vary somewhat from county to county in the Central Coast, but all of them have specific requirements regarding conditions of forest lands subsequent to harvest operations.

The forest practices regulations that apply to the Central Coast counties are more stringent than those of other timbered regions in California. The regulations in effect in the Central Coast require that a significant residual stand of trees be left after harvest. As a consequence only part of the timber stand is available for harvest at any time, and stands cannot be reentered for subsequent harvest until they meet specified minimal stocking standards, which means that only part of any stand is initially available, and after harvest, it is possible that none of the residual volume will be available for extended periods of time.
1 Impact of Forest Practices Regulations

2 Most of the types of limitations on timber availability mentioned affect only a part of the Region's timber resource. Evaluation of their impact is beyond the scope of this report. But forest practices regulations affect availability of the entire timber base. It seems appropriate to briefly investigate the impact of this potential limitation on the Region's timber output.

3 As mentioned, forest practices regulations in the Central Coast counties are the most stringent in the State. Although they vary among counties, the regulations all require that 40 to 50 percent of the saw-timber stand (in numbers of trees) be left after harvest.
In order to approximate the impact of the regulations on current availability of the Region's sawtimber resource, we screened each forest inventory sample plot to determine probable impact in terms of requirements to leave sawtimber trees. Tree distribution, crown position, tree diameter, and numbers of trees were all considered in an attempt to arrive at a reasonable approximation of the leave stand that would be required by the appropriate set of regulations. As anticipated,

2/ For San Mateo County, the County's 1972 harvest regulations were used. For Monterey County, the Southern Forest District, high-use sub-district rules were used (California Administrative Code, Title 14, Division 2, Chapter 2, subchapter 2, Article 3 (953.8)). For Marin, Santa Clara, and Santa Cruz Counties, the Coast Forest District, Southern area rules were used (California Administrative Code, Title 14, Division 2, Chapter 2, subchapter 1, Article 3 (913.9a)).

the proportion of "available" sawtimber volume varied widely from plot to plot. On some plots with low volume in scattered trees, no volume at all remained while some high-volume plots had up to 80 percent availability of the total volume.
The results of the screening, when expanded to the Region as a whole, indicate that 40 percent of the softwood sawtimber inventory is not currently available due to requirements of the forest practices regulations. On the average, then, we might expect that only 60 percent of the standing volume will be available for harvest in the Central Coast timber stands. Of course availability varies from stand to stand.

The following tabulation shows acres and volume of softwood sawtimber in each of five broad volume classes, before and after screening were screened of the data for potential impacts on available timber of the forest practices regulations, might have on availability of timber:

<table>
<thead>
<tr>
<th>Volume class (M bd. ft.)</th>
<th>Before screening</th>
<th>After screening</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>thousand acres</td>
<td>volume (MM bd. ft.)</td>
</tr>
<tr>
<td>0-5</td>
<td>55</td>
<td>126</td>
</tr>
<tr>
<td>5-10</td>
<td>38</td>
<td>284</td>
</tr>
<tr>
<td>10-25</td>
<td>42</td>
<td>669</td>
</tr>
<tr>
<td>25-50</td>
<td>62</td>
<td>2,082</td>
</tr>
<tr>
<td>50+</td>
<td>24</td>
<td>1,801</td>
</tr>
<tr>
<td>Total</td>
<td>221</td>
<td>4,962</td>
</tr>
</tbody>
</table>

The "after screening" tabulation shows the estimated "available" volume on the Region's forests after allowance for "leave tree" requirements of the forest practices regulations in the Region. The acres in high-volume per-acre classes are diminished by the screening, and the low volume class (0-5,000 board feet) increases from 25 to 43 percent of the total forest area.
This brief analysis is by no means definitive on the subject of timber availability impacts of forest practices regulations. But inferences can be drawn from it, most notably that the regulations can have a considerable impact at any time on the amount of timber available from a tract of forest land in this Region, the Central Coast.

The forest practices regulations for this Region were drafted to insure maintenance of substantial forest cover in logged areas, in recognition of the values other than timber placed on all of the Region's forests. This brief appraisal indicates that the regulations will perpetuate the continuous forest cover that characterizes most of the Region's forest area.
REQUEST FOR QUOTATIONS

(Please Note: This is NOT an Order)

1. REQUEST NO.
   2-26-75

5. ISSUED BY
   Pacific NW Forest & Range Exp. Station
   P.O. Box 3141
   Portland, Oregon 97208
   George J. Booras 503/234-3361 Ext. 4816

8. TO NAME AND ADDRESS
   Ivan Doig
   17021 - 10th Ave. N.W.
   Seattle, Washington 98177

11. ITEM NO.
12. SUPPLIES/SERVICES

Write a manuscript of the history of the Pacific Northwest Forest and Range Experiment Station in terms understandable to Laymen as well as the Technical people. And in accordance with the provisions, specifications, terms, and conditions attached.

Reading and other research for background information:
30 hrs $13/hr $40.00

Interviews with key personnel, photo selection, and other field research in Portland & environs
40 hrs $21/hr $840.00

Writing and revising manuscript
70 hrs $22/hr $1540.00

For the job:

EXPENSES (maximum estimates in each instance):

Lodging, food & travel for days spent in Portland
10 days $48/day $480.00

Photocopying and typist's fees in preparation of manuscript drafts

Writing supplies and postage

Telephone calls pursuant to interviews and other field research, and incidental expenses

estimated maximum expenses $330.00

17. Prices quoted include applicable federal, state, and local taxes.

18. Name and address of Quoter
   Ivan Doig
   17021 10th Ave., NW
   Seattle (King County), Wash. 98177

19. Signature of person authorized to sign quotation
   Ivan Doig

20. Date of quotation
   7 March 1975

21. Signer's name and title (type or print)
22. Telephone no. (include area code)
   Ivan Doig
   206-512-6658
**AWARD/CONTRACT**

<table>
<thead>
<tr>
<th>1. CONTRACT (Proc. Inst. Ident.) NO.</th>
<th>2. EFFECTIVE DATE</th>
<th>3. REQUISITION/PURCHASE REQUEST/PROJECT NO.</th>
<th>4. CERTIFIED FOR NATIONAL DEFENSE UNDER BSDA REG. 2 AND/OR DMS REG. 1. RATING</th>
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</thead>
<tbody>
<tr>
<td>19-235</td>
<td>3-19-75</td>
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5. ISSUED BY CODE

Pacific NW Forest & Range Exp. Station
P.O. Box 3141
Portland, Oregon 97208

6. ADMINISTERED BY CODE

(If other than block 5)

7. DELIVERY FOR DESTINATION

8. CONTRACTOR CODE

NAME AND ADDRESS

Ivan Doig
17021 10th Ave. N.W.
Seattle, WA 98177

9. DISCOUNT FOR PROMPT PAYMENT

10. SUBMIT INVOICES (4 copies unless otherwise specified) TO ADDRESS SHOWN IN BLOCK

11. SHIP TO/MARK FOR CODE

See Block 5

12. PAYMENT WILL BE MADE BY CODE

See Block 5

13. THIS PROCUREMENT WAS □ ADVERTISED, □ NEGOTIATED, PURSUANT TO:

- □ 10 U.S.C. 2304 (a)(1)
- □ 41 U.S.C. 252 (c)(3)

14. ACCOUNTING AND APPROPRIATION DATA

507-965-01-10-5006

<table>
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<th>15. ITEM NO.</th>
<th>16. SUPPLIES/SERVICES</th>
<th>17. QUANTITY</th>
<th>18. UNIT</th>
<th>19. UNIT PRICE</th>
<th>20. AMOUNT</th>
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<td></td>
<td>Write a manuscript of the history of the Pacific Northwest Forest and Range Experiment Station in terms understandable to Laymen as well as Technical people. And accordance with the provisions, specifications, terms, and conditions attached.</td>
<td></td>
<td></td>
<td></td>
<td>$3,550.00</td>
</tr>
</tbody>
</table>

LIST OF ATTACHMENTS

1. Job Specifications 4 pages
2. Listing of Employment Opening, AD-432 (5/73)
3. Employment of the Handicapped, R6-6320-47 (9/74)
6. Termination for Convenience of the Government, Form AD-572 (1/72)

21. TOTAL AMOUNT OF CONTRACT $5

22. □ CONTRACTOR’S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return 3 copies to issuing office.) Contractor agrees to furnish and deliver all items or perform the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein.)

26. □ AWARD (Contractor is not required to sign this document.) Your offer on Solicitation Number , including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government’s solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.

27. UNITED STATES OF AMERICA

28. NAME OF CONTRACTING OFFICER (Type or print)

29. DATE SIGNED

3-25-75
SPECIFICATIONS FOR PREPARATION OF A HISTORY
OF THE PACIFIC NORTHWEST FOREST AND RANGE EXPERIMENT STATION

SCOPE

The goal of this project is to assemble, in one publication, highlights of the history of research within the area of responsibility of the Pacific Northwest Forest and Range Experiment Station. The publication will cover the period from about 1920 to 1975.

It is estimated that adequate coverage of the subject matter will require a minimum of 40-45 pages of final printed text.

The history must be written in clear, concise terms understandable to laymen as well as technical people.

TIME

The time will begin as of the day the notice to proceed is received by the writer and shall be completed, including reviews, and ready for final editing by the Forest Service by October 1, 1975.

The Writer Will:

1. Furnish the Forest Service a mutually acceptable manuscript outline and project plan for accomplishing the preparation of the Station history by May 1, 1975.

2. Furnish the Forest Service a rough draft on July 1, 1975.

3. Include photos and/or other key illustrations in the history to illustrate the types of work done and accomplishments achieved.
4. Arrange for adequate review of the proposed publication. The Station Information Officer shall be one reviewer. Additional reviewers will be designated by the PNW Station. This review will serve as a basis for preparing the draft for final Forest Service editing.

5. Deliver to the Forest Service by October 1, 1975, two copies of the manuscript ready for final editing by the Station Editor.

The Forest Service Will:

1. Make available to the writer its library materials, records, equipment, and facilities. Upon completion of the publication, the writer will return reference materials and equipment furnished to him by the Forest Service.

2. Assist the writer in obtaining access to material in the National Archives, National Agricultural Library, Conservation Library, and other repositories.

3. Make Forest Service personnel available to the writer as needed for consultation in developing project plans, gathering information, and reviewing work progress.

4. Provide the writer with an outerview outline of Station Research History, a copy of the Cowlin manuscript, as well as, various station publications.

5. Provide editorial services as needed by the writer not to exceed 15 working days prior to submission of the draft for final editing October 1, 1975.

6. Assign the Station Information Officer or member of the staff to serve as the Station coordinator and contact for the project.
CONTENT

The manuscript will provide coverage of the following subject areas in a manner acceptable to the Station Director and Station Information Officer:

1. A brief review of key events leading up to establishment of research programs in the Pacific Northwest and Alaska.

2. A brief description of the unique characteristics of each physiographic region (mentioned in 1 above) within the Station boundaries.

3. Highlights of research within the Station territory for each decade beginning with 1900-1910 and ending with the half-decade 1970-1975. The following types of information should be included in each decade writeup:
   a. Major resource problems needing research attention.
   b. Highlights of research efforts designed to find solutions to resource problems including construction of major facilities and establishment of experimental forests and ranges.
   c. Significant research results contributing to problem solutions. These should receive major emphasis.
   d. Changes in Station boundaries.
   e. Major organizational changes, including changes in the Directorship.

4. Include a bibliography of all source materials located during research for the paper. Include the location of these materials.

5. Include a roster of all professional researchers who have worked for the Station from its beginning.

INSPECTION AND ACCEPTANCE

Acceptance of the manuscript outline, project plan, the review draft, and the draft for final Forest Service editing will be determined by the Station Information Officer.
MEASUREMENT AND PAYMENT

Upon acceptance of the manuscript outline and project plan, the writer is entitled to receive partial payment not to exceed 20 percent of the total project price. Upon acceptance of the review manuscript, the writer is entitled to receive partial payment not to exceed 40 percent of the total project price. Upon acceptance of the draft for final editing, the writer is entitled to receive the remaining 40 percent of the project price. Each payment will be made upon submission of an invoice to the Government.
UNITED STATES DEPARTMENT OF AGRICULTURE

LISTING OF EMPLOYMENT OPENINGS

(This clause is applicable pursuant to 41 CFR 50–250 if this contract is for $2,500 or more.)

(a) The contractor agrees, in order to provide special emphasis to the employment of qualified disabled veterans and veterans of the Vietnam era, that all suitable employment openings of the contractor which exist at the time of the execution of this contract and those which occur during the performance of this contract, including those not generated by this contract and including those occurring at an establishment other than the one wherein the contract is being performed but excluding those of independently operated corporate affiliates, shall be offered for listing at an appropriate local office of the State employment service system wherein the opening occurs and to provide such reports to such local office regarding employment openings and hires as may be required: Provided, That if this contract is for less than $10,000 or if it is with a State or local government the reports set forth in paragraphs (c) and (d) are not required.

(b) Listing of employment openings with the employment service system pursuant to this clause shall be made at least concurrently with the use of any other recruitment service or effort and shall involve the normal obligations which attach to the placing of a bona fide job order, including the acceptance of referrals of veterans and nonveterans. This listing of employment openings does not require the hiring of any particular job applicant or from any particular group of job applicants, and nothing herein is intended to relieve the contractor from any requirements in any statutes, Executive orders, or regulations regarding nondiscrimination in employment.

(c) The reports required by paragraph (a) of this clause shall include, but not be limited to, periodic reports which shall be filed at least quarterly with the appropriate local office or, where the contractor has more than one establishment in a State, with the central office of the State employment service. Such reports shall indicate for each establishment: (i) the number of individuals who were hired during the reporting period, (ii) the number of those hired who were disabled veterans, and (iii) the number of those hired who were nondisabled veterans of the Vietnam era. The contractor shall submit a report within 30 days after the end of each reporting period wherein any performance is made under this contract. The contractor shall maintain copies of the reports submitted until the expiration of 1 year after final payment under the contract, during which time they shall be made available, upon request, for examination by any authorized representatives of the contracting officer or of the Secretary of Labor.

(d) Whenever the contractor becomes contractually bound by the listing provisions of this clause, he shall advise the employment service system in each State wherein he has establishments of the name and location of each such establishment in the State. As long as the contractor is contractually bound to these provisions and has so advised the State employment system, there is no need to advise the State system of subsequent contracts. The contractor may advise the State system when it is no longer bound by this contract clause.

(e) This clause does not apply to the listing of employment openings which occur and are filed outside of the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, and the Virgin Islands.

(f) This clause does not apply to openings which the contractor proposes to fill from within his own organization or to fill pursuant to a customary and traditional employer-union hiring arrangement. This exclusion does not apply to a particular opening once an employer decides to consider applicants outside of his own organization or employer-union arrangement for that opening.

(g) As used in this clause:

(1) "All suitable employment openings" includes, but is not limited to, openings which occur in the following job categories: Production and nonproduction; plant and office; laborers and mechanics; supervisory and nonsupervisory; technical; and executive, administrative, and professional openings which are compensated on a salary basis of less than $18,000 per year. The term includes full-time employment, temporary employment of more than 3 days duration, and part-time employment. It does not include openings which the contractor proposes to fill from within his own organization or to fill pursuant to a customary and traditional employer-union hiring arrangement.

(2) "Appropriate office of the State employment service system" means the local office of the Federal-State national system of public employment offices with assigned responsibility for serving the area of the establishment where the employment opening is to be filled, including the District of Columbia, the Commonwealth of Puerto Rico, Guam, and the Virgin Islands.

(3) "Openings which the contractor proposes to fill from within his own organization" means employment openings for which no consideration will be given to persons outside the contractor's own organization (including any affiliates, subsidiaries, and parent companies), and includes any openings which the contractor proposes to fill from regularly established "re-call" or "re-hire" lists.

(4) "Openings which the contractor proposes to fill pursuant to a customary and traditional employer-union hiring arrangement" means employment openings for which no consideration will be given to persons outside of a special hiring arrangement, including openings which the contractor proposes to fill from union halls, which is part of the customary and traditional hiring relationship which exists between the contractor and representatives of his employees.

(5) "Disabled veteran" means a person entitled to disability compensation under laws administered by the Veterans Administration for a disability rated at 30 percent or more, or a person whose discharge or release from active duty was for a disability incurred or aggravated in line of duty.

FORM AD-432 (REVISED 5-73)
FPR (41 CFR 1-12,1102-2)
(6) "Veteran of the Vietnam era" means a person (A) who (i) served on active duty with the Armed Forces for a period of more than 180 days, any part of which occurred after August 5, 1964, and was discharged or released therefrom with other than a dishonorable discharge, or (ii) was discharged or released from active duty for service-connected disability if any part of such duty was performed after August 5, 1964, and (B) who was so discharged or released within the 48 months preceding his application for employment covered by this clause.

(h) If any disabled veteran or veteran of the Vietnam era believes that the contractor (or any first-tier subcontractor) has failed or refuses to comply with the provisions of this contract clause relating to giving special emphasis in employment to veterans, such veteran may file a complaint with the veterans' employment representative at a local State employment service office who will attempt to informally resolve the complaint and then refer the complaint in writing to the contractor for a report on the attempt to resolve the matter to the State office of the Veterans' Employment Service of the Department of Labor. Such complaint shall then be promptly referred through the Regional Manpower Administrator to the Secretary of Labor who shall investigate such complaint and shall take such action thereon as the facts and circumstances warrant consistent with the terms of this contract and the laws and regulations applicable thereto.

(i) The contractor agrees to place this clause (excluding this paragraph (i)) in any subcontract directly under this contract.
EMPLOYMENT OF THE HANDICAPPED

(Authority: Section 503, Pub. Law 93-112, 87 Stat. 393 (29 U.S.C., 793) and Executive Order 11758.)

(This clause applies to all nonexempt contracts and subcontracts which exceed $2,500 as follows: (1) Part A applies to contracts and subcontracts which provide for performance in less than 90 days, (2) Parts A and B apply to contracts and subcontracts which provide for performance in 90 days or more and the amount of the contract or subcontract is less than $500,000, and (3) Parts A, B, and C apply to contracts and subcontracts which provide for performance in 90 days or more and the amount of the contract or subcontract is $500,000 or more.)

PART A

(a) The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices such as the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising; layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

(b) The Contractor agrees that if a handicapped individual files a complaint with the Contractor that he is not complying with the requirements of the Act, he will (1) investigate the complaint and take appropriate action consistent with the requirements of 20 CFR 741.29 and (2) maintain on file for three years, the record regarding the complaint and the actions taken.

(c) The Contractor agrees that, if a handicapped individual files a complaint with the Department of Labor that he has not complied with the requirements of the Act, (1) he will cooperate with the Department in its investigation of the complaint, and (2) he will provide all pertinent information regarding his employment practices with respect to the handicapped.

(d) The Contractor agrees to comply with the rules and regulations of the Secretary of Labor in 20 CFR Ch. VI, Part 741.

(e) In the event of the Contractor's noncompliance with the requirements of this clause, the contract may be terminated or suspended in whole or in part.

(f) This clause shall be included in all subcontracts over $2,500.

PART B

(g) The Contractor agrees (1) to establish an affirmative action program, including appropriate procedures consistent with the guidelines and the rules of the Secretary of Labor, which will provide the affirmative action regarding the employment and advancement of the handicapped required by P.L. 93-112, (2) to publish the program in his employee's or personnel handbook or otherwise distribute a copy to all personnel (3) to review his program on or before March 31 of each year and to make such changes as may be appropriate, and (4) to designate one of his principal officials to be responsible for the establishment and operation of the program.

(h) The Contractor agrees to permit the examination by appropriate contracting agency officials of the Assistant Secretary for Employment Standards or his designee, of pertinent books, documents, papers and records concerning his employment and advancement of the handicapped.

(i) The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Assistant Secretary for Employment Standards, provided by the contracting officer stating contractor's obligation under the law to take affirmative action to employ and advance in employment qualified handicapped employees and applicants for employment and the rights and remedies available.

(j) The Contractor will notify each labor union or representative of workers with which he has a collective bargaining agreement or other contract understanding, that the contractor is bound by the terms of Section 503 of the Rehabilitation Act and is committed to take affirmative action to employ and advance in employment physically and mentally handicapped individuals.

PART C

(k) The Contractor agrees to submit a copy of his affirmative action program to the Assistant Secretary for Employment Standards within 90 days after the award to him of a contract or subcontract.

(l) The Contractor agrees to submit a summary report to the Assistant Secretary for Employment Standards, by March 31 of each year during performance of the contract, and by March 31 of the year following completion of the contract, in the form prescribed by the Assistant Secretary, covering employment and complaint experience, accommodations made and all steps taken to effectuate and carry out the commitments set forth in the affirmative action program.
Service Contract Act of 1965, As Amended

This contract, to the extent that it is of the character to which the Service Contract Act of 1965 (79 Stat. 1034; 41 U.S.C. 351) applies, is subject to the following provisions and to all other applicable provisions of the Act and regulations of the Secretary of Labor thereunder.

(a) Compensation. Each service employee employed in the performance of this contract by the Contractor or any subcontractor shall be paid not less than the minimum monetary wage and shall be furnished fringe benefits in accordance with the wages and fringe benefits determined by the Secretary of Labor or his authorized representative, as specified in any attachment to this contract. If there is such an attachment, any class of service employees which is not listed therein, but which is to be employed under this contract, shall be classified by the Contractor so as to provide a reasonable relationship between such classifications and those listed in the attachment, and shall be paid such monetary wages and furnished such fringe benefits as are determined by agreement of the interested parties, who shall be deemed to be the contracting agency, the Contractor, and the employees who will perform on the contract or their representatives. If the interested parties do not agree on a classification or reclassification which is, in fact, conformable, the Contracting Officer shall submit the question, together with his recommendation, to the Office of Special Wage Standards, Employment Standards Administration (ESA), of the Department of Labor for final determination. Failure to pay such employees the compensation agreed upon by the interested parties or finally determined by the Administrator or his authorized representative shall be a violation of this contract. No employee engaged in performing work on this contract shall in any event be paid less than the minimum wage specified under section 6(a)(1) of the Fair Labor Standards Act of 1938, as amended.

(b) Adjustment. If, as authorized pursuant to section 4(d) of the Service Contract Act of 1965, as amended, the term of this contract is more than one year, the minimum monetary wages and fringe benefits required to be paid or furnished thereunder to service employees shall be subject to adjustment after one year and not less often than every two years, pursuant to wage determinations to be issued by the Employment Standards Administration of the Department of Labor as provided in such Act.

(c) Obligation to furnish prime benefits. The Contractor or subcontractor may discharge the obligation to furnish fringe benefits specified in the attachment or determined conformably thereto by furnishing any equivalent combinations of fringe benefits, or by making equivalent or differential payments in cash in accordance with the applicable rules set forth in 29 CFR Part 4, Subparts B and C, and not otherwise.

(d) Minimum wage. In the absence of a minimum wage attachment for this contract, neither the Contractor nor any subcontractor under this contract shall pay any of his employees performing work under the contract (regardless of whether they are service employees) less than the minimum wage specified by section 6(a)(1) of the Fair Labor Standards Act of 1938. Nothing in this provision shall relieve the Contractor or any subcontractor of any other obligation under law or contract for the payment of a higher wage to any employee.

(e) Obligations attributable to predecessor contracts. If this contract succeeds a contract, subject to the Service Contract Act of 1965, as amended, under which substantially the same services were furnished and service employees were paid wages and fringe benefits, provided for in a collective bargaining agreement, then in the absence of a minimum wage attachment for this contract neither the Contractor nor any subcontractor under this contract shall pay any service employee performing any of the contract work less than the wages and fringe benefits, provided for in such collective bargaining agreements, to which such employee would be entitled if employed under the predecessor contract, including accrued wages and fringe benefits and any prospective increases in wages and fringe benefits provided for under such agreement. No Contractor or subcontractor under this contract may be relieved of the foregoing obligation unless the Secretary of Labor or his authorized representative determines that the collective bargaining agreement applicable to service employees employed under the predecessor contract was not entered into as a result of arms-length negotiations, or finds, after a hearing as provided in Department of Labor regulations, 29 CFR 4.10, that the wages and fringe benefits provided for in such agreement are substantially at variance with those which prevail for services of a character similar in the locality.

(f) Notification to employees. The Contractor and any subcontractor under this contract shall notify each service employee commencing work on this contract of the minimum monetary wage and any fringe benefits required to be paid pursuant to this contract, or shall post a notice of such wages and benefits in a prominent and accessible place at the worksite, using such poster as may be provided by the Department of Labor.

(g) Safe and sanitary working conditions. The Contractor or subcontractor shall not permit any part of the services called for by this contract to be performed in buildings or surroundings or under working conditions provided by or under the control or supervision of the Contractor or subcontractor which are unsanitary or hazardous or dangerous to the health or safety of service employees engaged to furnish these services, and the Contractor or subcontractor shall comply with the safety and health standards applied under 29 CFR Part 1925.

(h) Records. The Contractor and each subcontractor performing work subject to the Act shall make and maintain for 3 years from the completion of the work records containing the information specified in subparagraphs (1) through (5) of this paragraph for each employee subject to the Act and shall make them available for inspection and transcription by authorized representatives of the Employment Standards Administration of the U.S. Department of Labor.

(1) His name and address.

(2) His work classification or classifications, rate or rates of monetary wages and fringe benefits provided, rate or rates of fringe benefit payments in lieu thereof, and total daily and weekly compensation.

(3) His daily and weekly hours so worked.

(4) Any deductions; rebates, or refunds from his total daily or weekly compensation.

(5) A list of monetary wages and fringe benefits for those classes of service employees not included in the minimum wage attachment to this contract, but for which such wage rates or fringe benefits have been determined by the interested parties or by the Administrator or his authorized representative pursuant to the Labor Standards clause in paragraph (a) of this clause. A copy of the report required in paragraph (m)(1) of this clause shall be deemed to be such a list.
(i) Withholding of payment and termination of contract. The Contracting Officer shall withhold or cause to be withheld from the Government Prime Contractor under this or any other Government contract with the prime Contractor such sums as he, or an appropriate officer of the Department of Labor, decides may be necessary to pay underpaid employees. Additionally, any failure to comply with the requirements of this clause relating to the Service Contract Act of 1965 may be grounds for termination of the right to proceed with the contract work. In such event, the Government may enter into other contracts or arrangements for completion of the work, charging the Contractor in default with any additional cost.

(j) Subcontractors. The Contractor agrees to insert this clause relating to the Service Contract Act of 1965 in all subcontracts. The term “Contractor” as used in this clause in any subcontract, shall be deemed to refer to the subcontractor, except in the term “Government Prime Contractor.”

(k) Service employee. As used in this clause relating to the Service Contract Act of 1965, the term “service employee” means guards, watchmen, and any person engaged in a recognized trade or craft, or other skilled mechanical craft, or in unskilled, semiskilled, or skilled manual labor occupations; and any other employee including a foreman or supervisor in a position having trade, craft, or laboring experience as the paramount requirement; and shall include all such persons regardless of any contractual relationship that may be alleged to exist between a Contractor or subcontractor and such persons.

(1) Comparable rates. The following classes of service employees expected to be employed under the contract with the Government would be subject, if employed by the contracting agency, to the provisions of 5 U.S.C. 5341 and would, if so employed, be paid not less than the following rates of wages and fringe benefits:

<table>
<thead>
<tr>
<th>Employee Class</th>
<th>Basic Rate Per Hour</th>
<th>% of pay for H &amp; I</th>
<th>Paid Holidays</th>
<th>Paid Vacation</th>
<th>% of pay for Retirement</th>
</tr>
</thead>
</table>

(See attached listing)

(m) Contractor’s report.

(1) If there is a wage determination attachment to this contract and one or more classes of service employees which are not listed therein are to be employed under the contract, the Contractor shall report to the Contracting Officer the monetary wages to be paid and the fringe benefits to be provided each such class of service employee. Such report shall be made promptly as soon as such compensation has been determined, as provided in paragraph (a) of this clause.

(2) If wages to be paid or fringe benefits to be furnished any service employees employed by the Government prime Contractor or any subcontractor under the contract are provided for in a collective bargaining agreement which is or will be effective during any period in which the contract is being performed, the Government prime Contractor shall report such fact to the Contracting Officer, together with full information as to the application and accrual of such wages and fringe benefits, including any prospective increases, to service employees engaged in work on the contract, and a copy of the collective bargaining agreement. Such report shall be made upon commencing performance of the contract, in the case of collective bargaining agreements effective at such time, and in the case of such agreements or provisions or amendments thereof effective at a later time during the period of contract performance, such agreements shall be reported promptly after negotiation thereof.

(n) Exemptions. This clause relating to the Service Contract Act of 1965 shall not apply to the following:

(1) Any contract of the United States or District of Columbia for construction, alteration, and/or repair, including painting and decorating of public buildings or public works;

(2) Any work required to be done in accordance with the provisions of the Walsh-Healey Public Contracts Act (49 Stat. 2036);

(3) Any contract for the carriage of freight or personnel by vessel, airplane, bus, truck, express, railway line, or oil or gas piple where published tariff rates are in effect, or where such carriage is subject to rates covered by section 22 of the Interstate Commerce Act;

(4) Any contract for the furnishing of services by radio, telephone, telegraph, or cable companies, subject to the Communications Act of 1934;

(5) Any contract for public utility services, including electric light and power, water, steam, and gas;

(6) Any employment contract providing for direct services to a Federal agency by an individual or individuals;

(7) Any contract with the Post Office Department (U.S. Postal Service), the principal purpose of which is the operation of postal contract stations;

(8) Any services to be furnished outside the United States.

For geographic purposes, the “United States” is defined in section 8(d) of the Service Contract Act to include any State of the United States, the District of Columbia, Puerto Rico, the Virgin Islands, Outer Continental Shelf Lands, as defined in the Outer Continental Shelf Lands Act, American Samoa, Guam, Wake Island, Eniwetok Atoll, Kwajalein Atoll, and Johnston Island. It does not include any other territory under the jurisdiction of the United States or any United States base or possession within a foreign country;

(9) Any of the following contracts exempted from all provisions of the Service Contract Act of 1965, pursuant to section 4(b) of the Act, which exhibits the Secretary of Labor, prior to amendment of such section by Public Law 92-473, found to be necessary and proper in the public interest or so avoid serious impairment of the conduct of Government business:

(i) Contracts entered into by the United States with common carriers for the carriage of mail by rail, air (except air stars routes), bus, and ocean vessel, where such carriage is performed on regularly scheduled runs of the trains, airplanes, buses, and vessels over regularly established routes and accounts for an insubstantial portion of the revenue therefrom;

(ii) Any contract entered into by the U.S. Postal Service with an individual owner-operator for mail service where it is not contemplated at the time the contract is made that such owner-operator will hire any service employee to perform the services under the contract except for short periods of vacation time or for unexpected contingencies or emergency situations such as illness or accident.
(o) Special employees. Notwithstanding any of the provisions in paragraphs (b) through (1) of this clause, relating to the Service Contract Act of 1965, the following employees may be employed in accordance with the following variations, tolerances, and exemptions, which the Secretary of Labor, pursuant to section 10b of the Act prior to its amendment by Public Law 92-473, found to be necessary and proper in the public interest or to avoid serious impairment of the conduct of Government business:

(1)(i) Apprentices, student-learners, and workers whose earning capacity is impaired by age, physical, or mental deficiency or injury may be employed at wages lower than the minimum wages otherwise required by section 2(a)(1) or 2(b)(11) of the Service Contract Act of 1965, without diminishing any fringe benefits or cash payments in lieu thereof required under section 2(a)(2) of that Act, in accordance with the procedures prescribed for the employment of apprentices, student-learners, handicapped persons, and handicapped clients of sheltered workshops under section 14 of the Fair Labor Standards Act of 1938, in the regulations issued by the Administrator.

(ii) The Administrator will issue certificates under the Service Contract Act of 1965 for the employment of apprentices, student-learners, handicapped persons, or handicapped clients of sheltered workshops not subject to the Fair Labor Standards Act of 1938, or subject to different minimum rates of pay under the two acts, authorizing appropriate rates of minimum wages (but without changing requirements concerning fringe benefits or supplementary cash payments in lieu thereof), applying procedures prescribed by the applicable regulations issued under the Fair Labor Standards Act of 1938 (29 CFR Parts 520, 521, 524, and 525);

(iii) The Administrator will also withdraw, annul, or cancel such certificates in accordance with the regulations in Parts 525 and 528 of Title 29 of the Code of Federal Regulations.

(2) Any employee engaged in an occupation in which he customarily and regularly receives more than $20 a month in tips may have the amount of his tips credited by his employer against the minimum wage required by section 2(a)(1) or section 2(b)(11) of the Act in accordance with the regulations in 29 CFR Part 531. Provided, however, That the amount of such credit may not exceed 80 cents per hour.
Examination of Records by Comptroller General

(a) This clause is applicable if the amount of this contract exceeds $2,500 and was entered into by means of negotiation, including small business restricted advertising, but is not applicable if this contract was entered into by means of formal advertising.

(b) The Contractor agrees that the Comptroller General of the United States or any of his duly authorized representatives shall, until the expiration of 3 years after final payment under this contract or such lesser time specified in either Appendix M of the Armed Services Procurement Regulation or the Federal Procurement Regulations Part 1–20, as appropriate, have access to and the right to examine any directly pertinent books, documents, papers, and records of the Contractor involving transactions related to this contract.

(c) The Contractor further agrees to include in all his subcontracts hereunder a provision to the effect that the subcontractor agrees that the Comptroller General of the United States or any of his duly authorized representatives shall, until the expiration of 3 years after final payment under the subcontract or such lesser time specified in either Appendix M of the Armed Services Procurement Regulation or the Federal Procurement Regulations Part 1–20, as appropriate, have access to and the right to examine any directly pertinent books, documents, papers, and records of such subcontractor, involving transactions related to the subcontract. The term “subcontract” as used in this clause excludes (1) purchase orders not exceeding $2,500 and (2) subcontracts or purchase orders for public utility services at rates established for uniform applicability to the general public.

(d) The periods of access and examination described in (b) and (c), above, for records which relate to (1) appeals under the “Disputes” clause of this contract, (2) litigation or the settlement of claims arising out of the performance of this contract, or (3) costs and expenses of this contract as to which exception has been taken by the Comptroller General or any of his duly authorized representatives, shall continue until such appeals, litigation, claims, or exceptions have been disposed of.

Buy American Act

The Contractor, subcontractors, material men, and suppliers, must comply with the Buy American Act of March 3, 1933 (41 USC 10a–10d) and Executive Order 10552 of December 17, 1954 (19 F.R. 8723). (In substance the above require use of domestic materials, except as otherwise authorized by the Act and Executive Order.)

Contract Work Hours and Safety Standards Act

(The following clause is applicable if this contract exceeds $2,500.)

This contract, to the extent that it is of a character specified in the Contract Work Hours and Safety Standards Act (40 U.S.C. 327–330), is subject to the following provisions and to all other applicable provisions and exceptions of such Act and the regulations of the Secretary of Labor thereunder:

(a) Overtime Requirements.—No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any workweek in which he is employed on such work to work in excess of eight hours in any calendar day or in excess of forty hours in such workweek on work subject to the provisions of the Contract Work Hours and Safety Standards Act unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all such hours worked in excess of eight hours in any calendar day or in excess of forty hours in such workweek, whichever is the greater number of overtime hours.

(b) Violation; Liability for Unpaid Wages; Liquidated Damages.—In the event of any violation of the provisions of paragraph (a), the Contractor and any subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violation of the provisions of paragraph (a) in the sum of $10 for each calendar day on which such employee was required or permitted to be employed on such work in excess of eight hours or in excess of the standard workweek of forty hours without payment of the overtime wages required by paragraph (a).

(c) Withholding for Unpaid Wages and Liquidated Damages.—The Contracting Officer may withhold from the Government Prime Contractor, from any moneys payable on account of work performed by the Contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the provisions of paragraph (b).

(d) Subcontracts.—The Contractor shall insert paragraphs (a) through (d) of this clause in all subcontracts, and shall require their inclusion in all subcontracts of any tier.

(e) Records.—The Contractor shall maintain payroll records containing the information specified in 29 CFR 516.2(a). Such records shall be preserved for three years from the completion of the contract.

In connection with the performance of work under this contract, the Contractor agrees not to employ any person undergoing sentence of imprisonment except as provided by Public Law 99–178, September 10, 1985 (10 U.S.C. 6932(c)(2)) and Executive Order 11555, December 29, 1973.
(a) The performance of work under this contract may be terminated, in whole or in part, by the Government whenever for any reason the Contracting Officer shall determine that such termination is in the best interest of the Government. Termination of work hereunder shall be effected by delivery to the Contractor of a Notice of Termination specifying the extent to which performance of work under the contract is terminated and the date upon which such termination becomes effective.

(b) After receipt of the Notice of Termination the Contractor shall cancel his outstanding commitments hereunder covering the procurement of materials, supplies, equipment, and miscellaneous items. In addition, the Contractor shall exercise all reasonable diligence to accomplish the cancellation or diversion of his outstanding commitments covering personal services and extending beyond the date of such termination to the extent that they relate to the performance of any work terminated by the notice. With respect to such canceled commitments the Contractor agrees to (1) settle all outstanding liabilities and all claims arising out of such cancellation of commitments, with the approval or ratification of the Contracting Officer, to the extent he may require, which approval or ratification shall be final for all purposes of this clause, and (2) assign to the Government, in the manner, at the time, and to the extent directed by the Contracting Officer, all of the rights, title, and interest to all rights, title, and interest in and to the orders and subcontracts so terminated, in which case the Government shall have the right, in its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts.

(c) The Contractor shall submit his termination claim to the Contracting Officer promptly after receipt of a Notice of Termination, but in no event later than one year from the effective date thereof, unless one or more extensions in writing are granted by the Contracting Officer upon written request of the Contractor within such one-year period or authorized extension thereof. Upon failure of the Contractor to submit his termination claim within the time required by the contracting agency's procedures in effect as of the date of execution of this contract, determine on the basis of information available to him, the amount, if any, due to the Contractor by reason of the termination and shall thereupon pay to the Contractor the amount so determined.

(d) Any determination of costs under paragraph (c) shall be governed by the cost principles set forth in subpart 1-15.3 of the Federal Procurement Regulations (41 CFR 1-15.3), as in effect on the date of this contract, except that if the Contractor is not an educational institution the determination shall be governed by (41 CFR 1-15.2).

(e) Subject to the provisions of paragraph (c) above, and subject to any review required by the contracting agency's procedures in effect as of the date of execution of the contract, the contractor and the Contracting Officer may agree upon the whole or any part of the amount or amounts to be paid to the Contractor by reason of the termination under this clause, which amount or amounts may include any reasonable cancellation charges thereby incurred by the Contractor and any reasonable loss upon outstanding commitments for personal services which he is unable to cancel; Provided, however, That in connection with any outstanding commitments for personal services which the Contractor is unable to cancel, the Contractor shall have exercised reasonable diligence to divert such commitments to his other activities and operations. Any such agreement shall be embodied in an amendment to this contract and the Contractor shall be paid the agreed amount.

(f) The Government may from time to time, under such terms and conditions as it may prescribe, make partial payments against costs incurred by the Contractor in connection with the terminated portion of this contract, whenever, in the opinion of the Contracting Officer, the aggregate of such payments is within the amount to which the Contractor will be entitled hereunder. If the total of such payments is in excess of the amount finally agreed or determined to be due under this clause, such excess shall be payable by the Contractor to the Government upon demand; Provided, That if such excess is not so paid upon demand, interest thereon shall be payable by the Contractor to the Government at the rate of 6 percent per annum, beginning 30 days from the date of such demand.

(g) The Contractor agrees to transfer title to the Government and deliver in the manner, at the times, and to the extent, if any, directed by the Contracting Officer, such information and items which, if the contract had been completed, would have been required to be furnished to the Government, including:

(1) Completed or partially completed plans, drawings, and information; and

(2) Materials or equipment produced or in process or acquired in connection with the performance of the work terminated by the notice.

Other than the above any termination inventory resulting from the termination of the contract may, with the written approval of the Contracting Officer, be sold or acquired by the Contractor under the conditions prescribed by and at a price or prices approved by the Contracting Officer. The proceeds of any such disposition shall be applied in reduction of any payments to be made by the Government to the Contractor under this contract or shall otherwise be credited to the price or cost of work covered by this contract or paid in such other manner as the Contracting Officer may direct. Pending final disposition of property arising from the termination, the Contractor agrees to take such action as may be necessary, or as the Contracting Officer may direct, for the protection and preservation of the property related to this contract which is in the possession of the Contractor and in which the Government has or may acquire an interest.

(h) Any disputes as to questions of fact which may arise hereunder shall be subject to the "Disputes" clause of this contract.
PROPOSAL--STATION HISTORY PROJECT

The basic components of the Station's research program appear to be as follows:

1. Silviculture
   a. West-side Douglas-fir region
   b. East-side pine type
2. Fire-related studies
3. Forest survey
4. Waste utilization
5. Insect, disease, and pest control research
6. Research Natural Areas
7. Experimental forests
8. Cooperative forests
9. Reforestation
10. Range research
11. Products research
12. Economics research

All of the topics listed exist, to one degree or another, throughout the history of the Pacific Northwest Station. It is suggested that they be interwoven throughout the text.

Since this is an historical document, the time line is important in developing the story line and it might be preferable to divide the Station history into major time episodes.

Suggested rough story line:

1. Message from Station Director Buckman referring to Bicentennial and the place of research in forest resource management. Summarize key contributions of research.
2. Station prehistory including establishment legislation and other significant legislation such as Capper Report, 1925 Federal Appropriation Act, Clarke-McNary Act, and the McSweeney-McNary Act.
3. The early years and the development of research (1924-1938). This section can be divided into pre-depression and depression era, although it appears from Cowlin that the effects of the depression were relatively mild and short-term in nature. In this section it is important to stress the research vectors taken under the leadership of Director Munger. Research efforts during this time frame were directed, mainly, at forest protection in the areas of fire, insect and disease, and the reseeding of previously burned or logged areas. The forest survey began during this period.

4. The period of 1938-1940 under the direction of Director Wycoff. Research into sustained yield management of forest lands was stressed. Research into range management seems to come into its own.

5. The war years (1941-1945). Research direction changes due to mobilization for the war effort. Hardwood species receive additional attention for use in the developing aircraft industry. Economic studies are tied into the war effort. The point during this period seems to be the tremendous demand for forest products and the revision of research goals to meet this demand.

6. The postwar years and research under Director Hall (1945-1950). Hall is reported to have focused research into methods of intensive management of second-growth forests. The Forest Products Division was transformed into the Forest Utilization Service. Second-growth studies were accelerated and soil and flood control research efforts were established. The utilization of forest products in the area of "waste" was emphasized.

7. Period of expansion in research efforts and programs (1951-1963). This period is best characterized by the acquisition of the Forest Insect and Disease responsibilities and perhaps this should be the prevailing theme for this section. Many additional projects were started or expanded during this time frame. Work continued in all aspects of the silviculture of Douglas-fir. Additional studies in economics, rodent control, soils, and cloud seeding also took place and should not be neglected in the narrative.

8. The last decade-plus two (1963-1975). This era in the development of Station research programs might best be characterized as the most radical in terms of research technologies. Increasing attention is placed on the investigation of advanced logging techniques and the identification of a variety of microbial and acceptable chemical agents for the control of forest pests. Hydrology, genetics, and recreation research share the stage with studies in forest products utilization and pollution.

Suggestions about photos for station history

Louise/Karen:

These 28 photos are the best I've come up with from Station files. The following is a list of my comments to help you in your evaluating -- why I think some are musts, why others can be chosen among or are marginal.

#1 -- The Ford car I consider a must. It figures in the earliest history of the Station; also is a good photo with Station name clearly on side.

#2 & #3 -- I'm content with either of these; please choose on artistic basis for the layout. #3 had the virtue of showing Thornton Munger, but is not essential.

#4 & #5 -- We'd do well to have something showing the colossal size of timber in this region. I lean to #4, the point being that there is a fair-sized cave in a tree. But I don't insist on it, or on either of these, for that matter.

#6 -- I had trouble finding Wind River photos which show something happening. This one of the fire pots would do the job.

#7 -- This photo or something very much like it is a must for the section of text on the forest survey of the 1930's.

#8 & #9 -- Seems to me we should have at least one industrial photo. I prefer #8 for its clarity and ease of identification.

#10 & #11 -- I'm heavily in favor of #11 for sake of drama. Perhaps #10 might be used if we feel short of pics with people doing things.

#12 -- A must, because of the era clothing and human interest.

#13 -- We're short on pics of devices and machinery, although maybe that doesn't matter much. How about a few artist's sketches of things like this haze meter?

#14 -- I don't quite call this a must, but do like it because of graphic illustration of waste in early lumbering; would go well with a point in the text. I'd say use it if we can.
#15-#16 -- For the sake of getting in rangeland material, we ought to consider something like this pair. I'm content with either -- please choose on layout basis.

#17 -- A must unless there's something fatally wrong with photo quality or composition. Nicely illustrates a section of the text on New Deal programs.

#18 & #19 -- These are merely the best on Isaac's kite which I could turn up in files. The Forest History article has a much better photo of Isaac standing by his kite; if we can't get it from Forest History Society or somewhere, I'd like an artist's sketch.

#20 -- I'd say this is a must, to get in another mention of rangeland and to present a highly unusual photo besides.

#21 -- I have no idea what's happening in this photo, but liked it. What do you think?

#22 -- This balloon logging may not turn out to have enough to do with the Station to merit inclusion, but see what you think of this from the layout viewpoint.

#23 -- I like this immensely for its scope and clarity, and for saying much about rangeland. We'd have to use it large, maybe a full page, but I'd favor it.

#24 -- I liked the pattern on this one, but don't know if it's really appropriate topically.

#25 & #26 -- I'm content with either to illustrate mention of Natural Areas; choose on layout basis, please.

#26 & #27 -- If Tarrant becomes Director, I think it makes the natural choice; if he doesn't, maybe I lean to the other one.
As I mentioned to Karen, I think there should be another 4 to 6 photos selected by you folks to show current Station activities -- insect research, or recreation, or whatever. That way, you can stress whatever you like among current topics. I would suggest that something from Alaska might be included in this batch -- maybe the work on fish?

In general, I'd like to run photos as large as possible. I'd like a few pieces of sketchwork -- maybe the haze meter, Isaac and his kite, and perhaps two group sketches -- one showing the branches or cones of the major forest species (Douglas fir, spruce, hemlock, cedar, ponderosa pine -- any I've left out) and maybe one doing the same on rangeland grasses. Sound feasible? This would provide a couple of educational points for the readership, as well as dressing up the book.

A final point on dressing up the book. Louise, I'm going to try talk you into buying a historic print I know of, by the pioneer woods photographer Darius Kinsey. I would hope we could get it for $35-$50, though I can't keep track of inflation these days. It is a magnificent shot of early day loggers, one of the great historic photos ever shot in this region. I'll inquire about availability and price, and tell you more later. Anyway, if we can get the print, it would make a fine frontispiece, or some other use early in the book.

That's all that comes to mind at the moment. I have photocopies of the photos and captions, so can refer to them if you have questions.
Project Plan and Outline

for a History of Pacific NW Forest and Range Experiment Station

The history will total about 20,000 words, virtually the same length as the history of the Northeastern Station done a few years ago. For illustration, I'll select about two dozen photos from the Station files. I'd say perhaps 2/3 of them should be the most dramatic historic shots to be found -- Leo Isaac flying his batwing kite during his seed distribution experiments might be an example -- and the rest should be a good selection showing more current work of the Station. (Bob Cowlin has given me a group photo of all the Directors except the deceased Wyckoff, and I think it's preferable to separate mug shots.) Probably a map showing the extent of the Station's current facilities and activities would be a good idea too, although I think it should be kept as simple and easily read as possible.

I won't know the exact number of sub-headings with the text until I begin writing in earnest, but I'd estimate 12 to 15. As the first example on the outline suggests, each segment will be introduced with an appropriate (and lively) quote, perhaps set off in boldface italics. For instance, the quote about the gooseberry bush experimenter who came calling, taken from one of the Station's earliest reports, good-humoredly makes the point that the Station at first was an unknown quantity and somewhat mystifying besides. The next segment, on the geographic trove of resources which the Station was set up to work on, might be introduced with a quote from the early botanical observations by David Douglas or Meriwether Lewis. Similarly, the onset of the Depression and the outbreak of World War II show up in graphic quotes in the Station Directors' monthly reports. In every case,
the quotes chosen will be lively as well as apt, and will help to make the history more attractive and readable.

Another step to make the history appealing to the public: a catchy title. I'll be glad for any suggestions or guidance on this. My current nomination is something like the following which would stress both the "forest" and "range" in the Station's name and activities:

Mountains of Timber, Horizons of Grass
A History of the Pacific Northwest Forest and Range Experiment Station, 1924-1975

As for the style and approach, I believe I should mix in with the research accomplishments considerable material about the Station's people and the Northwest's forest resources. If this is to be a history thoroughly palatable to the public, it should include anecdotes and descriptive scenes. The Cowlin manuscript will serve as a spine to present the Station's research activities and major historical developments; in editing it down, I'll embellish with details from the archival material and interviews. And, a final point: the history throughout will stress the benefits of research whenever the point can be well made. There's a quote from Munger which may be appropriate: "From the start, I was not interested in research for research's sake but wanted to see research put into use, and so far as I had any influence, we did all we could to get the results before the public."

My working schedule will be to present a rough draft of approximately 20,000 words by the end of May, then after the reviews are completed to revise promptly and present the two copies of the manuscript for final editing. This might be accomplished by the end of July if reviews of the first draft are done promptly.
Manuscript Outline

1. Introduction

One caller, name unknown, who evidently saw the name on the door, came in to ask what we were experimenting with, saying that he too was a professional experimenter and worked with everything from lumber to gooseberry bushes -- he had once persuaded one of the latter to be a tree.

--Station Director Thornton T. Munger, in his monthly report for January, 1925

500-1000 words about the Station's growth and spectrum of activities.

2. The Land

1000-1500 words on the physiographic region, including brief recital of botanical findings by explorers and early naturalists, and beginnings of lumber industry in the Pacific Northwest.

3. The Skein of Law

500-1000 words on key events, such as establishment of the Branch of Research as a separate division within the Forest Service and later enabling legislation (Capper Report, 1925 Federal Appropriation Act, Clarke McNary Act, McSweeney-McNary Act) which led to establishment of research programs in the Pacific Northwest and Alaska. The regional context can be illustrated through the prominence of Sen. McNary in sponsoring essential research legislation.

4. The Early Years (2500)

(Indeterminate number of words in this and following sections; obviously some will need greater detail and length in the telling than will other sections.) Brief sketch of Wind River research; establishment of Portland office; early staff, with focus on Director T.T. Munger; highlights of research.
5. Inventorying the Forests (2000)
   The forest survey and Depression era projects, concluding with
   end of Munger's tenure as Director (1938).

   Stephen N. Wyckoff becomes Director (1939); sustained yield
   management of forest lands, and burgeoning of range management
   research.

7. The War Years (2000)
   Research is geared to wartime trend for forest products;
   early on, hardwood species are emphasized for aircraft production.

   J. Alfred Hall becomes Director in 1945; management of second-
   growth forests is emphasized; genetics research continues;
   hydrology projects.

   Robert W. Cowlin becomes Director in 1950; forest insect and
   disease research is stressed, silviculture of Douglas fir
   continues, natural areas program begins; subregional labs develop.

    Philip A. Briegleb becomes Director in 1963; cooperation with
    International Biologic Program; recreation research is carried
    forward, advanced logging techniques are emphasized.

    Robert E. Buckman becomes Director, 1971; interdisciplinary
    research is expanded; increasing emphasis on wildlife habitat.

12. Bibliography
REPLY TO: 6320 Contracting  

March 20, 1975

SUBJECT: Contract No. 19-235

TO: Ivan Doig  
17021 10th Ave. N.W.  
Seattle, WA. 98177

Your quotation not to exceed $3,550.00 for this project is acceptable.

Enclosed are three copies of Contract 19-235 covering the work to be accomplished.

If you approve, please execute and return all copies to this office.

After the contract has been signed by the Contracting Officer two copies will be returned to you. At that time the official Notice to Proceed will be sent to you.

GEORGE J. BOORAS  
Contracting Officer
REPRESENTATIONS AND CERTIFICATIONS

The Quoter represents and certifies as part of his quotation that: (Check or complete all applicable boxes or blocks.)

1. SMALL BUSINESS

   He □ is, ☑ is not, a small business concern. A small business concern for the purpose of Government procurement is a concern, including its affiliates, which is independently owned and operated, is not dominant in the field of operation in which it is quoting on Government contracts, and can further qualify under the criteria concerning number of employees, average annual receipts, or other criteria, as prescribed by the Small Business Administration. (See Code of Federal Regulations, Title 13, Part 121, as amended, which contains detailed industry definitions and related procedures.) If the quoter is a small business concern and is not the manufacturer of the supplies offered, he also represents that all supplies to be furnished hereunder □ will, ☑ will not, be manufactured or produced by a small business concern in the United States, its possessions, or Puerto Rico.

2. REGULAR DEALER-MANUFACTURER (Applicable only to supply contracts exceeding $10,000.)

   He is a □ regular dealer in, ☑ manufacturer of, the supplies offered.

3. CERTIFICATION OF INDEPENDENT PRICE DETERMINATION (Applicable only to quotations in excess of $2,500.)

   (a) By submission of this quotation, the quoter certifies, and in the case of a joint quotation, each party thereto certifies as to its own organization, that in connection with this procurement:

       (1) the prices in this quotation have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other quoter or with any competitor;

       (2) unless otherwise required by law, the prices which have been quoted in this quotation have not been knowingly disclosed by the quoter and will not knowingly be disclosed by the quoter prior to opening in the case of an advertised procurement or prior to award in the case of a negotiated procurement, directly or indirectly to any other quoter or to any competitor; and

       (3) no attempt has been made or will be made by the quoter to induce any other person or firm to submit or not to submit a quotation for the purpose of restricting competition.

   (b) Each person signing this quotation certifies that:

       (1) he is the person in the quoter’s organization responsible within that organization for the decision as to the prices being quoted herein and that he has not participated, and will not participate, in any action contrary to (a)(1) through (a)(3) above; or

       (2)(i) He is not the person in the quoter’s organization responsible within that organization for the decision as to the prices being quoted herein but that he has been authorized in writing to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to (a)(1) through (a)(3) above, and as their agent does hereby so certify; and (ii) he has not participated, and will not participate, in any action contrary to (a)(1) through (a)(3) above.

   (c) This certification is not applicable to a foreign quoter submitting a quotation for a contract which requires performance or delivery outside the United States, its possessions, and Puerto Rico.

   (d) A quotation will not be considered for award where (a)(1), (a)(3), or (b) above, has been deleted or modified. Where (a)(2) above, has been deleted or modified, the quotation will not be considered for award unless the quoter furnishes with his quotation a signed statement which sets forth in detail the circumstances of the disclosure and the head of the Agency, or his designee, determines that such disclosure was not made for the purpose of restricting competition.
SPECIFICATIONS FOR PREPARATION OF A HISTORY
OF THE PACIFIC NORTHWEST FOREST AND RANGE EXPERIMENT STATION

SCOPE

The goal of this project is to assemble, in one publication, highlights of the history of research within the area of responsibility of the Pacific Northwest Forest and Range Experiment Station. The publication will cover the period from about 1920 to 1975.

It is estimated that adequate coverage of the subject matter will require a minimum of 40-45 pages of final printed text.

The history must be written in clear, concise terms understandable to laymen as well as technical people.

TIME

The time will begin as of the day the notice to proceed is received by the writer and shall be completed, including reviews, and ready for final editing by the Forest Service by October 1, 1975.

The Writer Will:

1. Furnish the Forest Service a mutually acceptable manuscript outline and project plan for accomplishing the preparation of the Station history by May 1, 1975.

2. Furnish the Forest Service a rough draft on July 1, 1975.

3. Include photos and/or other key illustrations in the history to illustrate the types of work done and accomplishments achieved.
4. Arrange for adequate review of the proposed publication. The Station Information Officer shall be one reviewer. Additional reviewers will be designated by the PNW Station. This review will serve as a basis for preparing the draft for final Forest Service editing.

5. Deliver to the Forest Service by October 1, 1975, two copies of the manuscript ready for final editing by the Station Editor.

The Forest Service Will:

1. Make available to the writer its library materials, records, equipment, and facilities. Upon completion of the publication, the writer will return reference materials and equipment furnished to him by the Forest Service.

2. Assist the writer in obtaining access to material in the National Archives, National Agricultural Library, Conservation Library, and other repositories.

3. Make Forest Service personnel available to the writer as needed for consultation in developing project plans, gathering information, and reviewing work progress.

4. Provide the writer with an overview outline of Station Research History, a copy of the Cowlin manuscript, as well as, various station publications.

5. Provide editorial services as needed by the writer not to exceed 15 working days prior to submission of the draft for final editing October 1, 1975.

6. Assign the Station Information Officer or member of the staff to serve as the Station coordinator and contact for the project.
CONTENT

The manuscript will provide coverage of the following subject areas in a manner acceptable to the Station Director and Station Information Officer:

1. A brief review of key events leading up to establishment of research programs in the Pacific Northwest and Alaska.

2. A brief description of the unique characteristics of each physiographic region (mentioned in 1 above) within the Station boundaries.

3. Highlights of research within the Station territory for each decade beginning with 1900-1910 and ending with the half-decade 1970-1975.

The following types of information should be included in each decade writeup:

a. Major resource problems needing research attention.

b. Highlights of research efforts designed to find solutions to resource problems including construction of major facilities and establishment of experimental forests and ranges.

c. Significant research results contributing to problem solutions. These should receive major emphasis.

d. Changes in Station boundaries.

e. Major organizational changes, including changes in the Directorship.

4. Include a bibliography of all source materials located during research for the paper. Include the location of these materials.

5. Include a roster of all professional researchers who have worked for the Station from its beginning.

INSPECTION AND ACCEPTANCE

Acceptance of the manuscript outline, project plan, the review draft, and the draft for final Forest Service editing will be determined by the Station Information Officer.
MEASUREMENT AND PAYMENT

Upon acceptance of the manuscript outline and project plan, the writer is entitled to receive partial payment not to exceed 20 percent of the total project price. Upon acceptance of the review manuscript, the writer is entitled to receive partial payment not to exceed 40 percent of the total project price. Upon acceptance of the draft for final editing, the writer is entitled to receive the remaining 40 percent of the project price. Each payment will be made upon submission of an invoice to the Government.
REPLY TO: 1680 History

March 18, 1975

SUBJECT: PNW Station History Project

TO: Mr. Ivan Doig
   17021 10th Avenue, NW
   Seattle, Washington 98177

Dear Ivan:

This letter is to inform you that you have submitted the successful bid to research and write the Station's 1975 annual report, a popular history of the Experiment Station.

I couldn't be happier about this! I thought the written material you submitted was outstanding, and I am looking forward to working with you on this project. I will serve as Contracting Officers Representative (what a terrible title) for this project, but I want you to know that the rest of my staff will be available to help too, especially with our photo files and digging out the background information you need.

I hope you will come to Portland soon so that we can discuss further and you can see what kind of information we have on hand that will be of use.

Sincerely,

[Signature]

J. LOUISE PARKER
Information Officer
NOTICE TO PROCEED

Date:

Gentlemen:

This is your notice to proceed with the work on the above contract.

The time on this contract will start:

☑ At the beginning of business 8/26/75 (month, day & year)

☐ On the day following the date this notice is received.

Work on this contract must begin not later than ten (10) calendar days after the effective date of this notice.

Sincerely,

Louis Parker
(Contracting Officer)

INSTRUCTIONS:
If notice is mailed to Contractor, send original by Certified Mail – Return Receipt Requested.
If notice is delivered in person, have Contractor sign the following acknowledgement and retain the original.

ACKNOWLEDGEMENT—(Required if delivery of notice is other than by mail)

I do hereby acknowledge receipt of this notice.

Date 3-26-75

By

Title

Copies to: COR
Forest
Program Division
Contract File

6300-8 (8/70)
March 25, 1975

REPLY TO: 6320 Contracting

SUBJECT: Contract No. 19-235
Designation of COR

TO: Louise Parker

This is your designation as Contracting Officer's Representative
to administer the above numbered contract.

Your duties and responsibilities are:

1. Thoroughly familiarize yourself with the terms and conditions
   of the contract.

2. Mutually agree with the Contractor on the start work date and
   issue Notice To Proceed.

3. Review progress and determine acceptability and contract fulfillment.
   Also acknowledge satisfactory progress for partial and final payments.

4. Provide Contractor with library material, records, etc. as
   called for in the Contract.

5. Assume responsibility for return of Government records.

6. Report to the Contracting Officer any violations of terms and
   provisions of the contract, unsatisfactory developments, etc.,
   as they occur.

You do not have authority to:

1. Approve change Orders and Amendments.

2. Grant extensions of contract time.

3. Take actions to terminate the contract for default of or Government
   convenience.

4. Make final acceptance under the contract.

Please refer to this office any questions you may have with respect
to your authority of any matters for which you want advice of consultation.

GEORGE J. BOORAS
Contracting Officer

cc: Contractor
B&F
FRIDAY, MAY 2, 1975

10 a.m. - Erwin Waring, Administrative Officer - Tour Complex

11 a.m. - Rey Silen, Project Leader, 1401 - "Breeding Northwest Trees"

11:30 - Ron Stewart, Project Leader, 1201 - "Reforestation Systems in the Pacific Northwest" (meet in Romancier's office)

12 - 1 - LUNCH

1 p.m. - Bob Ruth, Project Leader, 1204 - "Culture of Mixed-Conifer Forests--West-Side Cascades" (Old wing, room 100)

1:30 - Douglas Swanston, Geologist, 1602 - "Managed Forest Watersheds--Douglas-fir Region"

2 p.m. - Boyd Wickman, Project Leader, 2201 - "Forest Insects of the Pacific Northwest" (New Wing, upstairs)

2:30 - Earl Nelson, Project Leader, 2209 - "Forest Diseases of the Pacific Northwest" (Old Wing, 110)

and James Trappe, Project Leader, 2210 - "Western Root Diseases and Soil Microbiology"
Alfred Man (Dr. J.A.)
7865 SW Broadmoor Terrace
Portland - 97225
503-2918

Ernest Coity Kolbe
Western Forestry Center
4033 SW Canyon Road
Portland - 97201
503-1367

Phil Buesgen
4217 SE Agate Lane
Portland - 97201
503-3333
REPLY TO: 1630 Written Information

SUBJECT: Early Forestry Research

TO: Mr. Ivan Doig
17021-10th Avenue NW
Seattle, Washington 98177

February 10, 1976

Dear Ivan:

Now that all the hard work is done, it's time to sit back and wait for the reviews. So far they're all good! As this begins to get out to people outside the Station, I'm sure those good comments will continue.

The special interest you took in researching and writing the Station's 50-year history is most appreciated. It could have been another routine government report. Instead, you made it come alive!

Thanks also from the Director's office and from all of us in Information Services, especially me. I enjoyed working with you on this project and am very pleased with the results. Give me a call if you ever get down this way. And let me hear from you now and then. I'd be interested in knowing what new and exciting projects you have underway.

Sincerely,

J. LOUISE PARKER
Information Officer
Dear Louise --

Very nice to hear the news of the old place. Karen said a little joke about a 'hedgehog' in the yard. I thought it was a good pun.

Ivan:

Am sending you a xerox copy of the proof for your information. I have made a couple of minor changes in the text...and Karen indicated some changes in layout. I think it looks great...sorry we didn't have another original proof to send you. I know you're as anxious to see this as we are. Hope you like the treatment of your authorship, etc.

The presses are running!

Louise Parker

ps: how many copies do you want????

And yes, Patti, we are about to get a new printer.

Keep in touch.

Ian Dole
January 28, '76

Dear Louise --

Very nice to see the proof of the Station history. Karen did a fine job of layout, and I'll drop her a note to say so.

As for the number of copies I can use, I think I originally told you two dozen. That sounds like a good round figure, anyway, and I think I can usefully spread around that many. Also, there are a few places I can think of which perhaps you could mail copies to directly:

Belden Durschi
Science Division
Shoreline Community College
16101 Greenwood Ave. N.
Seattle, WA 98133

Peggy O'Coyne
Library/Media Center
Shoreline Community Coll
16101 Greenwood Ave. N.
Seattle, WA 98133

Harold K. Steen
Forest History Society
PO Box 1581
Santa Cruz, Calif. 95061

Philip Lothyan
National Archives
& Records Center
6125 Sand Point Way NE
Seattle 98115

Harriet Rice
PACIFIC SEARCH
715 Harrison St.
Seattle, WA 98109

And so, by golly, we've about got the job done, hmm?

keep in touch

Ivan Doig
November 25, 1974

REPLY TO: 1630-4 Publications

SUBJECT: PNW Station History Project

TO: Mr. Peter Steen
Forest History Society, Inc.
P.O. Box 1581
Santa Cruz, California 95060

Dear Pete:

We have finally managed to put together a rough outline for the Station's history project. In terms of length, we want a manuscript which is no longer than the NE Station report. I do not see how we can possibly do a critical history in the sense that most historians look at this. But we do believe it will be worthwhile to pull together that which is readily accessible and factual about the Station's program and accomplishments over the years.

It also looks to us as though Cowlin's history (finished now from 1924-1955), together with Station annual reports, would furnish most of the information needed as background for the report. A few interviews might be desirable with key people in more recent times.

We would hope that photographs with captions could tell part of the story, and substitute for text in some cases. For example, photographs of some of the key staff members might be used, along with photographs of experimental forests and ranges, early field headquarters, scientists at work, etc.

It may be naive, but our staff writer believes he could do this job in 120-150 man hours. If we go the free-lance route, we will be looking for something in this general time frame.

I hope you will feel free to comment on this proposal and to suggest alternatives. Could you call me soon and discuss? We will want to move ahead on this as quickly as possible.

Sincerely,

JLP

J. LOUISE PARKER
Information Officer

Enclosure

JLParker:kr
REPLY TO: 1630 Written Information

December 18, 1974

SUBJECT: Writers

TO: Mr. Ivan Doig
17021 10th Avenue, NW
Seattle, Washington  98177

Dear Mr. Doig:

Thanks very much for sending the copies of your magazine articles and the book. I enjoyed them very much. If you don't mind, I'd like to keep this material for another month or so— at least until I get back from vacation and can make some decision on this project.

In the meantime, I'm sending you some informational material and reports from this Experiment Station which might be of some use to you in your work. Our research people are involved in a number of studies that might be of special interest to you.

Sincerely,

[Signature]

for J. LOUISE PARKER
Information Officer

Enclosures
Dear Ms. Parker

As we agreed on the phone yesterday, I'm sending along a batch of my writing for you to look over. Since yours is a history project, I've included several of my pieces on Northwest history. And please excuse the coverless copy of THE STREETS WE HAVE COME DOWN; it's the only one I can spare until some more arrive from my publisher. You might take a look at "Street of Dreams, Street of Life" beginning on page 90 as another example of my historical writing.

A bit of background: born and raised a Montanan, grew up on sheep ranches. Went to college at Northwestern -- bachelor's and master's in journalism. Wrote editorials and did a bit of everything else for a chain of dailies in downstate Illinois; from there, became assistant editor of The Rotarian magazine. Moved here to Seattle in 1966 to get a Ph.D. in American history at the U. of Washington. After completing the Ph.D. in 1969, I changed my mind about becoming a professor, turned down a slot on the journalism faculty at Indiana University and kept on writing, as I've done one way or another ever since college. As a full-time writer, I've done more than a hundred magazine articles the past five years, my wife and I co-authored a book called NEWS: A CONSUMER'S GUIDE (Prentice-Hall, 1972), and besides the just-out STREETS WE HAVE COME DOWN, I'm now finishing up a book on utopias.

That may be more than you want to know. But as Pete Steen may have told you, I do have a deep interest in Pacific Northwest history and have done considerable work in this region's forest history. If there's a chance to do some writing along those lines, I'm always glad to discuss it.

regards

Ivan Doig
December 20, 1974

TO: Mr. Ivan Doig
17021 10th Avenue, NW
Seattle, Washington 98177

SUBJECT: Station History Project

Dear Ivan:

I'm glad you're at least remotely interested in our forest history project. I am enclosing a copy of "A History of the Northeastern Experiment Station" which prompted us to undertake this project. I like the length, format, etc., for this report, but hope that our report will be more creatively written. Also, we have had a very good professional photographer here for many years, and should be able to find better pictures.

This report is a little longer than I had remembered, but about the length we want. It could be a little shorter, though.

Enclosed also is a letter I wrote recently to Pete Steen and a copy of a rough outline we put together indicating what should be included in the history of the Pacific Northwest Station.

I'm looking forward to hearing from you.

Sincerely,

[Signature]

for J. LOUISE PARKER
Information Officer

Enclosures
J. Louise Parker  
Information Officer  
Pacific Northwest Forest  
& Range Experiment Station  
PO Box 3111  
Portland, Oregon 97208

Dear Ms. Parker,

Just a hasty line to ask if there's anything new on your forest history project. In the next month or two I have to line out my work schedule for the summer, and it would help to know if the forest history is still a prospect.

I don't know whether Pete Steen told you that I'm editing his manuscript on the history of the Forest Service; I will be through with that well ahead of the time you'd want any work on your project, so there should be no conflict.

Thanks for the batch of informational material with your last letter; it indeed does make good reference material for me.

best regards

Ivan Doig
J. Louise Parker  
Information Officer  
Pacific Northwest Forest  
& Range Experiment Station  
PO Box 3144  
Portland, Oregon 97208

Dear Louise

I've worked out the price quotations and estimated expenses for the history manuscript, and am enclosing a photocopy for you. I'm mailing the completed original form to George Booras at the same time I send this to you.

After talking with you about the total number of hours the project might take, I noticed in the copy of your Nov. 25 letter to Pete Steen which you sent me that your staff writer had estimated 120-180 hours. I decided I had better boost my own estimate, and so settled on 140 hours.

I don't know how the price per hour figures will look to your office, but I think they are thoroughly reasonable. I've been charging Pete $15-$20 an hour, depending on length and difficulty of chapter, to look over his manuscript, and certainly the rate for writing has to be somewhat more than that. I know that a friend here who does occasional work for Pacific Northwest Bell is paid in the range of $25 an hour.

And the expenses I would guess might end up about 2/3 of what I've estimated. Again, I thought it best to leave some leeway. Naturally I'd voucher the expenses any way that's satisfactory to the Forest Service.

One thing I might add, for the sake of your scheduling: the manuscripts I turn in have a reputation for not needing much reworking. I plug and chink and smooth enough as I go along that the work generally is in good shape. This should mean that the draft I'd hand in July 1 would be researched and styled sufficiently that only the reviewers' corrections would have to be worked in. I can supply some editors' names on this point if it's of any help to you.

best regards

Ivan Doig
17021 10th Ave. NW
Seattle, Wash. 98177
March 21, 1975
phone 206-542-6658

J. Louise Parker
Information Officer
Pacific NW Forest & Range Exp. Station
PO Box 3141
Portland, Oregon 97208

Dear Louise,

You're right, Contracting Office's Representative is an awful title, but I'll try to think well of you even so.

I've just signed the contracts and put them in an envelope to George Booras. Now, a few additional thoughts on my trip to Portland next Wednesday, the 26th. I'd like to meet anyone, in addition to you, I'll be in contact with about the history. That is, at least say hello to people and get some notion of what they do. And for the sake of scheduling, I'd like to have a list of addresses and phone numbers of persons I should interview; Cowlin is certainly one, and whatever others you might suggest. I can see that up to 5 or 6 interviews might be useful, if you can think of that many useful folks; more than that likely would be diminishing returns on a project such as this.

As I mentioned on the phone, I'll tentatively schedule a week with you beginning April 28; I might make it a week earlier, but it's doubtful. Anyway, we can talk about that on Wednesday.

I'll be out of touch until then -- we're holing up in an oceanfront cabin the first few days of my wife's spring vacation -- but will call you from a roadside phone if there's some reason to change plans.

Looking forward to meeting you.

Ivan Doig
George J. Booras  
Contracting Officer  
Pacific NW Forest & Range Exp. Station  
PO Box 3141  
Portland, Oregon 97208

Dear Mr. Booras,

Enclosed are the three copies of contract 19-235, signed by me. I'm very pleased to have been the successful bidder for the history project.

I plan to be in Portland to see Louise Parker about the project on the afternoon of March 26. If there's further paperwork or anything else you should see me about, please leave word for me with Louise's office.

Sincerely,

Ivan Doig
March 22, 1975

Sheraton Motor Inn
1000 NE Multnomah St.
Portland, Oregon 97232

I'll be in Portland on a writing assignment on Wednesday, March 26, and would like to reserve a room with a double bed for that night. (My wife will be traveling with me as my photographer.) My recollection is that on similar assignments in the past, the Sheraton has provided a commercial rate; is this still possible?

Since I have appointments in the early afternoon, we'll likely arrive around 11:30 or noon; if it's possible to get into our room then, we would much appreciate it.

cordially
17021 10th Ave. NW
Seattle, Wash. 98177
March 31, 1975

Robert Cowlin
2697 SW Vista Ave.
Portland, Oregon 97201

Dear Bob,

I enjoyed meeting you in Louise Parker's office the other day, and I since have had a chance to go through your manuscript. A very thoroughgoing job; it'll be an invaluable resource as I do the briefer popular history Louise has contracted for.

About an interview session with you when I come to Portland the week of April 28; would it be convenient the morning of Tuesday, April 29? I suppose about 9:30 would be best for me, if it's all right with you. If that day and hour aren't convenient, I can fit into your schedule any time on April 30 or May 1.

You wanted some suggested questions. Since your manuscript largely covers policy and research activities, I believe I'll ask you to concentrate on details of how the Station and its people worked -- even down to asking you what the offices and equipment were in your early years with the Station, how you and the others traveled during field work, what your camps were like during such work. (Incidentally, your story of the judge throwing the whole shebang of staffers out of the borrowed jury room because of a cigarette burn is a gem.) I'd like any reminiscences you have about projects which never amounted to much (successful ones are always well documented) or cases in which research changed earlier findings or ideas; seems to me such incidents would be useful to show the nature of research, that the Experiment in the Station's name is truly significant.

Also, I'd like from you some assessment of Sen. McNary's influence in obtaining needed funding and legislation; you allude to it in your manuscript, but was McNary in personal touch with anyone in the Station administration? I'll also ask you for any information you have about other notable friends -- or for that matter, foes -- the Station has had down through the years.

One further thing, which I also suggested to Phil Briegleb; do you have a favorite photo from your years at the Station -- something which shows you at work, either behind a desk or in the field, rather than just a head portrait? I'd like to have good action photos throughout to enhance the history.

I noticed that we've crossed historical paths a number of times in our writing. Thought you might like to see a couple of my articles on
Ernest Kolbe
Western Forestry Center
1033 SW Canyon Road
Portland, Oregon 97221

Dear Mr. Kolbe,

I've been commissioned to write a 50th anniversary history of the Pacific Northwest Forest & Range Experiment Station -- a briefer and more popular version of the manuscript Bob Cowlin has put together with such dedication. Louise Parker and Bob Cowlin suggested you as a person I'd do well to interview. I'll be in Portland the week of April 28th; could you spare me an hour or so to talk about the Station?

I'll have an interview session with Bob the morning of Tuesday, April 29. Would it be possible to see you after lunch -- 1 or 1:30 -- that same day? If that isn't convenient, I can fit into your schedule any time on April 30 or May 1.

I'm looking forward to meeting you. I write regularly for PACIFIC SEARCH, which is affiliated with OMSI, and on visits there have admired the Western Forestry Center building.

Cordially

Ivan Doig
J. Louise Parker  
Information Officer  
Pacific NW Forest &  
Range Experiment Station  
PO Box 3219  
Portland, Oregon 97208

Dear Louise

I've just been writing letters to set up interviews with Cowlin, Kolbe and Briegleb when I come to Portland the week of April 28, and thought I should give you a few thoughts so far.

Seems as if the project, in terms of research and such, is pretty much as I'd imagined it to be. I'd been a bit bothered about how to get lively detail into the story, but the monthly reports I found in the boxes of archival material in the library should solve that. Also, the interviews should help immeasurably.

I've gone over the NE Station history you gave me. Besides livelier writing, it seems to me we ought to be able to use better -- and maybe larger -- pictures. For one thing, I'd like to steer away from mug shots of directors and use action photos of them instead -- show them doing something. I've asked Cowlin and Briegleb for nominations from any favorite photos they may have, and I'd be hopeful that with Dorothy Bergstrom's help I can come up with other shots.

A question I forgot to ask you the other day: the contract calls for "a roster of all professional researchers who have worked for the Station". Is that something readily available from personnel records which Karen -- or a secretary or somebody -- can compile? I suppose we'll have to have the names typed on index cards for alphabetizing the way a book index gets put together, hmm?

My schedule so far for the week of April 28: will drive from here early Monday morning and arrive at the Station I hope by 9:30 or so. Will work in the Station that day; Tuesday, interviews with Cowlin, Kolbe, Briegleb. Wednesday, maybe photo sorting. Thursday, whatever deskwork presents itself. Friday, May 2 -- can you arrange for me to be shown around the Corvallis lab that afternoon?

I plan to start on the writing as soon as I get back to Seattle, and would hope to have a rough draft to show you about mid-May.

So, okay: see you at the end of April.

best

Ivan Doig
April 3, 1975

Dear Dean:

Responding to your letter of March 31, I have set aside the morning of Tuesday, April 29 for our discussion. I will be at the TM (or office) 4th floor corner about 9:30 a.m. I am sure we can find an empty quiet office for our use.

Best regards,

Bob Cowlin
Mr. Ivan Doig
17021 10th Ave. NW
Seattle, Washington 98177

Dear Mr. Doig:

Glad to have your letter of March 31, and to learn of your plans to write a history of the PNW Station.

Tuesday, April 28 at 3:30 P. M. should be the best time for our get-together.

However, I believe it would facilitate progress if you would list some of the subjects and questions you would like to discuss. Then, if you would give this to me in advance, it might help to jiggle my memory of some events I might not have thought about recently.

If you want to reach me here by telephone, the number is (503) 227-3333.

Hope to see you on the 29th.

Sincerely,

Philip A. Briegleb
Philip A. Briegleb  
4217 SW Agate Lane  
Portland, Oregon 97201  

Dear Mr. Briegleb,

Thanks for your letter agreeing to talk with me about the history of the PNW Station. I'll look forward to seeing you at 3:30 on Tuesday, April 29. I'll call you sometime on Monday to confirm.

To give you some notion of what I'll be asking:

Mostly, I'll ask you to concentrate on details of how the Station and its people worked—down to such details as what the offices and equipment were in your early years with the Station. I'll need to know the particular projects you remember as most significant, and also those which interested you most, personally. It also would be useful to know of cases you can recall in which research drastically changed earlier findings or ideas; seems to me such incidents would be useful to show the nature of research, that the Experiment in the Station's name is truly significant.

Also, I'd like from you some assessment of Senator McNary's influence in obtaining needed funding and legislation. Bob Cowl in alludes to it a bit in his manuscript, but was McNary in personal touch with anyone in the Station administration during your years there? I'll also ask you for any information you have about other notable friends—or for that matter, foes—the Station has had down through the years. Along with this, of course, would go your assessment of the Station's relationships with the lumber industry in the years you were on hand.

One further thing, which I also suggested to Bob Cowl in: do you have a favorite photo from your years at the Station—something which shows you at work, either behind a desk or in the field, rather than just a head portrait? I'd like to have good action photos throughout to enhance the history.

I'll look forward to meeting you the afternoon of Tuesday, the 29th.

best regards

Ivan Doig
IVAN:

We are ordering the photos you requested. Might as well have them on hand so we can use if we need to. There are only a couple I disagree with you about. I'm a NUT on photo quality...so would tend not to use a picture if it isn't good -- even if the subject is something we need.

On the other points...

Agree about running photos large. Don't know if I'm wild about using sketches in this book...but let's work with Karen on that. She'll be designing this one (lucky you). I'd like to see this an understated elegant black little booklet...perhaps in nice warm brown duo tones and black and white. And good paper.

I'm not against paying $35-50 for the Kinsey picture if necessary... but am most in favor of telling FOREST SERVICE RESEARCH story... not early logging, which there's been a lot of lately. We're still trying to find the other Leo Isaac photos. That might be a possible cover picture. But we can work that out later too. (In the meantime, do you have a reproduction of the Kinsey picture we can see?)

One additional note from an earlier memo of yours.

The roster of professional researchers...
I'm not sure how that got in the contract...but we're trying to kill it. Check with me later on that one, but don't worry about it now. It's not one of the world's great ideas.

Louise Parker

Oh, yes. About the title... The one you're working on doesn't really grab me. I think because it sounds more resource oriented than research. Can you work on the kite theme...it seems to be the most colorful thing we've got going now. GO FLY A KITE comes to mind. There must be a theme here somewhere? Do you realize that Leo Isaac and Ben Franklin both flew kites? One discovered electricity and the other learned how far Douglas-fir seeds "fly"...
May 2, 1975
Visit from Dr. Hall, 10:30

Dear Doig:

Thinking back I omitted three or four important items in our recent conversation. The name of the Yale professor who did the pioneer work on fire in the South was H. H. Chapman.

We also began to analyze site factors in the Station during my term. The old site classifications were based only on age and height, but I felt we needed to know basic factors in order to classify unforested territory. We obtained Bob Tarrant from SCS who began the analysis of soil types, depth, and other basic factors.

The Station had not embarked on the use of statistical methods where they were obviously of great service. We obtained the services of Floyd Johnson and results were immediately apparent, especially in the complicated and pertinent "Logging and Milling Studies."

Also, it seemed to me desirable to be able to translate general weather predictions into specific wind behavior in rugged terrain. So we started meteorological investigations under Owen Cramer.

All these men are still in the Station.

Suan - Dr. Hall sent this up and I'm passing it on to you.

Karen
8 May 1975

Ivan Doig
17021 10th Ave. N.W.
Seattle, Washington 98177

Dear Ivan:

Thanks for your note and the address for Pacific Search. Although we will be sending no review copies out, Scrimshaw Press is sending a signature from each volume when requested. I will turn the information over to them.

As for the print you request, we have locked everything down for the summer. No printing will be done until fall, if then. That is, we are not at all certain we will make prints available, other than for a few full-spread articles and one or two other commitments that have already been made.

So, I am sorry. I had best say 'no' right now, rather than have you waiting for an answer in the fall, even if you could wait that long.

Best,

Dave Bohn
Dave Bohn
618 San Luis Road
Berkley, Calif. 94707

Dear Dave,

You likely won't recall my name from the hasty introduction Bob Monroe provided just before your Darius Kinsey talk at the U. of Washington's Northwest Collection. But anyway, your talk has had its effect, or at least the Kinsey slides have. I'd like to buy one of your prints to go in a small book I'm doing for a Portland office of the Forest Service. As you might guess, I have in mind the one you consider Kinsey's classic (and I agree) -- the trio of loggers on the stump with crossed axes, crosscut, and so on. Please advise what you'd charge for the print. For my part, I'll promise the most prominent credit line I can arrange (short of neon or 96-point, that is). I suppose you would want the Kinsey books cited in the credit?

The book I'll be doing, incidentally, will be no grand project -- a Bicentennial history project which will have a printing of 2,000-2,500 copies, mostly for libraries and archives. But it will have the kind of audience appreciative of Kinsey's work.

When the volumes come out, a worthwhile review outlet is PACIFIC SEARCH magazine here in Seattle, which I do a lot of historical writing for. It's circulation of 18,000-20,000 is in the bracket of good buyers for such books. Address: PACIFIC SEARCH, 715 Harrison St., Seattle, Wa. 98109.

best regards,

Ivan Doig
Robert CowlIn
2697 SW Vista Ave.
Portland, Oregon 97201

Dear Bob

Just a few very quick lines of thanks for all your help during my stay at the Experiment Station. I think things are going very well with the project I'm hired to do, which is largely because your manuscript provides such a basis.

I'll undoubtedly be back to you time and again about various points of fact. For now, I just have a minor matter: can you recommend any sources on hog fuel? I came across quite a selection of hog fuel photos at the Station, then Al Hall talked a bit about his wartime work with alcohol production, and it seemed to me an interesting sidelight.

Again, thanks. I'll hope to see you on another trip to Portland.

best wishes

Ivan Doig
J. Louise Parker
Information Officer
Pacific NW Forest
& Range Experiment Station
PO Box 3141
Portland, Oregon 97208

Dear Louise,

Thought you should have a few lines of evaluation, to let you know how my week with you folks furthered the station history.

--I'm quite pleased with the interviews with Cowlin, Briegleb and Hall. Spent about 2 hours with each of them. Coupled with the printed oral history interview with Munger, the tapes I made will mean that all but about 5 years (Wyckoff's tenure as Director) of the Station's top administration is covered in interview form -- an incredibly lucky situation, in terms of writing history.

--Had a very good day at Corvallis, too; nearly a full day of taped interviews with all manner of people there. Also made the find of an excellent historical photo in the insect files, truly a "must" for the history. Incidentally, some historical writing should be done sometime about the history of insect research in this region. A bit, but not much, will fit in the Station history. There's good material on file in Corvallis; as a historian, I was intrigued by a lot of it.

--And as you know, I gathered enough research material out of the Station to write several volumes. I hope to start in on it a week from today (the 12th), and if my own writing and a typist both work okay, to provide you a rough draft about the end of May.

That's about all that comes to mind. I'll be calling you in the next few weeks as things occur to me. Thanks for all the hospitality.

see you

Ivan Doig
Philip Bringleb
4217 SW Agate Lane
Portland, Oregon 97201

Dear Phil

Just a few quick lines of appreciation for talking with me at such length last Wednesday. I think there's a lot of useful information on the tape recording.

One small item which I've meant to check with you: I read someplace, in a source I can't put my finger on at the moment, that Wind River, the original site of the Experiment Station, is so named because the wind comes up at about a certain time every day. Do you know from experience that this version is accurate? Seems to me an interesting sidelight if it's so.

Again, thanks for your help. I'll undoubtedly take advantage of it again, by mail or phone.

best wishes

Ivan Doig
Ricard Engelman 222-1741 ext 25

Cor Il stven, "Pac RR Survos" V12, PI 7, p 138

"One is a descriptive name."

Tis: 2 probably got its name of its mouth. Same as 2d rescued at Fire, a wind funky.

Word Mtn - just 27 months 1st winter Able

"One Wath Goog Name", C.S. Kennedy
Douglas Swanston  
Managed Forests/Watersheds Project  
Forestry Sciences Laboratory  
3200 Jefferson Way  
Corvallis, Oregon 97331

Dear Doug

Just a quick line of thanks for taking time to talk with me last week. I found it very worthwhile. Besides whatever use I may make of the information in the Station history, I'll try to do some magazine writing on the problems of logging roads. When I do, I certainly will be back to you about it.

Since you're an old Alaska hand, thought you might like a look at this article I did about Metlakatla. If my intentions about an Alaskan trip come through this autumn, I may be hitting you up for advice on that, too. Meantime, give me a call for lunch or a drink whenever you're in Seattle, hmm?

best regards

Ivan Doig
Robert K. Campbell  
Breeding Northwest Trees Project  
Forestry Sciences Laboratory  
3200 Jefferson Way  
Corvallis, Ore. 97331

Dear Bob

Just a very quick line of thanks for taking time to talk to me during my visit to the Lab last Friday. The session was very helpful, both for the background for the Station history I'm doing and possibly for some future magazine work. I'll undoubtedly be checking back with you.

best regards

Ivan Doig
Dear Judy,

Just a quick line of thanks for orchestrating my visit to the Lab last Friday. Thanks to your scheduling, I got an enormous amount done during the day.

Hope to see you again in course of the Station history project.

best regards

Ivan Doig
Dear Ron

Just wanted to say thanks for your taking time to talk with me during my visit to the Lab last week. A very helpful session, both for the background for the Station history and possibly for some eventual magazine work. At any rate, I'll be back to you to check over any material I end up using.

best regards

Ivan Doig
Dr. J. Alfred Hall
7865 SW Broadmoor Terrace
Portland, Oregon 97225

Dear Dr. Hall

Just a few quick lines of appreciation for talking with me at such length last Thursday. I've listened to the tape recording, and am quite pleased with all the information you provided.

As I go through the writing process, I may be in touch with you again to check some facts. By the way, thanks for having your 4 publications sent to me. They were waiting when I arrived home on Saturday, which is quicker than prompt.

I'll try return the favor by recommending a book I think would interest you. It's titled *Ross & Tom*, by John Leggett (Simon and Schuster, 1974), and is about Ross Lockridge Jr. and a contemporary writer of his who also committed suicide, Thomas Heggen (author of *Mr. Roberts*). The first half of the book is about Lockridge, and I think you'd be intrigued by seeing how it squares with what you know of the Lockridge family.

Again, thanks for the cooperation. I'll undoubtedly take advantage of it again.

best wishes

Ivan Doig
Dear Louise

Just a quick response about the photos. Glad you've ordered them. I can see that there might be a few you'd want to argue me out of, and I'm probably willing. On sketches, about all I'd really urge is something to show tree and grass species -- seems to me we ought to do a little something to show the readership in detail the resources the Station has worked on.

The question of my prized logging photo is solved: can't get rights to it.

I'm writing to the Corvallis insect folks today about the photo I want from their files. You may yet have to arrange to get it (it's on a glass plate), but I'll try get them started, as I'm writing them about other material anyway.

best

Ivan Doig
Charles Sartwell  
Forest Insects Project  
Forestry Sciences Laboratory  
3200 Jefferson Way  
Corvallis, Oregon 97331

May 12, 1975

Dear Charles,

I'm just now getting squared away on the Station history project, and can get back to you about the lode of material you showed me in the files. Since you've been through the material so thoroughly, I'd be glad to have you select whatever you think is interesting and have photocopies mailed to me, if you would. And one specific thing you mentioned -- the correspondence about the incident where the lumbermen wanted to burn down a forest out of fear of the bark beetle or something.

Also, I definitely want to use that 1915 photo of the photographer we found. It's file # 2h4.5, photographic equipment, #2238. Can you arrange for a print to be sent to Louise Parker at the Portland office, or should she send a request to you, or what?

Very much enjoyed meeting you and being shown through the files. I'll try hard to get some writing done out of that fine trove of stuff.

Best regards,

Ivan Doig
Photographic equipment
Ashland, Oreg.

J.E. Patterson
Feb. 1915

Station Equipment
Photographic stand designed and built at Pacific Slope station for photographing small specimens and insects.
Thanks for your note. Just a couple of quick items. The word is "no" on the long list of Station scientists for the history project! I talked with the contracting officer and he says there's no problem there -- just as long as I'm happy.

I realize we haven't finished looking for photos yet... but it occurs to me that we may turn up a little weak in that area. So here's a few ideas (which might necessitate a trip to Portland). We suggest calling several retirees -- Bob Furniss, Walter Buckhorn, plus Kolbe, Briegeleb, Hall, and Cowlin (and maybe others) to see if they might have old photos tucked away somewhere. The Oregon Historical Society is another source for old forestry photos (although probably not research). And another is PHOTO ART (Claude Palmer) He has a lot of old photos that were offered to us for our use.

All for now...hope the writing is going well.

Louise-- May 23, '75

I doubt that there'll be much problem with photos, really. A couple of the sources you mention likely will have some, and up here at the U. of Washington's Northwest Collection is a great repository of historic photos. At any rate, I think any further looking should be done after the rough draft of the ms is looked over, so we can see what might be missing.

I think the writing is going okay; have just come up to the end of WWII, with some of the material after that in rough form. One gap ahead: the Director I know least about is Buckman. Can you send me any bio material about him pronto?

I'll likely be in touch by phone in the next week or so. See you eventually.

Ivan
REPLY TO: 6320 Contracting

SUBJECT: Contract 19-235, History of the PNW Station, Progress Payment

TO: Ivan Doig
    17021 10th Ave. N.W.
    Seattle, WA  98177

May 13, 1975

Your outline and project plan has been received and approved. If you wish a progress payment submit an invoice as called for on page 4, Measurement and Payment.

Sincerely

[Signature]

GEORGE J. BOORAS
Contracting Officer
May 19, 1975

To: George J. Booras
Contracting Officer
Pacific NW Forest & Range Exp. Station
PO Box 3111
Portland, Oregon 97208

Invoice for partial payment (first 20%) on Pacific Northwest Forest & Range Experiment Station history project. As per page 4, Contract 19-235, the outline and project plan has been submitted and, according to your letter of May 13, 1975, has been approved. Accordingly I wish the following progress payment as stipulated:

$710.00  (20% of contract total of $3,550.00)

Payable to: Ivan Doig
17021 10th Ave. NW
Seattle, Wash. 98177  Social Security # 516-44-4410

signed [Signature]  May 19, 1975
Mrs. Thorson --

I think this is a fairly straightforward typing project, no footnotes or other complications. I imagine it'll total 70 or 80 pages; this batch is roughly the first half.

The one odd thing will be that I don't want you to number the pages. I may have to do some revising, and it'll be simpler if the pages aren't numbered. So, each of these short chapters just has the numbers I've put on to guide you.

Please type these as separate chapters -- that is, start each p. 1 on a fresh page.

Ignore the brackets and notes in the margins -- they are source notes to myself.

Any questions, give me a call. Can I get this batch, or most of it, back by Saturday?

Ivan Doig

542-6658
J. Alfred Hall  
7865 SW Broadmoor Terrace  
Portland, Oregon 97225

Dear Dr. Hall

I've just finished a first draft of the Station history, and am sending photocopies to you, Gowlin and Bringleb. I'd particularly value your looking over and commenting on the section about your own era as Director -- in your case, it's primarily pp. 42-51 -- but would be pleased to have you comment on the whole shebang, to the extent you can afford the time.

If it's simpler, feel free to write on the manuscript pages -- I have plenty of copies. I'm enclosing a self-addressed envelope for you to fire the manuscript back when you've had a look.

One specific small item: on p. 43, where your fine story about Austin Cary is told, do you recall what national forest the crownfire was in? I'd like to use the specific forest instead of "near Cogdell, Georgia," if you happen to recall it.

And please blame my typist, not me, for the capitalization of Ponderosa pine throughout the manuscript. Where she got such reverence for the species, I don't know.

Thanks immensely for your help; it'll do much to make this Station history as accurate as possible.

best regards

Ivan Doig
Robert Carlin
2697 SW Vista Ave.
Portland, Oregon 97201

Dear Bob

I've just come home with photocopies of my first draft of the Station history, and will put one in the mail to you while they're still warm. I'd appreciate whatever extent of comment you can give me, after a reading. But I know there are several specific items I need help on, and you'll likely spot some more:

-- p. 21, 2nd graf -- Am I right about the consequence of Hofmann's seed-in-the-duff theory, had it been correct?

--pp. 29-31 -- Please check me closely on my description of the Lewis County linear survey, especially the comparison of the linear and compilation methods at the bottom of p. 30 and top of p. 31.

-- p. 35 -- Thanks to your manuscript and the interviews I did on my trip to Portland, I have anecdotal material about you, Hall and Briegleb which brightens the history a lot. But I don't have anything about Wyckoff. Anything come to mind about him that would be interesting and lively? Even a description of what he looked like would help a bit -- how tall, mannerisms, office demeanor, or whatever.

--I'll undoubtedly make another trip to Portland, after the manuscript has been read at the Station and by you and several others I'm imposing on, and when I do, I'd like to get together with you to get some of your specific sources for the source notes at the end of the history. One of them, for instance, is needed to back up the graf at the top of page 38 -- the Henry Wallace memo about defense priorities.

Also, the manuscript has a quirk or two such as my typist capitalizing Ponderosa pine throughout, but those matters of style will be ironed out in the next version. At any rate, I'll be interested in hearing your reaction (if it's simpler, just write your comments on the manuscript sheets at the appropriate spots); my briefer version, as outlined in the contract drawn up by Louise Parker, is necessarily different in tone and angles than yours, but it truly couldn't have been done without your more extensive version.

I'll look forward to seeing you again my next trip to Portland (possibly August sometime).

best regards

Ivan Doig
Philip Bringleb
1217 SW Agate Lane
Portland, Oregon 97201

Dear Phil

Have just finished the first draft of the Station history, and here's your promised copy. Cowlin and Hall will read it over for me, too. I'd particularly value your looking over and commenting on the section about your own era as Director -- in case, it's primarily pp. 62-70 -- but would be pleased to have you comment on the whole shebang, to the extent you can afford the time.

If it's simpler, feel free to write on the manuscript pages -- I have plenty of copies. I'm enclosing a self-addressed envelope for you to fire the manuscript back when you've had a look.

A specific small item or two: on p. 66, in the last graf, have I adequately defined a mensurationist? If not, I'll be glad for any help you can give. On page 67, am I right that the Southern Experiment Station is in Louisiana?

Also, something I mentioned to Bob Cowlin: thanks to the interviews and other sources, I have good anecdotal material about you, him, and Hall to brighten the manuscript. But I have nothing about Steve Wyckoff. Anything you can remember about him as a personality would add to the section about his years.

And I have to explain that it's my typist's enthusiasm, not my own silvicultural ignorance, that capitalized Ponderosa pine all through the manuscript.

I'll look forward to your comments, Phil. And thanks immensely for the help; it'll do much to make this Station history as accurate as possible.

best regards

Ivan Doig
Ivan:

Congratulations! Your draft looks excellent. I haven't read it all yet, but the parts I did read are very nice. I'm sending back your letter with some notes. In general, I agree with all you've said!

About the art work -- The cones still don't really grab me. What I'd like to do on the art is to have Karen work that out in connection with the FS graphic shop in California... or hire some art work done. Let them come up with some ideas about art that might be worked in with the pictures we come up with.

Again... I can't tell you how pleased I am with the manuscript. I have sent it out for review now... and have asked for comments back by July 4. Will get them to you as quickly as possible after that.

Louise Parker
Dear Louise

And here's the manuscript. You'll find it lacks a few amenities, such as a title, but for a first draft it's pretty complete. Some specifics for you to mull:

--It occurred to me what we ought to do about footnotes: use a "source notes" system which provides full info at the back of the book, but doesn't clutter the text with footnote numbers. I'm attaching a sample from Barbara Tuchman's book on General Stilwell -- I think the system would be just right for this manuscript.

--You'll note about mid-page, p. 72, a reference saying, "for current roster of research, see page 200." I could see no manageable way to describe the Station's current research projects except this, and I think it would work okay: we would run at the back of the book something like the Station roster you had in this year's annual report, listing the names of the projects. Sound okay to you?

--Throughout the ms, my typist for some obscure reason (the only kind typists seem to have) insisted on honoring the ponderosa pine with a capital P. I didn't make all the changes -- time enough on the final version.

--On p. 74, there's a fairly obvious gap: I stopped the half-decade of the 70's with Buckman. If there's to be something about the new Director -- is there one yet? -- it likely should go here.

--Do you think we should indicate the years, parenthetically, for each section? It just occurred to me this morn. Bit of a problem in that there's some overlap in activities through different Directors' eras. Anyway, something for us to think about.

--In the next few days, I'll send checking copies to Hall, Gowlin, and Briegleb, to Pete Steen, and to a couple of knowledgeable friends here in town. Since I haven't yet gone through the ms to annotate and re-check all the sources -- it's a harrowing job which takes a full day or more -- there undoubtedly are some small slips of fact in this version. The ex-Directors should be a help in weeding them out.
I think I mentioned on the phone that I was a bit surprised that major historical themes presented themselves for each of the Director's eras as well as they did. Solved a lot of problems of how to structure all this.

On illustrations: I kind of like the map of the Station's sites which has been used in annual reports of recent years, though I would like Karen's opinion on whether it could be cleaned up a bit, in terms of the big legend across the bottom of both pages. Anyway, I think I'd be content to use a version of it. Also, I liked the artwork in the '72 annual report which showed the different kinds of cones (p. 4, 6, etc.) -- can we use some version of that, too?

That's about all that comes to mind right now. Please feed me the raw comments as promptly as they come in. I would just as soon do the final draft sometime in August (and likely make my next trip to Portland just before that), if we can get things moving that promptly.

Have a grand time in Alaska.

best
Ivan Doig

p.s. My check came the other day.
NOTES TO CHAPTER TWO

15 Stilwell's demerits: USMA, Corps of Cadets, Register of Delinquencies, Nos. 38, 38½.
16 Root's principles: Jessup, Elihu Root, I, 253.
17 Life at Army posts: Army-Navy Journal, Dupuy, Janowitz, Pogue, I, passim.
20 Efficiency Reports: NA, RG 94, AGO 530007.
20 "Everyday intercourse with Frenchmen": letter to Military Secretary, US Army, 25 Feb 06, and reply, 21 Apr 06, NA, MSO.
21 Requests to go "beyond the seas": NA, RG 94, 17 and 19 Feb 07, MSO; 23 and 25 May 07, 28 and 30 Apr 08, 30 Apr and 4 May 09, all AGO; also Carmel B-1.
21 "Confidential Mission": NA, RG 165, File 4493-A; also RG 94, AGO 530007.
23 Further requests to go "beyond the seas" and other correspondence dealing with his career during this period are also in NA, RG 94 and 165.

2. Visitor to Revolution: China, 1911

31 Open Door, origin of the phrase: Tyler Dennett, Life of Hay, 295.
31 "America Assists the East": F. T. Gates, described as Mr. Rockefeller's secretary, Outlook, 9 Sep 05, qtd. Smith, 239.
33 "Stolen, sacked, pillaged": Minister Rockhill to Mrs. Henry Cabot Lodge, 2 Dec 00, qtd. Beale, 187-88.
34 John Hay on China: Morse and McNair, 780.
35 An up-river Treaty Port: Rasmussen, 39.
35 "Her weakness will endanger": Pelissier, 247.
36 "He did not have a Chinese mind": qtd. Snow, Journey, 95.
36 Li Yuan-hung under the bed: Tang Leang-li, 81.
37 American correspondent quoted: NYT, 10 Nov 11.
38 John Foard quoted: NYT, 20 Oct 11.
June 13, '75

Pete --

Here is the untitled opus; title will likely be one of many things to be thrashed out with PNW Station folk.

Some specifics you can help me with:
--Have I given too much space or emphasis to the forest survey of the 1930's? Had to follow Gowlin's material on this, and since he was so heavily involved, he thinks it was a very important project. If it truly was the first detailed inventory of the U.S. forests, I think he's right; but would you agree with that characterization?
--How am I doing on the environmental stuff of the 1960's? Donno what the Station is going to think of my approach there, but some of the points at least are mentioned in the Gowlin ms, and that offers some line of defense.
--Do you have any problems with the themes I ascribe to each Director's era -- that is, do they jibe fairly well with your sense of the Forest Service as a whole in those periods?
--Finally, although I don't know whisper whether I can lengthen this any, is there anything big that I've left out?

I'm a trifle uneasy or embarrassed or something about having to cross trails with your ms in a place or two where it's historically unavoidable -- the Pacific Northwest as the final frontier on pp. 6-9, for instance, and the passing of the Pinchot personnel further on. I've tried to steer clear of your prose at these points. Also, there probably are points where I'll be directly citing your ms.

Just sent this off to the Station a few days ago, so no response yet except Louise Parker's first-glance reaction. That, at least, sounded pleased.

Oh, yeah: meant to say you're getting a sort of semi-corrected version -- I've worked over things like dates and numbers, but middle initials and such are pretty loose.

thanks again for taking this on
Dear Pete,

Thanks for the appreciative comments on the PNW Station history. Things have been going so well, I'm astonished. Dr. Al Hall, regarded by some of the PNW folk as so crusty they weren't sure I should go out to talk to him, was full of praise for the ms, and it's gone through Tarrant, Chuck Peterson and Buckman with hardly a pen stroke on it. Perhaps significantly, Cowlin and Bringleb haven't returned their copies yet. I prefer to think they're off fishing somewhere rather than stewing acidly over my notions of history.

Your comments help a lot, especially about Mc Ardle's Bulletin 201 and the early history of shelterwood, points which had escaped me. I liked your notion too about the relative sizes of Mc Ardle and Munger, vis-a-vis sleeping economically in the car. As an absolute medium in the war of the sizes -- 58", 155#, size 38 and all the other average statistics -- I tend to lose sight of the significance of dimensions. Which you surely can't from your lofty viewpoint.

You haven't mentioned a fee, Pete. I'd expected to pay you one, and surely you've earned one, so let's hear it.

I appreciate the interest in the Survey stuff for a Forest History piece. I'm going to write directly to Ron Fahl about it -- maybe even today, with a carbon to you, if I can get my thoughts together -- so that you'll be off the hook if anything fouls up. I'll have to find out from Ron when he would need the article, and how much scope it would have to have. I'm interested in doing it, in conjunction with the publication of the PNW history next January, but will have to see how much more on Survey can be found during my next trip to the PNW Station.

Oh, one last thing. I am familiar with the Isaac piece you ran -- it's one of the first things the PNW people dug out for me, as they're properly quite proud of it. I'd like to use the photo of Isaac and his kite which you had on p. 58 of the article. Can't seem to come up with the picture in the PNW files; who can I get in touch with at the Society to see if you have it on file?

I trust the revising is going well. This too shall pass.

best
June 23, 1975

Mr. Ivan Doig
17021-10th Avenue, N.W.
Seattle, Washington 98177

Dear Ivan:

Wow! I'm impressed. You did a smashing job on the PNW history. I can only imagine how my turgid prose must have tempted you to revise much more than you did. Anyway, you asked for comments.

Too much on Forest Survey? I think not but don't really know. I had never heard of Survey until I went to work at PNW. At least among my associates, Survey was not considered research. Historically, it landed in Research but those guys only collect and tabulate. No hypothesis, no experimental technique. Actually glorified timber cruises. We used to play volley ball every Thursday night against guys from Survey, and those big, well-conditioned bruise would always win. I believe, at least then, they too saw themselves as non-research. To deal with your question--Survey is important, but it may not be important research.

I liked very much your treatment of the 1960s. Silent Spring came out when I was at PNW, and it caused a lot of fuss. As a matter of fact, Carson's main contention that we didn't know what we were doing was right on target. Bob Tarrant got $90,000 to start a semi-secret project to see if she was right. Bob has a great sense of humor. He always referred to it as his Rachel Carson money.

I knew Leo Isaac, not well, but had a couple of cups of coffee with him. Of course, I'm familiar with his work. I don't remember if I told you before, but I excerpted his oral history in the October 1972 Forest History. His seed-flight studies determined the optimum size of Douglas-fir (always hyphenated) clearcuts at 40 acres. That's how far a seed will fly. "Policy Needs Research" was my title, to me one of the best examples and maybe one of the few times the administrators paid any attention to Research. Leo wasn't the most popular man at the Station; your heavy and repeated emphasis on him may ruffle a few feathers or even put a burr under a few saddles. You'll have to wait until all of old-timers get out their reading glasses.

McArdle was senior author of Bulletin 201 on Douglas-fir in 1931. It became the bible of Douglas-fir management and was replaced only a decade or so ago. It provided standards of stocking by soil productivity class and lots of other extremely useful nuts and bolts info for the practical forester. Bulletin 201 might tie in with McArdle, Douglas-fir, Research, and forest management.
Other random comments. Page 8—date of scorning spruce—very popular during WW I. P 19—car with folding seats—McArdle is much larger than Munger. From my experience, little folk rarely appreciate the problems of cramped accommodations. Page 60—Wyssen's and helicopters also made defacto wilderness economically accessible. Page 68—shelterwood treatment of Douglas-fir was taught as part of my junior-year silviculture course in 1956. We learned that shelterwood possibly even held the cure for cancer, would feed the starving millions, and would bring lasting peace.

One last general comment. We sent a mss roughly equivalent to yours to the Northeastern Station. They added at least one million, or so it seemed, names. Beware.

Sincerely,

Pete

Harold K. Steen
Associate Director

HKS:at

PS: I showed your chapter on Survey to Ron Fahl, the new editor of Forest History. No reply, but if you could expand Survey into a 15 pages, he'd like to run it in next January's issue. Interested?
July 7, 1975

Mr. Ivan Doig
17021 10th Avenue, NW
Seattle, Washington 98177

Dear Ivan:

Glad but not surprised that your mss is moving smoothly along. You may well set a new standard for Forest Service publications.

Ron Fahl will write to you shortly about your article. He sees no problems.

As far as a reader's fee is concerned, if the Forest Service has budgeted for such services, then I'll take a piece of the pie. However, I strongly suspect that in your case they haven't. I've been paying you out of surplus research assistance funds, a big difference from dipping into my own sugar bowl. Maybe Louise Parker would agree to hire me retroactive. Don't feel obligated; I didn't expect anything but enjoyment, and I got that already.

Regards,

Harold K. Steen
Associate Director

HKS:at
Dear Pete,

Just a hasty line of thanks for the $180 check, and for the letter of July 7. You're truly magnanimous about the fee for reading my ms. I am going to broach the possibility of a retroactive fee with Louise Parker, although I'm not optimistic about her response. You're right that there is nothing in my budget for fees, and I think Louise is chary of after-the-fact financing. But I'll see if I can pry her.

Yesterday's mail also brought Bob Cowlin's ms comments, and I'm relieved that they're all minor and quite amenable.

Since you're a Pacific Search reader, I should alert you that my version of the Bitterroot fire of 1910 is upcoming. Because of space limits, it's pretty much a bare-bones recital. But if you don't object, I would like to base a couple of lines about Greeley on your ms. I think it'll be simply something like this: "His dean at Yale, Henry Graves, had called him 'a special star.' Now Graves himself had become head of the U.S. Forest Service, and Greeley was surging up through the ranks to become his heir apparent."

Enough for now. I hope it's all going well with you. Will look forward to your last couple of chapters, and ultimately to my final fee for ms reading -- an autographed copy of the book.

best regards

Ivan Doig
Robert W. Cowlin  
2597 SW Vista Ave.  
Portland, Oregon 97201  

Dear Bob  

Just a quick line of appreciation for your comments on my manuscript. They are hugely helpful, both in catching the details of forestry expertise which escaped me and in suggesting some additions. I see now major problems with anything you suggest.

I'm pleased to say all the readers' evaluations have been favorable to date. I've had the manuscript looked over by an "outside" expert -- Pete Steen of the Forest History Society in Santa Cruz -- and he found little to criticize. A greater benefit of that reading has been that Pete is interested in an article on the forest survey for the Society's Journal of Forest History. Told him I'd see what could be done, and I'll be talking with you further about that topic before I decide whether to write it.

Again, thanks for all the time and effort. Will be in touch when I work out a Portland schedule with Louise Parker.

best regards

Ivan Doig
Philip Bresleb  
4217 SW Agate Lane  
Portland, Oregon 97201

Dear Phil

Just a few quick lines of appreciation for your reading of my Station History manuscript. I think your comments are reasonable and workable; they'll bear fruit in the final version of the history.

I especially noticed your comment about the shelterwood concept. I would like to talk further with you about it. I'll likely wait until I make another trip to Portland, however.

So, I will be in touch. In the meantime, thanks again for your time and effort. You, Cowlin and Hall are contributing greatly to this history project.

best regards

Ivan Doig
Robert W. Cowlin  
2697 SW Vista Ave.  
Portland, Oregon 97201

Dear Bob

I've been making corrections on the Station history ms. in view of the comments by you and several other readers, and here's a smattering of questions I'll need your help with:

--On the Lewis County forest survey material, beginning on p. 29 and onward, one reviewer suggested it ought to be called the "line-plot" method instead of the "linear method". What do you think?

--Another reviewer wondered whether the Forest Survey can be really considered research. "No hypothesis, no experimental technique," as he put it. Obviously the Survey was an important part of the Station's work, but is there anything to this suggestion that it wasn't really a research function? Would you say the Survey people, or the Station administration, ever considered Survey as being separate from research?

--Here's something I have no way of checking, and I'll keep your answer confidential: is it accurate to credit Al Hall with the Forest Utilization Service, and ultimately with its adoption by other Experiment Stations? If so, it is a considerable historical feather for the PNW Station and should be cited. If indeed Hall was the father of FUS, I would revamp a sentence in the middle of p. 46 to make it read: "Hall reoriented the Forest Products Division and renamed it the Forest Utilization Service, a move subsequently followed by the other Experiment Stations." Does that strike you as okay?

Those are about the only pressing items just now. My next trip to Portland awaits the end of Louise Parker's vacation, and the coming and going of some houseguests here -- may make it the first week in August.

best wishes

Ivan Doig
July 21, 1975

Dear Dean:

Regarding your letter of July 17 and the questions raised—"line plot" is probably more descriptive of the Lewis County job than "linear."

I don't see any good reason why the Forest Service cannot be considered research. This question has been raised before within the Forest Service but never too seriously. I can fill you in on details and also give examples of work of the Survey that would fit even the "other reviewers" apparent restricted definition of research. It is a long story and will hold my fire until your imminent visit.

With respect to the FUS and CD Hall I think he had much to do with the establishment of the FUS and other stations as well as PNW. However, I will do some checking on chronology and also discuss it with you in Eugene when you come to Portland. The middle of the first week in August would catch Bill and me at home.

Regards,
Bob
Dr. J. Alfred Hall  
7865 SW Broadmoor Terrace  
Portland, Oregon 97225

Dear Dr. Hall

My Station history manuscript has gone through a vast clutch of reviewers by now, and surprisingly there's been very little dispute. I had thought there might be a good scuffle or two along the way, but no such luck. Anyway, as I make the final revision a couple of minor points ought to be cleared with you -- please just jot any response on this same sheet, to save yourself time:

Someone pointed out that I had you going to the associate directorship of the California Experiment Station on one page, and on the next Steve Wyckoff becoming director of the Pacific Southwest Experiment Station. Am I right that I ought to call it the Pacific Southwest Experiment Station in both instances, and that it was located in Berkeley in both instances (i.e., when you were there in the late 1930's and when Wyckoff went in 1945)?

Also, I want to credit you as fully and accurately as possible where the Forest Utilization Service is concerned, and I'm not sure I managed it on the first try. I think you told me when we talked that you "invented" the FUS: is it okay if I say, one way or another, that the FUS was your concept -- that you originated it at the PNW Station? Also, do you know if it's accurate to say the FUS was subsequently adopted by all the other Experiment Stations -- that is, do you remember if it became a Forest Service-wide revamping after being introduced at the PNW, or whether other Stations adopted it piecemeal, or what? This will make only a sentence or two in the final version, but it might as well be accurate.

best regards

Ivan Doig
From people in F.S., M. H. H. (Wells, Frayer, Chief F. Products) and I know the real genius of 19-05.

About my friend from Washington to Tacoma to answer questions arising about lack of contact in the North West with the Treed Portable Lab. The meeting was with the Tacoma chamber of commerce, whose business was a fine and outspoken chair whose name helps me.

I discussed my F.S. venture and proposed it to the group in Seattle and it was well received with enthusiasm. Back in Washington I presented the proposal. I proposed about four or five units that crossed station boundaries. It was modified to have each unit attacked to a station and making another in the boundary. That was the way it turned out and its boundaries, Just the way it turned out and its boundaries, just the way it turned out and its boundaries. Just the way it turned out and its boundaries, just the way it turned out and its boundaries. Just the way it turned out and its boundaries. Just the way it turned out and its boundaries.

I'm still working on a copy of the November discrepancy of the Electric Department Station on the Pacific coast.

I recently was able to call the Pacific station, and that is what I was able to do. I'm still working on a copy of the November discrepancy of the Electric Department Station on the Pacific coast.

If I may, I would like to offer you my quarterly, as possible.

Love regards.
Roy R. Silen
Forestry Sciences Laboratory
3200 Jefferson Way
Corvallis, Oregon 97331

Dear Mr. Silen,

You may or may not know that I've been commissioned to write a brief history of the PNW Station, to mark its fiftieth anniversary. When I made a trip to the Lab last spring, Bob Campbell was most helpful in talking to me about genetics research. But now that my manuscript is going into final revision, I have a couple of points I'll have to check with you for the sake of accuracy.

The first involves the seed-flight research by Leo Isaac in the late 1920's. I understand that you worked with Isaac early in your career with the Station, and in any case you would likely be the person most knowledgeable about his research. One reviewer of my manuscript suggested that the consequences of Isaac's research came down to this: "His seed-flight studies determined the optimum size of Douglas-fir clearcuts at 40 acres. That's how far a seed will fly." Would you agree with that? I know it's difficult to render complex research into such simple terms, but on the other hand, it seems to me that's the way policy is often made. At any rate, I'd much appreciate your views on Isaac's research as it related to Douglas-fir clearcuts.

Also in the reviews it was suggested that I might mention Richard Mc Ardle as "senior author of Bulletin 201 on Douglas-fir in 1931. It became the bible of Douglas-fir management and was replaced only a decade or so ago. It provided standards of stocking by soil productivity class and lots of other extremely useful nuts and bolts info for the practical forester." Does that sound okay to you?

Finally, a small personal note: I mention you as one of the several hires who came to the Station during Al Hall's tenure. Should I refer to you as a silviculturist or a tree geneticist?

Sorry to take your time, but I have to try as hard for accuracy in my research as you do in yours. Many thanks.

regards

Ivan Doig

July 26, 1975
Seattle, Wash. 98177
17021 10th Ave. NW
Dr. J. Alfred Hall  
7865 SW Broadmoor Terrace  
Portland, Oregon 97225

Dear Dr. Hall

My Station history manuscript has gone through a vast clutch of reviewers by now, and surprisingly there's been very little dispute. I had thought there might be a good scuffle or two along the way, but no such luck. Anyway, as I make the final revision a couple of minor points ought to be cleared with you -- please just jot any response on this same sheet, to save yourself time!

Someone pointed out that I had you going to the associate directorship of the California Experiment Station on one page, and on the next Steve Wyckoff becoming director of the Pacific Southwest Experiment Station. Am I right that I ought to call it the Pacific Southwest Experiment Station in both instances, and that it was located in Berkeley in both instances (i.e., when you went there in the late 1930's and when Wyckoff went in 1945)?

Also, I want to credit you as fully and accurately as possible where the Forest Utilization Service is concerned, and I'm not sure I managed it on the first try. I think you told me when we talked that you "invented" the FUS: is it okay if I say, one way or another, that the FUS was your concept -- that you originated it at the PNW Station? Also, do you know if it's accurate to say the FUS was subsequently adopted by all the other Experiment Stations -- that is, do you remember if it became a Forest Service-wide revamping after being introduced at the PNW, or whether other Stations adopted it piecemeal, or what? This will make only a sentence or two in the final version, but it might as well be accurate.

best regards

Ivan Doig
Robert M. Romancier  
Assistant Director  
Forestry Sciences Laboratory  
3200 Jefferson Way  
Corvallis, Oregon 97331  

Dear Bob  

Although we didn't manage to meet when I made my swift interviewing trip through the Lab last spring, I do feel acquainted after using your office so much that day. Judy Chasse treats visitors with style.  

I've much appreciated your comments on my history of the PNW Station, and most of those suggestions can be handled without much problem. But the insertion suggested for my treatment of the Forest Utilization Service during Bob Cowlin's tenure has me a bit baffled. You may recall that I began a paragraph -- based on Cowlin's more detailed manuscript -- with the sentence: "The Station's Forest Utilization Service meanwhile was working on technology," then went on to mention the Wysen Skyline Crane tried in the Chehalis country, and to note even more briefly that taking out logs by helicopter was first tried in this same period.  

The suggested change would keep my first sentence, but then discuss "studies relating the volume and value of product output to existing measures of log and tree quality." And there's the parenthetical advice to drop any reference to Wysen and helicopter logging.  

I see a couple of problems here. First, the suggested change does not seem to live up to my opening sentence about technology -- i.e., the volume and product output studies sound to me like research in the field- and- office sense rather than trying out technology. Second, why shouldn't the Wysen and helicopter systems be mentioned? Even if they didn't work, they would be notable just for the fact that they were something the Station was focusing on at the time. I stuck to Cowlin's own language that the FUS staff played "a major part" in the Wysen installation, without suggesting that it was entirely a Station project. Anyway, the point for omitting the Wysen and helicopter experiments eludes me, and I'd be glad to have your thinking on it.  

Otherwise, I don't see any points worth arguing over, and all in all, the manuscript seems to suit the various Station reviewers pretty well. I owe much of that, of course, to the extent of Bob Cowlin's research. Thanks again for the help you've provided.
J. Louise Parker  
Information Officer  
PNW Forest & Range Experiment Station  
PO Box 3141  
Portland, Oregon 97208

Dear Louise,

Here's the revise of the History. Happily there hasn't been much rewriting to do; spent most of my time double-checking for accuracy and working in the corrections from the various readers.

There are always loose ends or something further to be tinkered with, and I've been listing them on the attached sheets as I come across them. I think they're all things you can solve with a quick decision, or phone call or letter.

I have a number of checking letters out to Station folks on some minor points -- changes, if any, could even be made after we go to proofs, but I would hope to pass them along to you long before that. I've written to Jerry Franklin about a point on shelterwood, for instance, to Romancier to tackle him on the one graf he'd like to substitute (I didn't understand either his point or why he wanted to do it, and thought it would be interesting to toss it back in his lap), and so on. Also have been meaning to report Pete Steen's reaction upon reading the first draft of the history. His comments begin: "Wow! I'm impressed. You did a smashing job on the PNW history," and go on from there. Since Pete is now probably the most knowledgable historian on both Northwest forestry and the Forest Service, I was pleased.

That brings me to the point, incidentally, that I think we have a good chance of making the final product a really outstanding publication. I'll immodestly take some credit for this, but quite a bit of it owes to the good luck of having the Cowlin manuscript and all those stories around to be interviewed. Anyway, I feel we are going to have something we can happily show around, and to that end I'll gladly hand around a couple of dozen copies to strategic people if you'll furnish them to me once we're published. (I think, for instance, I can get us at least mentioned in the book review sections of both Seattle dailies.)

Guess that's it, except for this: I do want to be consulted if you or anyone else in the office does much editing on this revised draft. A lot of it is fairly carefully nuanced to keep a precise meaning from Cowlin's manuscript or to adjust to a reviewer's comment, or some such. I do have a master draft annotated with every source, and the source of every correction, so we can ferret out the reasoning behind practically everything in the doggone manuscript.

See you eventually -- best regards

Ivan Doig

P.S. Gadd, I nearly forget -- will you put through my check for the first draft?
Editing style on Douglas fir, red cedar, and ponderosa pine -- A couple of the reviewers maintained that proper usage is Douglas-fir (always with a hyphen) and redcedar (one word), while my typist took it into her head to capitalize Ponderosa pine throughout. Since this history is for the general public, I think we ought to use the more familiar colloquial forms instead of the strictly scientific. The American Heritage dictionary sanctions Douglas fir, red cedar, and ponderosa pine as proper usages, and if there's likely to be an inter-Station scuffle about the issue, we could insert a footnote to that effect. Anyway, I've tried to style the three species accordingly, and would ask you to check on them as you edit, too.

Permissions -- For courtesy's sake, and perhaps legally, we ought to secure written permission to quote from the Isaac and Munger oral history interviews. I think this would best be done in a letter by you, Louise, representing the Station. According to the use agreement in the front of the published interviews, the Director of the Forest History Society can grant permission. That would be Elwood Maunder, Director, Forest History Society, PO Box 1581, Santa Cruz, Calif. 95061. The passages quoted will be as follows:

From Leo A. Isaac, Douglas Fir Research in the Pacific Northwest, 1920-1956:

p. 49 -- "It was then a sad affair."

p. 53 -- "...piled two feet high on one big open table."

p. 71-72 -- "I got a piece of spruce and made my struts and frame... I got light balloon silk sailcloth and stabilized and covered it... I attached an oatmeal carton (I saved them from the kitchen) bottom-side-up and tied the cover on with a thin, light thread."

p. 71 -- "I haven't seen a kite like it before or since."

p. 72 -- "It checked out with amazing accuracy, the density of seed fall in the frame in comparison to the total number of seed that was released. I got a regular survey, a pattern of seed fall on the snow."

p. 74 -- "...one of us had to sit up all night to keep the fire going to keep from freezing to death..."

p. 75 -- "...when they got lost in the tall grass."

From Thornton T. Munger, Forest Research in the Northwest:

p. 45 -- "From the start, I was not interested in research for research's sake, but wanted to see research put into use..."

p. 58 -- "...our leader and really our hero was gone."

p. 49 -- "People who have gone through that area since then have been surprised to discover once in awhile an eastern oak or a European pine of some kind and have wondered how in the world it got there."

p. 99 -- "...as a surprise to me, District Forester Cecil wanted to know if I would care for the job as Director and I thought I would."

p. 138 -- "They did a lot of development work, including building residences and office buildings at several places..."
Title -- I've opted for Horizons of Timber and Grass because it fits both the geographical sweep of resources which called the Station into being, and the "horizons" of forest and range research. Also, it happens to fit the concluding lines I unwittingly came up with. Any fault to find with it?

More names of personnel -- I've inserted a few more people, both current and historical -- Walter H. Meyer on p. 27, for instance, and Flora Sligh et al on p. 68. I did this somewhat grudgingly, since once we start inserting there could be no end. But when a couple of reviewers separately suggested adding someone, I have. With the additions I've made, I think only George Garrison of all the reviewers would like to have more names in. I strongly feel we'd better hold the line where we are.

Sources and Acknowledgments -- I'm convinced we'd do well to be as scrupulous as possible about the sources and research which went into the history. It's a matter of great importance to librarians and academic scholars, as well as being very useful to future generations at the Station. (I mean, 25 years from now when you feebly reach for the phone and hire me to totter to the typewriter and write the 75-year history, we'll both want to know what the hell was going on back in bicentennial times, won't we?) Anyway, I've tried to be as thorough and explanatory as possible; I think the results when printed will only add up to a page or so, and it'll be well worth it in terms of class and veracity.

The source notes, as you'll see, are mostly restricted to quotations. Listing a note for every piece of documentation would be overkill, running to many pages. But as I mention on p. 77, I will provide you for the office files an annotated copy of the manuscript or the published version, listing in the margins the sources for every fact. It'll be a valuable resource for any future research, and protect us if we're challenged about anything in the manuscript.

(personnel figures -- Am I right on the figures cited on p. 2 -- some 60 scientists at Corvallis lab, total Station staff of 250, some two dozen research teams?)

There are a couple of minor points of research I'm not able to check out, but perhaps someone at the Station can. On p. 14, we need to check whether Leonard I. Barrett indeed went on to become Director of two Stations. Cowlin thinks Barrett had terms at both the Southeastern and Central Stations, but isn't positive. He says the Forest Service directories, probably for the 1940's, which used to be in the Station library should show when and where Barrett was Director. Secondly, on p. 35, we could stand some fuller documentation about the Station adding "and Range" to its name in Feb., 1938; neither the Cowlin ms nor the Station historical record seem to mention it. If there's some other file around there, in the Director's office or wherever, which would have that info, it would help.
Finally (I hope; this is getting ungodly long), the inserted stuff about Tarrant. The graf on p. 7ha was about the best I could come up with from his bio sheet; check me on the date he became Director, since I had to guess. Also, you might make sure I've mentioned his elder work properly on the p. 68a insert; should it read "in soil regeneration" rather than "in soil enrichment"?
Karen Randle
Information Office
FW Forest & Range Experiment Station
PO Box 3161
Portland, Ore. 97208

Dear Karen

As you’ve done such a hellwa amount of work recently trying to track stuff down for me, thought I ought to write a line to say the results have been paying off. The xeroxies you sent will do fine, and PACFORNET came through with the Kirkland-Brandstrom manual. As for the biographical info, I will try the Society of American Foresters headquarters in D.C. for anything on Axel Brandstrom, Burt Kirkland, or C.J. Buck. But in the meantime, would you call out to the Western Forestry Center, or whatever Ernie Kolbe’s fiefdom is titled, and see if they have anything in their files (particularly on C.J. Buck)? I read somewhere that they have some bio material, and Buck might qualify with them.

Glad to hear of the Seattle trip. Although I think Carol and I will be in southern Idaho in mid-September, try calling us (542-6658) on the chance we’re not; we’d happily join you for a meal or a drink if we’re in town. David Ishi’s bookstore in the Grand Central building is maybe the best-known Pioneer Square book shop — as I savvy it, it’s not very large, and maybe entirely used books, but Ishi is a skilled bookman. The ultimate in used books — and some new — is Shorey’s, a ways north of Pioneer Square at 815 Third Ave. Biggest emporium of new books is the University Book Store, 4326 University Way NE, a few blocks from the U. of Washington campus.

Have fun. See you sometime.

Ivan Doig
Dear Ivan:

You're right! You have done a masterful job. It is nicely written and well researched. We will send money.

Now, as to the procedure from this point on. I do think the manuscript needs some editing, especially from the standpoint of length. Our contract calls for not less than 40 pages—which is quite a ways from 75. I know that you are concerned with the editing process, and that we keep to the spirit of the sources you used, so perhaps you are the best person to do this job.

My concern is not that the material is not interesting, but that we have a story that is highly readable and not too expensive to print. Also, we probably don't have enough visual material to support a text of that length.

In editing, will you please cut this down to about 50 pages. I would suggest cutting out or summarizing most of the material that does not deal directly with the PNW Station, and tightening up other places.

Some other points, partly in answer to your notes:

(a) I like the quotes that begin sections of the manuscript—except where they have no relation to the PNW Station. For example, the lines from Tennyson seem out of place. Can you find some quotes that work better here, or we can use the quotes you have as part of the graphic design rather than as leadins to each section.

(b) Could we have a summary paragraph somewhere—as introduction or ending—which gives the reader a better understanding of why all this is important, its value to resource managers, etc.
(c) We should conform to the Government Style Manual (yes, there is one) in the matter of punctuation, spelling, and hyphenizing. But a quick final edit can solve those problems.

(d) We will definitely ask permission of the Forest History Society to quote those interviews you mention.

(e) Title is okay.

(f) I have checked the points of fact you asked about and notes are made on your memo attached.

Can you please have the edited manuscript back to me by August 22. After that, I will ask the Station editor, George Hansen, to do a quick final edit. Following that editing, I will send you a copy of the final manuscript so you can double check it. Then we will proceed with design and layout.

Ivan, I really appreciate the very thorough job you have done on this. I, too, think we will have a fine story here and, like you, look forward to the finished product.

It seems to me that you budgeted for at least one more trip to Portland. Perhaps you would like to come down in a couple of months to review the rough layout with us. That will be the last opportunity to make changes.

Again, congratulations! I like it very much.

J. LOUISE PARKER
Information Officer

cc: George Booras
Aug. 5, 1975

Dear Ivan:

Pardon this wrinkled piece of stationery, end of supply.
Perhaps it is appropriate for correspondence regarding incidents.
I had several references concerning C. Menzies including his “Journal of Vancouver Island, April to October, 1792” by C. E. Newcomb. However, the specific reference I used in the station history was taken from “Oregon Journal of David Douglas” - Oregon Book Society by D.S. Lowender.

Forest dendrologists did painstaking research on Douglas fir preceding the change in the scientific name of that species from P. taxifolia to P. Menziesii. Undoubtedly they culled the literature thoroughly to support the new nomenclature. If you are interested in this subject Dr. E.S. Little Sr., of the Forest Service, W.O., is an authority on the subject.

Sincerely,
Bob.
1630 Written Information

August 8, 1975

PNW Station History

Mr. Peter Steen
Forest History Society, Inc.
P.O. Box 1581
Santa Cruz, California 95060

Dear Pete:

Ivan Doig has asked that we get permission from you to quote from the Society's interviews with Leo Isaac and Thornton Munger for the PNW Station history. A list of quotes we want to use is attached.

Don't you think that Ivan has done an excellent job? There are so many interesting things I hadn't known. I like the remembrances best—the things that tell us just what it was like then. Thanks again for giving me Ivan's name. We're very happy with this.

Sincerely,

J. LOUISE PARKER

J. LOUISE PARKER
Information Officer

Enclosure

cc: Ivan Doig

JLParker:kr
Friday

Ivan:

Checked with the Western Forestry Center. The only place they have any biographies is in (are you ready for this?) the Memorial Hall. C.J. Buck isn't in it. They suggested the Oregon Historical Society--seems like when I was looking for something else that source was suggested. It might be quite a good one. Have you tried it yet?

Karen
Thursday:

Dear Ivan:

The Regional Office is a regular fountain of information (little sarcasm there).

All I could find on C.J. Buck is that he was Regional Forester from March 1, 1930, through 1939. He was then transferred to the Washington Office.

The lady I talked to (Nella Huelett of the Information (?) Office) suggested that you talk to Bob Cowlin about this one. She said he came over there one day and plowed through all their material trying to find out something about Buck. He may have pursued the leads with the WO and have exactly what you need.

All roads seem to lead to Bob Cowlin. That's what he gets for being so thorough.

A friend and I are coming up Saturday, Sept. 13 (I think) to sample Seattle's wares. If you have a favorite bookstore in the Pioneer Square area, let me know. I can spend many hours in good bookstores.

Stuart

Any word from PACFOLL yet?
Dear Ivan:

Munger's handwriting mystifies most people. Sometimes I could usually decipher it. I became fairly adept but the years had dimmed my skill.

I would agree with your first guess - that it was lumber "at the juniper would seem more appropriate and logical. However, the unknown writers were probably no logicians. I rate for lumbar & let the chips fall where they may.

Sincerely,
wants "The man who knew trees" printed in Forest History. If so I have read it.

Bob
Ivan:

Here's the info. you requested on Le.Ultra Barrett. Looks as though he was only Director of one Station -- from 1943-45.

also fiscal reports that you will need to submit an invoice if you want money!
I believe that you already got the first 20% -- is that correct? If so, bill us for the next 40. If not, bill for entire 60.

Louise Parker
re Leonard I. Barrett

Info. from WO history office 202/447-2418

From old FS directories

1926 listed as junior forester, Southern Station.

1929 " junior forester, Central States Sta., later silviculturist

1931 " in forest management, Appalachian Station

1935-1939 listed variously as silviculturist, silvics, Timber management
at Appalachian Station

1940-42 head, forest management at Appalachian St.

1943-1945 Director Central States Station

April 1945 WO

1946-1952 Chief, Divisions of Forest Management Research, WO

1953 Project leader, Timber Resource Review, WO

1958 Programs, Planning & Special projects, WO

1960 retired

From PNW history

1924 field assistant

1925 temporary computer
Robert W. Cowlin
2697 SW Vista Ave.
Portland, ORE. 97201

Dear Bob,

Only a true ingrate would answer a supply of information with a request for still more information. But that's the way of the researcher.

Thanks hugely for the specifics on the Menzies. I'll make the proper annotation -- did I tell you intend to provide the Station with a copy of the manuscript annotated with every source, for the sake of any future research? -- and get a reference into the source notes to be published at the end of the history in its final version.

The enclosed is a small piece of detective work which I send to you in desperation as perhaps the only possible source to decipher what must be Munger's handwriting. It is the only handwritten insertion in the whole doggone year's worth of monthly reports (1925), and naturally it comes in the middle of the fine quote I'm using to lead off ch. 1 of the history. So, I've made a photocopy of the page, for safety's sake, and am sending you the original to see if you have any theories what the word might be. My first guess was "lumber", but I've since thought it could be "juniper" instead.

Don't strain overmuch on this, or feel frustrated if you can't solve it either. If the word can't be deciphered, I'll simply add a source note saying so, and giving our best guess.

Thanks once more. Have I told you that the JOURNAL OF FOREST HISTORY wants an article on the Forest Survey? You and your material naturally will be prominent in that; I'll simply amend much of it from portions of the Station history, but will be able to add considerable detail, too. The JOURNAL editor yesterday sent me "The Man Who Knew Trees," a 35-page autobiography of Jim Girard. If you haven't seen it and would like to, I can send you a photocopy version.

best regards

Ivan Doig
Dear Louise

Huge thanks for the enthusiastic comments on the ms. I've just been doing some scheduling for the next month or so, thinking about when I might get down to talk about layout and any loose ends. But more on that anon ...

About the length of the manuscript: there's been a bit of misreading on this score, and luckily it's in my favor. The first page of the contract specifications asks for "a minimum of 40-45 pages of final printed text", and that's what my 76 pages of typed text will come out -- in fact, probably somewhat less. You had told me at the start, both on the phone and in a letter, that you had in mind a history comparable in size to the NE Station history, which you sent me as an example. Before ever starting to write, I did a word count on the NE history -- coming out at 486 inches of text, @ 42 words/inch, or just over 20,000 words. So, that became my target length, as indicated in the Project Plan and Outline I did while I was at the Station. And in fact, because my typist used a large typeface which seems to about 10% less than the usual 250 words per typed page, the finished manuscript likely was closer to 17-18,000 words than 20,000. (Edited-in corrections and amplifications from Station folks probably has added several hundred words to that total by now.)

In short, the manuscript is very close to the length we've talked about all along. Which, thank God, will save me cutting the material I worked like hell on. Okay?

As to the visual material: again, I selected enough possible pics to keep this history in line with the NE version -- about 2 dozen and one map, as against the NE version's 28 pics and 3 maps.

Other points: I envisioned the section-beginning quotes as part of the graphic design, all right. Sorry you don't like the Tennyson -- it's meant to make the point that the Forest Survey was a sort of rolloall of the national soul -- that at long last we began a sober estimation of a vital resource. If you still don't like it, I can substitute.

more
To: George J. Booras
Contracting Officer
Pacific Northwest Forest & Range Experiment Station
PO Box 3141
Portland, Oregon 97208

August 15, 1975

Invoice for partial payment (40%) on Pacific Northwest Forest & Range Experiment Station history project. As per page 4, Contract 19-235, the review manuscript has been submitted and, according to notification from Contracting Officer's Representative J. Louise Parker on Aug. 12, 1975, has been approved. Accordingly I wish the following progress payment as stipulated:

$1,420.00 (40% of contract total of $3,550.00)

payable to: Ivan Doig
17021 10th Ave. NW
Seattle, Wash. 98177 Social Security # 516-44-4410

signed ________________________________
J. Louise Parker  
Information Officer  
PNW Forest & Range Experiment Station  
PO Box 3141  
Portland, Oregon 97208

Dear Louise,

Here's the manuscript, ready for George Hansen's pencil. I've made the handful of small corrections I had on hand, and cut the length a bit. The most notable cuts come in the descriptive material at the start of the second chapter, which I take it you're a bit reluctant to spend your budget on. I'm agreeable to such trims in description. I would hope, though, that we can retain the historical stuff in that chapter -- background on the NW lumber trade, mostly. That kind of history, after all, is the main benefit I can provide this project.

You'll be heartened to know that I jettisoned Tennyson from the opening quote on p2, and substituted that other renowned poet, T.T. Munger. I did keep the non-Station person's quote on p. 52, though -- the opening of the Cowlin era. I think it characterizes Bob's directorship better than anything else available.

Should have mentioned to you before this that there is a solid rebuttal to any complaints Silen may have: when I went to Corvallis, he refused to see me, and shunted me off to one of his project men -- the only lack of cooperation I've had during this entire project. So if Silen feels he didn't get his ear in, he brung it on himself.

I sent an invoice to Booras for the next 40% of my fee, so I assume it's trickling through the system.

If you have to reach me, I'll be here at home until Labor Day, then out of touch in Idaho and eastern Oregon until Sept. 15. But I'll give you a call before I show up in Portland. See you then.

best regards

Ivan Doig
J. Louise Parker
Information Officer
PNW Forest Range Experiment Station
PO Box 3111
Portland, Oregon 97208

Dear Louise

Your letter of the 18th just arrived -- the Pony Express must have run out of oats between Portland and here.

I don't mean to keep hashing over the question of editing, but your letter again makes me wonder if we're both operating on the same basis of understanding. Certainly I don't object to having an occasional fat sentence edited out of my work. Anybody's writing can stand that, and I did some editing of that sort myself before sending the ms back to you earlier this week. What I can't agree to is editing out some given proportion of my work, just on the theory that some proportion ought to be edited out. I wrote the manuscript to a specific length, on the basis of both the contract stipulation and my project outline, and did what I think any professional writer would do: tailor the approach and the material to the given length. A wholesale cutting of a manuscript written that way will not only waste much of the expertise I was supposedly hired for, but will break up what all of the reviewers -- a dozen or so, by now -- have found to be a highly readable narrative.

I'm not on the warpath about this, because you've been grand to work with and I haven't yet seen any evidence that the editorial pencil of George Hansen or anyone else is doing me wrong. But I do have to tell you what my understanding of the project has been, according to the contract, project outline and your letters, and how I tailored the manuscript accordingly. Okay? I may have to sum it up this way: I'm thoroughly agreeable to being edited on editorial standards alone, but not on any pre-existing notion that the manuscript automatically is too long.

Looking forward to seeing you in mid-September. Be ready to nominate a place for dinner; I much enjoyed the Bush Garden, but would happily try any other good candidate. See you then.

best

Ivan Doig
Ivan:

You're technically right about the length of the manuscript. I had envisioned, however, that any manuscript would need editing, and that we would ask for copy longer than the finished report to allow for that. Since your last memo strongly implied that you were reluctant to have anyone else do any editing, I had assumed that you would want to do that yourself.

However, the Station editor tells me that he will be happy to do this. And that sure meets with my approval!

I'm still adamant about some of those quotes. It isn't Tennyson I don't like, it's the idea of using quotes from sources other than the history material. I had hoped that you could come up with something from the manuscript.

About the September trip. That will be fine for a preliminary discussion of layout. Karen tells me that we will be able to talk over general layout and style by then. I would suggest about an hour's meeting either the 15th or 16th (but not first thing Monday morning). You may want to hold off on caption writing until she has selected the exact photographs she wants to use and has decided where they will go in the layout.

Louise
Dear Bob

Just a quick line to report on the progress of the Station history, and to thank you for reading over the Forest History article for me. Louise and Karen have imaginative plans for illustrating the Station history. They'll use more photos than I thought was originally intended, and Karen has in mind a very attractive style of design. I think it'll be a lovely job when it gets into print.

Louise mentioned in passing that she thought you were a bit bothered by the anecdote I used about Munger's early impression of you -- that you had "Eli connections". I've looked at it again, and am puzzled as to what the problem might be. The joke, such as it is, is on Munger rather than you, and it seems to me a pretty gentle joke at that. If it's the next line, where I wrote "Cowlin had even more than that to commend him," I've strengthened that in the editing to read "Cowlin had considerably more than that to commend him." I have at least two reasons for using the anecdote. First, it provides a low-key way to introduce the reader to your era as Director, nicely making the point about how the scope of the Station had changed from Munger's time to yours. Second, it has historical value in showing how Yale-oriented Munger was -- how much he was part of that original Yale group of Forest Service leaders.

So, if there's some problem with the anecdote which I'm overlooking, I'd be pleased to have you point it out to me. But if you agree with my reasoning, I'd prefer to let it stand pretty much as written. Seems to me there's a lot of value in such anecdotal capsules of history.

Good to talk to you on the phone last week. Forgot to tell you I caught a couple of fine rainbow trout on the Payette River during our Idaho trip. Maybe someday I'll be in a league with you real fishermen yet.

best regards

Ivan Doig
Dear Ivan:

Here is the long-awaited manuscript. It has been looked at by several of the finest editors in the country! It is a little shorter, but not much, and somewhat tighter. I hope you like what we've done. I think I am the toughest of your several editors, so you can argue with me about any of this.

As soon as you okay the manuscript, we are ready for typesetting, so please hurry. We're anxious for Karen to get to the layout.

Hello to Carol! I really enjoyed dinner when you were here. I'll give you a call the next time I'm in Seattle.

J. LOUISE PARKER
Information Officer

Enclosure
J. Louise Parker  
Information Officer  
PNW Forest & Range Experiment Station  
PO Box 3111  
Portland, Oregon 97206

Dear Louise,

Here's the Station history once again, heavier in glue and patchwork but lighter in woodage.

I suppose our next step in the schedule is captioning Karen's illustrations. For the sake of your planning, here are a couple of unbudgeable things on my schedule we'll have to work around. The galleys of my utopias book are supposed to arrive about the 18th, and they may be a week or so of steady work. On the 23rd and 24th, there's a National Archives conference I'm attending here in town, followed by a trip to Victoria the 25th-27th. All in all, it means the last 2 weeks of October are pretty well wiped out for me. Either before or after that, I can get to the captions fairly promptly, I think.

I'm attaching a page or two here which will answer specific questions the editors had and also explain a few things I did in my own revising. I think we're getting this thing whipped into shape, huh?

Are you coming up for the Advisory Committee meeting? Give us a call if you can.

Best,

Ivan Doig
p. 4- I sympathize with the inclination of George Hansen and his cohort to cut anything which didn't actually happen within the 4 walls of the Station, but a bit of background is essential to the Station history. This version should solve any problems of the lengthier original. I've cut down both the forestry and administrative material and combined them into one section. I've also made it more explicit that the few explorers and such are mentioned because they were the forebears of what the Station has done. Similarly, the material about early logging and what we now consider horrible practices must stay in -- the point being that if logging had been done ideally all these decades there wouldn't be any reason in being for the Station.

So, I think you'll find that this section now reads pretty crisply, and provides what the histories of the other Stations have lacked: a thoughtfull background on the Station's region and resources. Also, it's a vital matter to me, as a professional in writing and research, to have interpretive material which will back up and illustrate the specific details of the Station material.

p. 12 -- Hansen was quite upset -- and so was one of the earlier readers, maybe Garrison -- about my mention of Alaska in the Station's original territory. If they know something I don't, okay. But I'm just going by the Station Record, those volumes Cowlin dug out for me, which says on p. 15, in the summary for calendar year 1924: "The initial territory assigned to the station included all of Region 6, Alaska, and the yellow pine forests of Idaho." (It goes on to explain the Idaho forests were dropped later that year.) I'm willing to drop the mention of Alaska, if there's some problem about it, but to do so would omit any mention at all of when Alaska comes into the Station's area of concern. What do you think? Want to ask Hansen what he thinks the problem is, or what? I'm neutral on this one, just the researcher going by the sources.

On that same page, you're right that the line should read "the forests of Oregon etc" rather than the "national forests"; 'twas a slip of my typewriter.

p. 25 -- Someone objected to "alphabet agencies" in talking about New Deal. I want to use the device because there's a generation or two of people -- readers -- who know the New Deal agencies by their initials -- CCC and such -- but not by their full titles, which they couldn't care less about. In short, it's a way to make the history easier and more comfortable at this point. For the same reason, I'm keeping the Munger quote about the CCC youths. That was maybe the single federal program which veterans of that generation are most heartfelt towards, and it's a good idea here to back it up with a little life and detail from Munger.

pp. 45-6 -- Here's something weird which seems to have escaped all the readers: not until I began editing in some stuff from my talk with Silen did I realize that I was calling the Blue River Exp'l Forest -- following Cowlin's material -- is actually the Andrews. Your affection for your old hometown aside, can we simply change the name to "the H.J. Andrews" in
the references I make? We'd be in line with the 1959 guide by Berntsen & Rothacher, which begins: "The H.J. Andrews Experimental Forest was established July 28, 1918...

pp. 52-3 -- The couple grafs of background on insect research ought to stay in. The number of bug scientists in Corvallis and the amount of news about forest insects in recent years easily justify it. We'll be scanting a major area of the Station if we ignore the history of insect research. I'm sorry that history doesn't happen to have happened under the Station's letterhead, but that can't be helped.

...more...

p. 58 -- I begin the Biegelb era with environmental material, which one of the editors objected to. This is both a story device -- to give the reader a change of pace from meeting some new Director at the head of every chapter -- and a good way to emphasize the new importance of environmental concerns. Let's not water down the quality of the history by having to have every director up front in a chapter. Phil is happy with my version, so I don't see why the rest of us shouldn't be.

p. 61 -- Louise, you wondered about the computer simulation experiment; I took the info from the 1969 annual report, p. 27. Okay? If not, edit.

On the source notes, somebody questioned whether publishers should be cited. Modern style is not to cite, just give the city and year of publication, which is ample for anyone interested in looking up the book.

In the edited version, I put in p. 68a to add mention of modern research, bow in the direction of Silen, Franklin, etc., and you suggested putting it in an introduction instead. That's dandy with me. I'd prefer that you write it, and say whatever more you think is needed. The only thing I'd like is that it run on the inside cover, or on a separate page somehow; I would like my text to begin with that Hunger quote about the guy dropping by the office, which gets the reader into the history immediately.
October 13, 1975

J. Louise Parker
Information Officer
PNW Forest & Range Experiment Station
PO Box 3141
Portland, Oregon 97206

Dear Louise

A small piece of editing to be done on p. 4 of the revised Station history ms. In the 8th line from the bottom, let's make an insertion to make it read:

"His research harvest from there and elsewhere included..."

It's a small historical point, arising out of Bob Cowlin's research; we'll just be more certain of accuracy with this version.

Got a schedule yet for me to write outlines? And is there an estimate on when we'll see galleys?

cheers

Ivan Doig
J. Louise Parker  
Information Officer  
PNW Station  
PO Box 3141  
Portland, Oregon 97208

Dear Louise,

You're right, the proofs look generally very good. I haven't done a really proofreading -- I'm still half-blind from reading book galleys the past week or so -- but did a quick editorial read.

The attached comment sheets list the problems I caught, plus the places where the editing-down process has cut too deeply into accuracy or style. I've given the reasons in each case why a phrase or line has to be restored; I realize that from your editing point of view of getting the final product as short as possible that all of these must have seemed expendable, and I'm simply pointing out the particular nuance or kernel of information which has to be provided.

Karen reports she's sick, so I imagine the layout and captioning is off for awhile, hmm?

I'd like to wait a bit before putting in for the last installment of my money; have to figure some taxes first, and divine whether it would be better to wait until after Jan. 1 to have the money. Is it any problem for your bookkeeping to wait until then, if I would want to?

Sorry we missed you during your Seattle visit. Try us again. And do you realize we're actually getting this project near completion?

best,

Ivan Doig
editing changes on PNW Station History galley proofs:

p. 1 -- Karen assures me she's already outraged at the underlining beneath the introductory quote, and will get it out of there. The other style question is what to do about book titles, as in intro quote on p. 2, to set them apart -- make them roman instead of italic, or boldface? Or leave them underlined? I don't care what, as long as they are set off somehow.

p. 1, 3d line from bottom: Somehow "passer-by" passed by all of us; it should be "passer-by".

p. 2, 2nd graf: Change the last sentence from "His harvest included..." to "His research harvest from there and elsewhere included..."

p. 2, 3d graf: bracketed letters have to be added to Lewis quote: capital A in front of species, capital T on They, as on the ms.

p. 2 -- Karen, can we have a space between the 3d graf from the end and the 4th graf from the end, to show transition of topics there?

p. 3, 1st graf of GETTING UNDERWAY: Something else which went past all of us. When somebody changed my version of "June H. Wertz was transferred" to what must be office style of "June H. Wertz transferred", it left the 2nd part of the sentence without an auxiliary verb. So, insert "was" into the 7th line of this graf to make it read: "Six office several blocks away and was put onto..."

p. 5, 5th graf from end: again, can we have a space between this graf and the one below it, to show transition from Munger to Isaac?

p. 4, 3d graf from end: Thus may seem a minor point, but it is a matter of accuracy: in the last sentence of this graf, the remarkable thing about the Isaac brothers' sojourn in the woods was not that the brother's health "gradually improved", as the edited-down version has it, but that he became truly a robust outdoorsman again. So let's restore it to my original phrasing, to read: "...as the brother's health gradually became robust again."

p. 4, last graf: I hate to sound like the Great Restorer here, but again the last part of a graf has been changed for brevity's sake and instead detracts from the pace of the chapter. My original sentence read: "He arrived on the job in early May, 1924, just before the Pacific Northwest Forest Experiment Station came into being and absorbed the Wind River facility." I put in the phrasing after "early May, 1924" because the material from here on will talk about work Isaac did at the PNW Station, not Wind River, and the reader needs both the transition and the brief reminder as to just when the PNW took over from Wind River. Please restore to the original ms sentence, hmm?

p. 5, 2d graf: The editing here changed my phrase "should regenerate themselves bountifully" to just "should regenerate themselves". This loses an important nuance, and maybe even puts us in error. The forests do regenerate, at least eventually; the point of the Hofmann theory was that they would come back plentifully and promptly once the seeds began sprouting in the duff. So we'd better put back in "bountifully", "or "automatically", or something of the sort.
p. 5, 4th graf from bottom: need to capitalize "one" in Isaac quote.

p. 5: Louise, early on you stressed to me that you wanted the practical worth of research shown. But by editing off the concluding sentence of the last graf here -- "Even Munger, that strict accountant of budgets and men, must have seen a rare bargain in the quality of Isaac’s work -- as he had hoped, not 'research for research's sake, but ... research put into use.'" -- we lose a prime chance to drive that home to the reader. Also, it laps off the sentence which ties Munger and Isaac together, bringing the theme of the chapter to a logical close. Why not put the sentence back in?

p. 6, 1st graf: line 6, editing down took out auxiliary verb: insert "were" to make it read "whatever stands of timber were left". And somebody has a phobia against the word "would", which is perfectly accurate -- and necessary -- to designate when something in the past was about to begin. So in the last sentence of this graf, can't we make it "Survey would begin"? "Began" is the wrong tense, since the Survey was not yet underway.

p. 6, 4th graf from end: The Munger quote on CCC work reads much better if "was done" is deleted.

p. 8, 1st graf: If you won't let me get away with calling the sub's shelling a "mysterious" show of bravado (which it was; what on earth did a submarine, vulnerable to spotting along the enemy coast, hope to gain by lobbing a few shells at an insignificant fort?), we'd better say it "was merely a show of bravado..." Otherwise, the "but" which leads into the 2d part of the sentence isn't justified.

More important, however, is to change back the final sentence in this graf to its original version. It's not really historically accurate, it seems to me, to say the impacts of WWII "were strongly felt" by this region. In comparison with all the other belligerents, who through battle or bombing felt the devastation of war within their own country, the U.S. didn't feel the holocaust "strongly". It's much more accurate to say "the far conflicts broke the routines of life", or, if you like, "drastically altered the routines..."

p. 8, graf 3: in line 5, don't we have to make it read that Wyckoff was Director at Missoula "since" 1936, instead of "in" 1936?

p. 8 -- Louise, why edit out the short graf I had between grafs 4 & 5 -- the one with the quote that "Wyckoff had a philosophical attitude toward many of the chores that troubled Munger?" It blurs over the history to take that out. Old-timers know, and are frank to say, that Munger stepped down because of job pressures, and we owe it to historical accuracy to allude to it. Besides, this quote -- from Cowlin -- is the gentlest possible way to do it, casting no aspersions on Munger or Wyckoff. Please restore?

p. 9 -- the anti-would phobia again. In the 2d graf, changing "would" to "did" entirely changes the tense, and the implication. The point is that the war was not going to last forever, and thus post-war planning had been started; restoring the "would" says this with no problem.
p. 10 -- The graf deleted between graf's 2 & 3 -- about Hall's prediction of being into WWII within 3 years -- was intended to show the flavor of Hall's personality. To all the people who know him, that graf sounds just like him. We're not so cramped for space we can't afford such "aside" graf's now and then, are we? Besides, such a graf speaks directly to a whole generation of readers; everyone of that age remembers where they were when WWII began.

p. 10, graf 4: The editing has left the first sentence here betwixt and between; will read much better and more grammatically if we delete "at a time".

p. 11, 2d graf from end: We'd be more accurate to retain the final phrase "as we know it" after "the seedtime of the "National Forest system". Historically, there were "national forests", although they weren't called precisely that, before Pinchot; it's been since Pinchot that the system in the form we can recognize has come to be.

p. 11, last graf, line 4 -- a letter has been dropped in "the".

p. 13, second graf, line 8 -- "beetle" misspelled.

p. 13 -- last 2 graf's from the ms have been dropped. They are vital, because they conclude Isaac's career and introduce computer era.

p. 14, graf two: Why change my phrase "our great family quarrel" to "the endless debate"? Mine is just as accurate, and a lot livelier. What's possible objection is there? It's historical fact by now that this country has had a vast quarrel, very much like a family squabble where values are all intertwined and conflicting, for the past several years.

p. 16, 3d graf from end: Again, for transition's sake, a space between this graf and the preceding one?

p. 17, 1st graf: There must be some kind of intra-Station message about not singling out the Douglas-fir research, and you're going to have to spell it out for me. The Station editors cut the D-fir references from this graf in manuscript, I carefully restored it, and now it's gone again. Why? There's a large historical point here, and as far as can see, it's all in the Station's favor: that there has been especially significant work done on this region's prime timber resource. You may recall that this very question was asked by the Washington office when Buckman was still around, and he had Cowlin, Briegleb and Hall do a lot of pondering, and they agreed the D-fir work had been prime. As a dispassionate outsider, I concur. So what's the problem with saying so? I'm not merely exercising personal pique here. At this point of summing up, I don't want to stand out as looking dumb by omitting all assessment of how the Station has dealt with the Douglas-fir.

p. 17, last graf: Please restore my final sentence -- "Not for nothing are such scenes called horizons" -- to round off the concluding lines, and to tie in with the title of the history.
10-24-75

Ivan:

Just a brief note to let you know that I did indeed get your last letter. I did not make the changes you indicated because the manuscript had already gone to the typesetter's. (We're just fast)

There will be no galleys in the usual sense -- of being able to make quite a few corrections. We will, however, be able to correct typos or other glaring errors. I trust by this time that all the bugs are out!

Yes, I was in Seattle for the advisory committee meeting. Tried to call you one afternoon, but no answer. Had very little time to myself there. I thought it was a good meeting.

Will send you a copy just as soon as the manuscript is back from the typesetter's. Caption writing can come last -- after Karen gets the layout done. If you're anxious to get paid, we could probably work that out first...just send the bill as usual.

Louise Parker
Ivan:

Here it is! And looking very good I think. It always helps to get things into a final form so you can really see what it looks like.

We will proofread here, so there is no need to do that if you don't want. If you see any glaring errors though, be sure to let me know quickly. You might want to check the one change you sent me late...and see if that should be made now.

I will now get an introduction written (it will be very short), Karen will get on with the layout, and we'll let you know when it's time for captions.

Congratulations! I think it's neat.
To: George J. Booras
Contracting Officer
Pacific Northwest Forest & Range Experiment Station
J. Louise Parker
PNW Forest & Range Experiment Station
PO Box 3141
Portland, Oregon 97206

November 21, 1975

phone 206-542-6658

Dear Louise,

Have mulled my tax situation, and decided that I will go ahead and bill you for the last of my money, as you offered a month or so ago. The invoice is enclosed with this.

Invoice for final partial payment (40%) on Pacific Northwest Forest Experimentation.

Talked with Karen briefly last Friday when I phoned to correct Gail Simson to Gael in the ms. -- the damnedest little things creep in, huh? -- and she sounded very enthused about the layout. So I'm quite pleased it all sounds so good. Am a bit embarrassed that you folks are doing the captioning and the affixing of page numbers to the source notes, but if you're content that it's the quickest and most efficient way, okay.

I'll be around until Dec. 13th, when we take off on a 3-week California trip. That'll include a couple of days in Santa Cruz, visiting the Forest History Society, especially Pete Steen and Journal editor Ron Fahl; that piece of mine on the Forest Survey should be in print in January, incidentally.

Payable to: Ivan Doig
21 310th Ave. NW
Seattle, Wash. 98177

Social Security #4-44-4410

Ivan Doig

signed

[Signature]

Nov. 24, 1975
12-15-75

Ivan:

Thanks for sending me the piece on clearcutting in Search. I thought it was an excellent job. Congratulations! Of course, it was nice that PNW researchers were mentioned so prominently. But the tone is just right.

The history report is at the printer's -- we will see a proof, probably around the end of the month. I will try to work out a way that you can see that, too. I think it looks great. We're going two color on this...so we'll have black and a good brown, with the photographs printed in duo-tone. Pretty classy, huh?

You haven't heard from me lately because I've been in Washington, D.C. on a two-week detail... working on some rewriting for the Resources Planning Act. An impossible job!

See you soon...
April 16, 1976

Dear Louise:

I hope you still have a job and all that, after the Station history has made its rounds. People I show it to are much impressed. The only drawback, they like Karen's layout so well they ignore my prose.

I have come across a leftover from the project I forgot I had—the Station's historical files. They have been tucked away in our spare room, but I came across them the other day and thought I ought to ask you how best to return them. Can they somehow be returned to the Station's Seattle office? Or should they go back to the National Archives here? I would like to have a receipt for them, however it is done. So, advise me whenever you get a minute.

All is well here. When are you going to be in this direction again?

Best regards,
4/21/76

Dean Doig

We acknowledge receipt of 2 boxes of archival records used in preparation of the Station's history.

[Signature]

Manager

Asst. Director
Mr. Ivan Doig  
17021 10th Ave. NW  
Seattle, Washington 98177  

July 2, 1975  

2697 SW Vista Ave.  
Portland, Oregon 97201  

Dear Ivan:  

I enjoyed reading your draft of the Station history—in fact I have re-read it. Before replying to your specific questions I say it is very well done. Following the specifics I will add a few general comments:  

Page 21—second paragraph—yes, I agree with your treatment.  

Pages 29-31—This might be an appropriate place to acknowledge the early contributions of Dr. Walter H. Meyer to the Station's record. He was responsible for the comparative statistical analysis of the Lewis County job. He determined the sampling accuracy of the area and volume data produced from the linear survey. He was also chiefly responsible for the methods used in determining current and prospective growth for the entire Douglas-fir region Forest Survey. An advanced Mathematician, he was the Station authority on statistical methods at that time. He carried on the growth and yield studies started by McArdle and extended this important work to major species other than Douglas-fir; namely, spruce, hemlock and ponderosa pine.  

Page 35—Don't know that I can add much useful descriptive material to your Wyckoff profile. He was tall, erect and comparatively slender, and a pipe smoker. He enjoyed good music and had a good voice. He was an avid reader with a wide taste in literature including "who done its." My shaky memory recalls that he sang professionally in a small way in his younger days. I knew his younger brother, a classmate at University of California. The Wyckoff family lived on the edge of the Berkeley campus. I would call his office demeanor as "low key."  

Now I will add a few specific points of my own:  

Page 2—Isaac might better be described as a silviculturist. I doubt if he had any formal training in plant genetics.  

Page 4—Other early writers made some pungent comments of the Oregon weather. One mentions the "stinking fogs." Since I can't recall who said it, my comment is idle. It seems to me Rudyard Kipling visited Oregon and expressed his dislike of our weather.
Len Barrett was a Washington Office Division Chief.

Geographical purists use "Cascade Range."

"Sawtimber" accepted term.

suggest add "and Regional Director of the Forest Survey."

If that refers to the forest fire insurance study it deserves some additional explanation and possibly mention of its leader, Harold B. Shepard, Senior Forest Economist. It was the first study of its kind in the country.

It was not only uneven age. Munger and Isaac also foresaw a change in species composition in favor of species more tolerant than Douglas-fir and considered of lesser commercial value.

Munger stepped down at his own request.

Source of the reference to the Secretary Wallace memo is the Station History compiled by June Wertz and Christina McPhail (office copies only).

The fine old "yellow" fir was generally older than 200 years. Much of the 200-year-old Douglas-fir timber particularly on the better sites was termed "bastard fir" by timber cruisers. Why not say several centuries old.

California pine and redwood industries.

Spelling of Roseburg.

In May 1958 the Station moved to its present location, the Omark Building.

Since Dr. Hopkins was mentioned, it would be better balance to mention Drs. Meinicke and Boyce, pioneer forest pathologists. Boyce's work on heart rot of Douglas-fir was a major contribution.

As a general comment, the manuscript centers around the six directors and a few of the early researchers; Isaac for example. I could add a few names to that list, Bob Furniss and Bob Harris for example. Regardless of that, there were many others who contributed. The staff of the past two or three decades is composed of much better trained and scientific researchers and in retrospect some of the early successes appear elementary by present standards. I don't want to deprecate any of the early work nor do I believe it practical to burden the history with a mere recital of names, but a few sentences could
emphasize as a class the ones who made the wheels go around—"the hewers of wood and drawers of water," and also characterize the expertise of the current staff.

I will look forward to your next trip to Portland. At that time I will be glad to elaborate on my suggestions.

Sincerely,

Bob

ROBERT W. COWLIN
4217 SW Agate Lane
Portland, Oregon 97201

July 7, 1975

Mr. Ivan Doig
17021 10th Ave NW
Seattle, Washington 98177

Dear Ivan:

Between projects, both in and out of town, I have reviewed the draft manuscript inclosed with your letter of June 9.

It is interesting and very readable. I have written a number of comments on the copy which is inclosed. If any are unclear, or if they stimulate questions, please let me know and I'll be glad to try to clear them up.

You asked for thoughts about Steve Wyckoff. As you say, he did delegate more. This practice extended to the driving of cars. If Wyckoff had to travel by automobile someone else always drove. Steve used these occasions to get better acquainted with his staff members—their problems, accomplishments and goals. In turn, he shared his philosophies with them.

Wyckoff's predecessors, Munger and Acting Director Andrews, in contrast, enjoyed taking a turn at the wheel, and sometimes stimulated nervousness among their passengers. I recall an experienced and perceptive member of the staff remarking, soon after Wyckoff's arrival, that the Station never had a Director who could drive an automobile, but Steve was the first one to admit it.

My main concern about the draft manuscript: it can give the impression that the Station in its early years was great, glamorous and productive on a shoestring—but more recently on a much bigger budget it is running downhill. This is a matter of balance. More attention to the output of valuable and used results in recent decades, and to the talented and dedicated scientists who produced them would help.

For example: Don Flora's concept of the allowable cut effect of intensifying timber management is a basic innovation in forest economics. It has clarified the incentives of increasing investments in timber growing on the National Forests. It is being applied directly in management plan revisions, and has led to better Congressional understanding and approval of timber growing proposals.
Roy Silen's new system of Progressive Tree Improvement for Douglas-fir gives timber managers a quicker more flexible and ecologically sound method of increasing timber yields by up-grading the growth capacity of the trees themselves. The Progressive System is being applied on millions of acres of both private and public lands in the Northwest today.

Similar relatively recent notable research achievements at the Station already in the pilot or pay-off stage include:

Mauro Martignoni's discovery of the polyhydrosis virus in the blood of the Douglas-fir tussock moth, which promises a safe as well as effective control of this devastating insect;

Bob Tarrant's discovery of the role of alder in soil building;

Logan Norris' clarification of environmental effects of forest herbicides;

Jack Rothacher, et al, quantified the separate contributions from road-building, clearcutting and slash burning on the Douglas-fir watersheds: sediment production;

Jerry Franklin, et al, discovered that hot, dry sites in Southern Oregon, harsh exposures on the Cascade Range upper and east-side slopes can be effectively regenerated by the shelterwood system despite repeated failures of clearcutting and planting on similar sites.

These are examples that quickly come to mind; a more systematic screening is needed and deserved to balance the space given to directors, research management problems, reorganizations and facilities. Could be these administrative subjects are of more interest to Directors and former Directors than others.

One other point deserves notice. Perspective of the years shows that some early, very unpromising research efforts turned out to be dramatically valuable half a century later. History can never lead to perfect predictions of the future, but this History of the Station can help us understand the nature of research.

You are right, headquarters of the Southern Station is in New Orleans, Louisiana.

A forest mensurationist is a specialist in forest measurements, including forest growth evaluation.

Please let me know how I can help further.

Sincerely,

Philip A. Bringleb
Ivan...

One more review in now. This one from the Washington, DC office. I really didn't sent this to them for information only, but I think they've made some good points. Still waiting for review from the big three -- Petersen, Tarrant, and Buckman. Will get that to you just as soon as it comes in.

Then let's pow wow about necessary changes...

Louise Parker

Ivan - I think we already sent that to you several weeks ago. Let me know if you have it. Karen
1630 Written Information

June 13, 1975

1975 Annual Report

Bob Tarrant, Chuck Petersen, and Bob Buckman

Attached is a draft copy of the manuscript by Ivan Doig which will be the Station's annual report for 1975—the bicentennial report. Ivan is sending copies personally to the former directors for review, so we do not have to worry about that.

Will you please review this for technical accuracy and policy. I haven't read it completely yet, but what I have seen so far looks good. With good design and artwork we should have a very nice report.

Can you please route this on as quickly as possible, and get it back to me by July 4.

J. LOUISE PARKER

J. LOUISE PARKER
Information Officer

Enclosure

second copy: George Garrison, Bob Romancic, Jack Grantham, Don Flora, Ken Wright

cc: History Coordinator, WO (w/enc)
    John Jenott, Region 5 (w/enc)
    Ivan Doig

JLParker:kr

Ms. Parker: Note clipped pages.

Frank Harmon
Acting in Charge
History Unit
Washington Office

6-26-75
Ivan Doig

Ivan:

Looks like you’ve scored a hit! at least from part of our staff. I’ll send comments from the other reviewers just as soon as they come in.

Louise Parker

7-17-75
REPLY TO: 1630 Written Information  June 13, 1975

SUBJECT: 1975 Annual Report

TO: Bob Tarrant, Chuck Petersen, and Bob Buckman

Attached is a draft copy of the manuscript by Ivan Doig which will be the Station's annual report for 1975—the bicentennial report. Ivan is sending copies personally to the former directors for review, so we do not have to worry about that.

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cc: History Coordinator, WO (w/enc)
John Jenott, Region 5 (w/enc)
Ivan Doig

Excellent! I made only a few marginal notes.

Chap att!
1630 Written Information

June 13, 1975

1975 Annual Report

Bob Tarrant, Chuck Petersen, and Bob Buckman

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Enclosure

second copy: George Garrison, Bob Romander, Jack Grantham, Don Flora, Ken Wright

cc: History Coordinator, WO (w/enc)
John Jenott, Region 5 (w/enc)
Ivan Doig

JLParker:kr

Douglas fir is hypersensitive!
Errors in PNW STATION History

Page 36

Line 13 -- The author meant to say "undergrazing," but correcting this error of typography is of little gain for then the sentence reads like wild journalistic liberty.

May I suggest the following wording of the sentence:

In 1941 the wide spread drought of the Interior West broke and the once languishing rangelands of eastern Oregon and Washington began displaying a resource potential that indeed called attention to the need for the STATION to develop a division for range ecology and management.

Page 48, 7th line from bottom: This should read: Pechaneec's Division also launched range ecology investigations and a study of -- --

(more)
Page 51, line 9, after the words "in their own right."
This should be followed by an insertion: In later years two more of Hall's hires on Harris and Tarrant went on to head Stations.

Page 55, next to last line:
Yes
Change Roseberg to Roseburg.

Page 50:
Mention of Matson, Knauss, Kotok and Silem now open up claims to a lot more name dropping. Several could now say "Why fellows of that level or G5-grade"? Where of Ben Spada, Elbert H. Reid, Robt. Rummell, etc., etc.

I disagree mildly. I view on this last point—author seems to know the key names. RMR
J. Alfred Hall  
7865 SW Broadmoor Terrace  
Portland, Oregon 97225

Dear Dr. Hall,

I've just finished a first draft of the Station history, and am sending photocopies to you, Cowlin and Briegleb. I'd particularly value your looking over and commenting on the section about your own era as Director -- in your case, it's primarily pp. 42-51 -- but would be pleased to have you comment on the whole shebang, to the extent you can afford the time.

If it's simpler, feel free to write on the manuscript pages -- I have plenty of copies. I'm enclosing a self-addressed envelope for you to fire the manuscript back when you've had a look.

One specific small item: on p. 43, where your fine story about Austin Cary is told, do you recall what national forest the crownfire was in? I'd like to use the specific forest instead of "near Cogdell, Georgia," if you happen to recall it.

And please blame my typist, not me, for the capitalization of Ponderosa pine throughout the manuscript. Where she got such reverence for the species, I don't know.

Thanks immensely for your help; it'll do much to make this Station history as accurate as possible.

best regards

Ivan Doig

From: Excellent job, pretty concise and well-organized.
I love the narrative style. Few corrections.
Consists on a fine job.

All Hall
Dr. Hall --

Excuse the hasty nature of a postcard rather than a letter, but I do want to thank you promptly for your reading of my PNW Station history draft. Your corrections were very helpful, and will do much to make the history more accurate. And your general comments were exceedingly generous.

I do hope you will give a call, and come by for a drink or at least some chat, sometime when you're up here visiting your son. The phone number, not listed but available from the operator, is 542-6658.

Again, thanks and best regards

June 23, '75

[Handwritten signature]

Dear Dr. Hall,

I hope this finds you well. I've been busy with some project work, so I haven't had a chance to write before. I'm enclosing a self-addressed envelope for your own use.

If you're ever in Oregon for a stay, you can drop in to see us while you're there. We'd be happy to have you.

Best wishes,

[Handwritten signature]

[Handwritten notes]
Ivan—This is the only piece of paper I have that has Wyckoff's name on it. I talked to Agnes (Petersen's secretary and part of the very mortar of this building) and she says Hall and Cowlin would be able to help you.

September 2, 1959

Mr. R. W. Cowlin, Director  
Pacific Northwest Forest and Range Experiment Station  
P. O. Box 4095  
Portland 8, Oregon

Dear Mr. Cowlin:

It is with much regret that I inform you that Mr. Wyckoff died yesterday, September 1. Funeral services are being held Friday, September 7, at 2 p.m. at the Berkeley Hills Chapel.

Mr. Wyckoff had been seriously ill of cancer for some time. The work of the Foundation was foremost in his mind even through these past two difficult months. I thought you would like to know that contributions are being made in Mr. Wyckoff's memory to the Forest Genetics Research Foundation at the request of his family.

We are carrying on at the Foundation. An executive committee of the Board of Directors will meet shortly and determine the policy of the future.

Sincerely,

Barbara D. May

Barbara D. May  
Secretary to Mr. Wyckoff
Christopher CRX

p.20, line 21 - Okanogan

p.22, gra/3 - went brief Ft. Ucser trial

(Station record, p. 24)

p.22 - Margins of eastern or central Ore.

p.22 - change "pair" to "few"

p.8, line 10 - Okanogan

change to "water-powered"

p.6, 4th line from bottom: steam sawmill near Olympia?

p.7 - line 2, change Astoria to Oregon City

p.1 - "lumber" in gooseberry quote

p.1 - add A. to Isaac's name

p.2 - add F. to McCordle

p.15 - change Greeley years to "1920"

p.17 - 3d line from bottom, omit "mid-

- add paren: (amt was $26,060)

p.34 - line 2, change "ten" to "nine"

p.44 - add F. to Watts

p.47 - 3d line from bottom, change to "next two fiscal years"

p.29 - mid-page, change to panel sedam

p.28 - line 1, change heard to "paid" add "about about"

p.32 - add "T.F." to Brandstrom

p.31 - change mid-page to "800 another gr. not realized"

p.36 - 1941 begin series of next year? change

p.50 - add W. to Marquis
p. 51 - add T. to Munger
p. 51 - Pendiot age ?
p. 47 - 1948 floods - known as "Vanport"?
p. 49 - 1/3 of total coned forest b. NW?
p. 60 - line 30, change to 1955
p. 47 - both appl/ll tracts b. PSmol region - Voght Area
p. 57 - line 1, add "5" to Engin
p. 63 - line 8, Eng bottom, "at least"?
p. 51 - change Pendiot's age to 81
A BEGINNING

One caller, name unknown, who evidently saw the name on the door, came in to ask what we were experimenting with, saying that he too was a professional experimenter and worked with everything from lumber to gooseberry bushes -- he had once persuaded one of the latter to be a tree.

--Station Director Thornton T. Munger,
January, 1925

That early visitor to the Pacific Northwest Forest Experiment Station must have hoped he had stumbled onto a brotherhood of wildwood magicians there in a downtown Portland office building. But he more than likely departed shaking his head that these Forest Service fellows weren't even equal to his own sorcery with the gooseberry bush.

He would have found a scant staff of eight persons tucked into four small rooms, and still waiting for most of their office furniture to arrive. Since it was winter, the staff members long since had left the rainy woods to come in and catch up on paperwork. Young Leo Isaac was preparing a report about seed storage tesis he had run on stands of noble and silver fir. Another young forester
named Richard McArdle was compiling data on Douglas fir growth. Staff meetings were held once or twice a week, presided over by Thornton T. Munger, a crisp New Englander.

All in all, what activity could be discerned behind the name on the door looked to be mostly Station and not much Forest or Experiment.

Today, a half century later, the doorways which would have to be knocked on to discover what the Pacific Northwest Forest and Range Experiment Station is "experimenting with" are scattered from Fairbanks, Alaska, to Bend, Oregon. Laboratories and field offices are located at nine sites in the Pacific Northwest and Alaska; the largest, the Forestry Sciences Laboratory on the campus of Oregon State University at Corvallis, alone boasts some 45 scientists. The Portland office has grown from four rooms into a four-story building, headquarters for a total Station staff of about 325 persons. All in all, this research facility at any one time has some two dozen teams at work on forest and rangeland problems -- reforestation, watershed management, wildlife habitats, and forest diseases and insects, to name a sampling.

In all of this, there is a lineage of effort and achievement from that modest office scene of 1925. Leo Isaac would become renowned as a silviculturist, and a storied figure in forestry science for his imaginative experiments.
Richard McArdle would rise to be Chief of the U. S. Forest Service. Thornton Munger would oversee test plots of selected Douglas fir stocks which have been yielding valuable reforestation information ever since.

Just so do yesterdays count up into today. Just so does the story which opens with a single curious passerby flex itself into a history of Forest Service research on the timber and range resources of the Pacific Northwest.
THE LAND, THE TREES

...a species which grows to immense size; very commonly 27 feet in the girth, six feet above the surface of the earth, and in several instances we have found them as much as 36 feet in the girth... they frequently rise to a height of 230 feet, and one hundred and twenty or 30 of that height without a limb...

--Captain Meriwether Lewis,
February 4, 1806, describing
the Sitka spruce

The storms track in from the Pacific on collision course first with the Olympic Mountains and the Coast Range, and then with the longer jut of the Cascade Range north to south through the states of Washington and Oregon. We can't say for sure what at least one writer has alleged: "The first thing reported about the Northwest Coast was rain." But anyone familiar with the dousing which this rumpled corner of the country undergoes in a cycle of the seasons might agree that rainfall should have been

....in the reports of the earliest European mariners who cruised this coast. We do know with more precision how impressed the explorers were with the vast growth fed by this damp North Pacific weather -- the dark-green forests
which bristled mile upon mile, mighty trees often a height of two hundred feet and more.

The beginnings of scientific research into this trove of timber make savory reading—adventurers onto a strange shore plucking off the odd specimens everywhere around them. On a voyage with Commander Vancouver in 1792, a Scottish surgeon and naturalist named Archibald Menzies went up the Columbia River 100 miles by longboat and collected twigs, needles, and cones along the way. Menzies' jaunt gathered in specimens from the Douglas fir, Sitka spruce, western hemlock, and western red cedar—the four great timber species in the ecosystem west of the Cascades.

Then in mid-October of 1805, the Lewis and Clark expedition arrived at the Columbia River in what is now southeastern Washington. Continuing westward to the mouth of the river, the Corps of Discovery would spend a total of 196 days in the country of the Columbia, and the journal entries by Captain Meriwether Lewis diligently recorded flora and fauna. As the introductory quotation shows, the big tree now called Sitka spruce mightily impressed diarist Lewis. "this timber is white and soft throughout," he wrote, "and rives (splits) better than any other species which we have tried."

Another species, one which would become the mainstay of generations of Northwest logging, took its name from a visitor two decades after Lewis and Clark. In 1825, David Douglas
was sent by the Royal Horticultural Society in London to study the forests of the Pacific Northwest. Of the dominant tree he found in the coastal region, a huge straight-boled species armored with thick furrowed bark, the naturalist ventured a mild prophecy: "The wood may be found very useful for a variety of domestic purposes."

The Douglas fir did indeed prove useful, by the billions of board feet lumbered from those original lofty groves.

What was called the Oregon country, from California north to the present Canadian border, in those early days was held by Great Britain through the Hudson's Bay Company. In the autumn of 1827, just two years after Douglas was admiring the giant firs, the Company set up what seems to have been the first sawmill in the Pacific Northwest, some six miles up the Columbia from the Hudson's Bay post at Fort Vancouver.

The next three decades saw the wane of British influence as the course of American settlement took over the Pacific Northwest and halved it into the state of Oregon and the territory of Washington. Those tall forests loomed with new significance. The lumber trade begun modestly by that Hudson's Bay mill grew gigantically both north and south of the Columbia. As early as 1847, a steam sawmill was clattering on the shores of Puget Sound, near the present site of Olympia. In 1853, more sizable sawmills were set up at Seattle, Port Ludlow, and Port Gamble. Oregon by
then had at least three dozen sawmills, including big ones at Salem and Milwaukie and Portland. And the boom was just beginning. The 1860 census would show 32 lumber mills in Washington Territory, 126 in Oregon.

By the outbreak of the Civil War, then, the Pacific Northwest lumber industry was cutting hard at the stands of big trees. The cutting went on with little heed or forethought for the next half century. Lumbermen who had logged in New England now pioneered on the far side of the continent. An early logger recalled one of the spanking-new mill settlements on Puget Sound: "Port Gamble was a fine place. It was filled with State-of-Mainers, not just common Yankees ... We always had baked beans and johnny bread at Gamble, and plenty of codfish." As forests dwindled in the South and the upper Midwest, other logging entrepreneurs followed the Maine men into the forests beside the Pacific. Cargo fleets breasted the waters of Grays Harbor and Puget Sound and the Columbia to carry the lumber away along Pacific routes. Railroads trundled in to freight lumber off to the markets of the Midwest and the Atlantic seaboard. A mining phrase can be borrowed to tell best what was happening: lumbermen had hit the timber equivalent of a mother lode.

We can read the bonanza mood even yet in logging camp photographs taken during the era. A lumberjack stretches out full-length in the undercut of a giant cedar, while two of his mates stand casually in mid-air on their springboards.
Above the forest floor and the camera's lens loom Douglas fir stumps the size of homestead cabins. Only the redwood forests of California held huger specimens, and they offered nothing like the variety of species and expanse of groves which marked the Northwest bonanza of wood.

But the very size and abundance of Pacific Northwest timber bred a delusion. Such forests were thought to be inexhaustible. The notion prompted logging practices which we can look back on today as a carnival of horrors. In the Okanagan country of north-central Washington, top quality knotless ponderosa pine was sliced up for fruit boxes and irrigation flumes when lesser grades of lumber would have served just as well. Western hemlock and Sitka spruce were generally scorned until they at last were found valuable for the pulp industry. Prime fir and cedar close to waterways, on the other hand, went down all too promptly; as early as 1881, a Seattle newspaper remarked that the best timber along the entire length of Hood Canal had been cut in a swath which now reached a mile and a half back from the shoreline. Whatever the species or locale, the customary logging practice was "cut out and get out," with no thought of replanting, no concern about the slash and waste left strewn behind.

Yet, in the lumbermen's march westward across America, the Pacific Northwest clearly was the final frontier. An indisputable boundary said so -- the Pacific waters which
lapped at the forested shores. There were limits of public mood, too. As Oregon author Stewart Holbrook, himself a veteran of the woods, once put it: "Boss loggers and lumbermen were surprised one day to find themselves public ogres who fairly sweated destruction from every pore and who ate up everything but the sawdust, which they left in unsightly piles." The boundless forests which had intrigued the earliest naturalists now were being eyed nervously as a dwindling resource.
THE SKEIN OF LAW AND ADMINISTRATION

...America had the virgin West for Science to open, and in Washington forged keys to open it with.

--Wallace Stegner, Beyond the Hundredth Meridian

While the trees toppled, legislation and administration on behalf of forest research were inching along. The U. S. Forest Service, which began in 1881 as the Division of Forestry in the Department of Agriculture, had listed research among its official functions from the very start. But the first three decades of federal forestry saw time, energy, and budget mostly spent elsewhere.

What has become the present system of national forests was being pieced together from the timber and range portions of the public domain. As national forests were created, they had to be administered. From 1898 to 1910, Gifford Pinchot's era as chief, the Forest Service was an agency kept busy putting itself together out in the new ranger stations and in the headquarters in Washington, D. C. Research poked through mostly on a project-by-project basis.

The Forest Service for some years had cooperated with the Bureaus of Entomology and Plant Industry to study forest insects and tree diseases. In 1908, the first forest experiment station was set up in the Coconino National Forest in Arizona. Came 1910, and the Forest Products Laboratory was established at the University of Wisconsin to work on more
efficient uses of wood. But not until 1915 did the full-
 fledged Branch of Research emerge within the Forest Service --
an administrative unit to direct all federal forestry
research, headed by Assistant Chief Earle H. Clapp.

Even after forest research came into its own on the
organization chart, it took another decade for the present
system of regional experiment stations to evolve. As early
as 1913, the Pacific Northwest had been granted the Wind
River Experiment Station, south of Mount St. Helens in the
Gifford Pinchot National Forest. A Forest Service tree
nursery already existed at Wind River, and the diversity on
the site -- virgin forest, second growth, cut-over land, and
even a burn scar from the great Yacolt fire of 1902 --
made possible a variety of planting experiments. But all in
all, the Wind River station and its works were modest.

Leo Isaac recalled that when he was transferred there in
1924, "it was then a sad affair," with languishing tree plant-
tations and with most of the station files "piled two feet
high on one big open table."

Within the next few years, however, a pair of long-
awaited legislative moves bolstered the research concept.
The Federal Appropriation Act for the fiscal year 1925
allotted $26,000 to establish the Pacific Northwest Forest
Experiment Station -- a new facility which would keep Wind
River for its field work. Next came a vital piece of
legislation wheeled into place by Sen. Charles L. McNary of
Oregon, the McSweeney-McNary Act of 1928. The lines of that Act blueprinted the regional Experiment Stations as they exist today, and went on to recite the fields of study the facilities were to delve into: forest diseases and insects; wildlife; fire; range and watershed; forest products; timber survey; reforestation and economic analysis.
GETTING UNDERWAY IN PORTLAND

We had ... a bicycle tire valve soldered to the gas tank under the seat so we could forcefeed the gas when we had to go up steep hills -- the only other way was to drive backwards up the hills.

--Richard E. McArdle, recalling the Pacific Northwest Experiment Station's first truck

Down from Wind River in two truckloads came the makings of the new Experiment Station headquarters in Portland -- files, library, and some odds and ends of furniture. Four rooms had been leased in the Lewis Building at Fourth and Oak. June H. Wertz was transferred from the Forest Service's District Six office several blocks away and put onto "the big task of going through the ten years of Wind River files, throwing away the inconsequential stuff and retaining the remainder, and then supplementing that with whatever the Experiment Station files should have from the District files."

Promptly a "Monroe electrically driven calculating machine" was bought for use on statistical studies—as Station Director Munger reported with chagrin, "Price $500!"

The staff assembled by late 1924 was both new and young. The Wind River personnel, Leo A. Isaac and A. Gail Simson, had been transferred to the Station. Richard E. McArdle was appointed as a Junior Forester from the Civil Service
list of eligibles. Four young field assistants were hired:
Leonard I. Barrett, later a director of Forest Experiment Stations and a research division chief;
John McGinn, who would shift to a career as a successful lumber merchant; Robert Marshall, who in later years became a nationally known writer and eloquent advocate of wilderness areas; and Edwin L. Mowat, a meticulous researcher who completed a career in Ponderosa pine research at the Station.

All in all then, it amounted to a staff of remarkable promise. They had a field of research where nearly everything remained to be done; American forestry was just coming into its second generation of university-trained forest scientists, and the federal funding and administrative scaffolding for extensive work had just arrived. The Station's expanse of territory -- the national forests of District Six in Oregon and Washington, plus Alaska -- provided a colossal variety of tree species, grazing lands, climate, and topography. The vast cuts of lumber which had gone on unabated for more than six decades insured the need for all manner of research into the region's timber resources.

To this set of circumstances, the man in charge of the new Pacific Northwest Forest Experiment Station added utilitarian guidelines. As Thornton T. Munger later summed it up, "From the start, I was not interested in research for research's sake, but wanted to see research put into use...."
Munger might have had his own initial research in mind when he insisted on carefully-plotted expenditure of time and effort. In 1908, not quite 25 years old, he had been somewhat offhandedly sent from Forest Service headquarters in Washington, D. C., to study the encroachment of lodgepole pine on Ponderosa pine in the Pacific Northwest. Since Munger's Forest Service career at the time amounted to the grand sum of two months and he had never laid eyes on either species of pine in his life, the assignment was, as Munger later understated it, "rather presumptuous." But it served to get the young New Englander to the Pacific Northwest; the brief project into the pines led to a full career in this region.

Trained at Yale, the academic hub of American forestry at the time, Munger knew the New Haven men who ran the U. S. Forest Service during the first quarter of this century. Henry S. Graves, Chief of the Forest Service from 1910 to 1920, had been one of his professors in graduate school. William B. Greeley, who headed the Forest Service from 1920 to 1928, earned his master's degree in the Yale forestry program a few years before Munger did likewise. And Munger not only knew Gifford Pinchot, the storied and flamboyant father of the modern Forest Service, but was on hand the night Pinchot was fired by President Taft. A public vendetta had erupted between Pinchot and Secretary of the Interior Richard A. Ballinger about Interior's plans to lease out coal and timber lands in Alaska. On the evening
of January 7, 1910, Munger was at the Washington home of his brother-in-law, a Yale classmate of Pinchot. Pinchot, invited for dinner, came in a bit late, but with the apology that a White House messenger had handed him a letter just before he left home. As the party sat down to dinner, Pinchot coolly read aloud his dismissal for taking the Alaskan lands argument to the public. Munger remembered the "awful blow" that "our leader and really our hero was gone."

But if Pinchot was gone, the Yale cadre of foresters he had inspired still was at work on the remaining American woods -- with younger men such as Thornton Munger eyed as administrators of the future.

For his first several years in the Pacific Northwest, Munger was in charge of the one-man Section of Silvics -- forest research -- at the District Office in Portland. He served as "sort of a roustabout" in the job, handling technical questions from the public. Research ventures into the field could be hit-and-miss. Once when directed to establish some test plantings of trees from the American east coast and Europe, a pet project of then-Secretary of Agriculture James Wilson, Munger found himself on the western slope of Mt. Hood with two companions, five horses, and a worsening snowstorm. As the snow piled up around them, Munger and company quickly flung the tree seeds out onto the snowbanks and scurried for lower climes. "People
who have gone through that area since then," Munger mused later, "have been surprised to discover once in awhile an eastern oak or a European pine of some kind and have wondered how in the world it got there."

But other projects were tidier and more productive. Munger did some early planting to slow the drifting of sand dunes along the southern Oregon coast. He made reconnaissance trips into avalanche areas of the North Cascades to study the effects of deforestation.

And in 1912, Munger and a crew gathered the seed from some 120 Douglas fir trees and over the next few years planted them at six diverse sites scattered through western Oregon and western Washington. This pioneering effort in tree genetics by now has yielded decades of information about how the same seed stock prospers or falters at different altitudes and latitudes. Perhaps almost as importantly, that early seed study project foreshadowed the extensive research efforts which would focus on the Douglas fir to this very day.

In 1915, a revamping of the District Six office made Munger an assistant chief of the Division of Silviculture. Technically he remained in charge of the Wind River Experiment Station, but the bulk of his work for the next several years was spent on timber survey and timber sales. Then in mid-July, 1924, funding became available for the new regional Experiment Station, and Munger was drawn into research again. ". As a surprise to me, District Forester
Cecil wanted to know if I would care for the job as Director and I thought I would." He held the job for the next fourteen years.

The thrust of research by the new Station was established in cooperation with an advisory committee drawn from other agencies, forestry schools, and the lumber industry in early February, 1925. Later that year, Munger's monthly reports would show how the general goals were being translated into specific research. For the month of October, 1925, he ran down this list of Station activities:

"October has been divided about equally between field and office work, though the weather has been perfect for the former throughout the region. In anticipation of a full house during the winter another small room was engaged.... McArdle has spent practically the entire month supervising and helping with the computations for the Douglas fir yield study.... Westveld was on the Whitman Forest all the month studying brush disposal practices on private lands and on government sales.... Isaac spent practically the entire month in the field. The measurement of a series of Snoqualmie plots completed the biennial examination of the Douglas fir seed study plantations .... Simson has been at Wind River throughout the month engaged chiefly in experimenting with meteorological instruments, taking static observations, and in various maintenance jobs.... Munger spent most of a week at Wind River helping on final jobs to close up the season there...."
If the research projects strode ahead purposefully in such accounts, so did Munger's distinctive style of administration in the day-by-day life of the Station. A jar always near at hand held the tiny pencil stubs he would use to jot directives on scraps of paper. His mystifying scrawl became an office legend, yet he was an exacting man with the language; correspondence not up to standard would be fired back to the unfortunate staffer for rewriting, with an abrupt Munger comment attached.

Munger would put funds into expensive items which were essential -- the $500 calculating machine, the little fleet of cars and trucks needed for Station work -- but preached Yankee frugality in operating them. McArdle, who spent much time on the road dealing with the mysteries of gasping fuel lines, recalled that Munger had the front seat of the Station's first car "remodeled with hinges so it could be folded back and make a bed. I was supposed to drive off into the bushes and use this instead of hotels. I did, too, but I can't say it was a very good substitute for a real bed."

Munger is remembered as the sharp-eyed administrator who ran the Experiment Station in its earliest era. Another figure from that time is remembered for a different brand of keenness -- Leo Isaac, the Douglas fir scientist.

Isaac was born in 1892 on a farm near Fond du Lac, Wisconsin. As a schoolboy, he trapped fur animals to earn his spending money. Then, just after Isaac graduated from