



Walter Mulford

FORESTRY EDUCATION
AT THE
UNIVERSITY OF CALIFORNIA

The first fifty Years

PAUL CASAMAJOR,
Editor

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FOREWORD

THE history of an educational institution is peculiarly that of the men who made it and of the men it has helped to make. This book tells the story of the School of Forestry at the University of California in such terms.

The end of the first 50 years of forestry education at Berkeley provides a unique moment to look back at what has been achieved. A remarkable number of those who occupied key roles in establishing the forestry curriculum are with us today to throw the light of personal recollection and insight on these five decades. In addition, time has already given perspective to the accomplishments of many graduates.

The School owes much to the California Alumni Foresters Association for their interest in seizing this opportunity. Without the initiative and sustained effort that the alumni gave to the task, the opportunity would have been lost and the School would have been denied a valuable recapitulation of its past.

Although this book is called a history, this name may be both unfair and misleading. If it were about an individual instead of an institution it might better be called a personal memoir. Those who have been most concerned with the task of writing it have perhaps been too close to the School to provide objective history. But if anything is lost on this score, it is more than regained by the personalized nature of the account.

To the California Alumni Foresters who conceived of the project and vigorously supported it, to Paul Casamajor who as editor-in-chief worked prodigiously to ferret out facts and to write the text; and to the large number of individual alumni who contributed time, energy and funds to support the project, the School of Forestry expresses its heartiest appreciation.

HENRY J. VAUX
Dean

June, 1965

Acknowledgements

- Chapter 1. Without the great effort of A. E. Wieslander, '14, in developing this chapter, this book would have been far less complete and interesting. At his own considerable expense, "Wies" chased leads from Berkeley to Los Angeles (University of Southern California library), to Palo Alto (the Stanford-Dudley story), to Eugene, Oregon (the Greeley Papers at the University of Oregon), to Seattle, Washington (the University of Washington Library for the only (?) complete file of the *Timberman*), and to Sacramento (to the California State Library and numerous conferences with C. Ray Clar).
- Chapter 2. This chapter, also by Wieslander, was originally published in the 1962 issue of *Timber*, the Forestry Club student annual as a part of its 50th anniversary commemoration. It has been rewritten and augmented by information uncovered in the research for Chapter 1.
- Chapter 3. We were particularly fortunate to have two of Walter Mulford's associates write his story. Both Edward I. Kotok and Myron E. Krueger knew Mulford for more than 40 years. Both knew him first as one of his students—Kotok at the University of Michigan, 1909 to 1911, and Krueger at Cornell University in 1913–14 and at Berkeley in 1915–17. Both knew him as an associate—Kotok as director of the California Forest and Range Experimental Station, 1926 to 1940, and Krueger as a member of Mulford's staff from 1925 on.
- Chapter 4. Major support in various sections of this chapter was given by: J. A. Zivnuska (Graduate Study); H. J. Vaux (Research Program); F. E. Dickinson, E. Fritz, R. A. Cockrell and, H. H. Smith of the Pacific Southwest Forest and Experimental Station (The Forest Products Laboratory); Mrs. E. Johnson and Miss M. L. Eakin (Forestry Library); and R. F. Grah (Extension Forestry).
- Chapter 5. Vaux wrote Dean Baker's biography and provided his great editorial strength to the entire chapter. Zivnuska assisted with Vaux's biography. Krueger helped with those men who joined the staff between 1919 (Fritz) and 1932 (Kittredge). Barr's biography was adapted from his memorial published by the University and written by Vaux, Colwell and Zivnuska. Vaux threw out my autobiography and rewrote it. The remainder is my effort.
- Chapter 6. The first happy draft of this chapter was written by F. S. Baker in his inimitable style and is largely contained in the last part of the chapter. Baker's recollections and the camp journals served as sources for the remainder of the chapter. Editorial help was provided by Gerry Larson '62.

Chapter 7. It was not possible to tell the full story of the Forestry Club. Only some milestones and representative activities are indicated. The appendix (E) of club officers was begun by Gerry Larson '62 and finished by Al Stangenberger '65.

Chapter 10. The effort of locating, researching and writing (however briefly) professional biographies of 1,607 graduates and 178 other alumni often seemed too ambitious a project. But it is believed that the most important product of a school is its graduates and that their story is the heart of the school's story. Emanuel Fritz made numerous editorial improvements and added knowledgeable corrections. Alan Casamajor prepared the alumni location maps and Mike McChesney '63 conducted the salary analysis.

The Book: There can be no perfect accounting for all the assistance that goes into an effort like this. I am indebted to Sel J. Sharp '20 for catalogue research on the faculty; to Bill Paul, Manager of the University's Agricultural Publications, who designed the book and gave assistance with printer liaison; to Kenton Bates, also of Agricultural Publications, who helped mightily with the graphics and page and photo layout; to Miss M. Dornin and J. R. K. Kantor, University archivists, who helped locate photographs and odd bits of information; to Norm Johnson, '65, who helped set the record straight about the Xi Sigma Pi members; to D. E. Teegarden, who corresponded with other forestry schools about their 50th Anniversaries and their publishing experiences; to Ruth Zapf and her girls in the office—Evelyn Lym, Sharyn Greer, Mary Todt and Joanne Herwig—who typed and retyped the manuscript, cheerfully, until it was done; to Birdie Weisbrod, who helped to chase 1,001 details about the alumni; to Mary Lida Eakin, who prepared the general index; to George Craig '38 who critically reviewed the manuscript; and to Joseph Fabry who edited the manuscript when I thought I was finished with it.

I shall long remember that day in April, 1961, when Horace D. Jones '36, then president of the California Alumni Foresters, walked into my office and informed me that henceforth I was the Historical Committee of CAF, a job held for the previous ten years by Myron E. Krueger. It took over four years to find out what I had "agreed" to do. While preparing this book, I was often sustained by the words of Samuel T. Dana, dean emeritus of the University of Michigan's School of Natural Resources and editor of its history, who said to me: "You may be certain that you will not please everyone."

Finally, the book could never have been completed without the patient support of Dean Henry J. Vaux who, among many other ways of helping, made provisions that allowed me to devote a portion of my regular working hours to it. It was a wonderful experience. Fortunately, it occurs only once every 50 years.

PAUL CASAMAJOR
Berkeley, California

June, 1965

DEDICATION

To WALTER MULFORD for demonstrating that cultured men, too,
practice forestry;

To BARR for making us think—and like it;

To FRITZ for explaining that our families also need bread and meat;

To SAMMY for showing us that foresters are dedicated;

To KRUEG for helping us see that teaching can also be done outside
of classrooms and books;

To KITTREDGE for proving that from little raindrops huge seas are
made;

To WOODY for illustrating how to teach and sing “Allouette” at the
same time;

And to BAKE, God bless him, for most amiably teaching us that the
whole business is FUN.

Inspiration of ALVA B. WILLIAMS '35

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The First Fifty Years

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CHAPTER I

The Beginnings

1873—1912

A. EVERETT WIESLANDER

THE earliest references to forestry education in California go back to the establishment of the University of California at Berkeley in 1873. During the ensuing 40 years three major universities in the state seriously considered starting a forestry school. Rivalries, natural disasters and political tides all had their impact on the timing and substance of the final decisions. Serious financial problems had to be overcome. Many able and dedicated men devoted much effort to achieving the goal.

The story of these 40 years serves properly to set the stage for a history of the School of Forestry. It gives recognition to those who labored to start the School and tells how this start came about.

Earliest references

On July 16, 1873, University President Daniel Coit Gilman said, in reference to the new campus: "When the University formally entered upon the site at Berkeley, such sites as are suited to forest culture will be thus improved, although to render that service to the State and to Science, which is loudly called for, a much larger tract than ours would be requisite. An earnest plea has lately come to us from Dr. [Asa] Gray, the world renowned botanist of Cambridge, asking in this respect, the cooperation of this University."¹

The 1873-75 *Report of the Regents* mentions the reservation of land "to illustrate the principles and methods of landscape ornamentation, forestry, botany, and allied studies" and reports that Professor Frederick G. Hesse was studying the strength of timbers grown on the Pacific Coast.

¹*Report of the Regents, 1872-73, p. 47.*

And the October, 1874, number of *The Berkeleyan*² contained this item of news: "The Berkeley property has been surveyed by a competent engineer; the right places marked out for Agriculture, Horticulture, Botanical Garden, and Forestry."

Thus, by 1875, the University had taken two first steps toward forestry education, one pertaining to silviculture, the other to utilization.

The first clear call for forestry education was to come from southern California.

ABBOT KINNEY'S LEADERSHIP

"One of the difficulties that forestry has to contend with in its widening sphere of usefulness is the scarcity of men acquainted with its practical details. At the suggestion of this Board, the University of Southern California at Los Angeles has inaugurated a School of Forestry. . . . If this school is carried on as planned, it will be of great value, and will be the only complete forestry school in the United States. We hope that the University of California at Berkeley will advance the great interest of forestry in the same way."

These words were written 28 years before the institution of a forestry curriculum on the Berkeley campus and 12 years before the establishment of the first school of forestry in the United States at Cornell University. They appear in the First Biennial Report of the State Board of Forestry, 1885-86. Abbot Kinney of Los Angeles, chairman of the Board, probably is their author. The University of California did not respond, nor did the plans for the University of Southern California mature.³ Kinney, nevertheless, delivered at USC "during the Spring Term of 1887 . . . a series of lectures on 'Forestry' . . ."⁴ and continued to urge the establishment of forestry schools. In the Board's report for 1891-92, Fred M. Campbell, employed by the Board as statistician, added his voice to that of Kinney:

"The establishment in the State University in connection with the Agricultural College, of a Chair of Forestry should be strongly pressed. . . . and I suggest that this Board memorialize Governor Stanford, asking that such a professorship be established in the Leland Stanford Junior University." Thus, by 1892, three California universities—Southern California, California, and Stanford—had been urged to institute training in forestry.

A short-lived school at USC

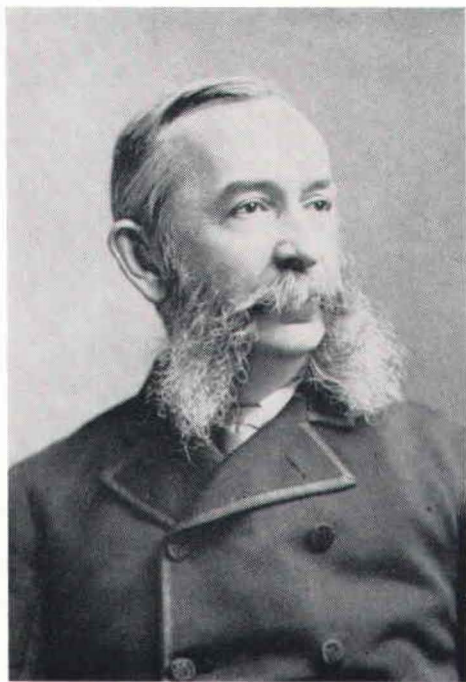
The first school of forestry was actually established at the University of Southern California. Its president, George W. White pointed out in the April, 1899, issue of *The Land of Sunshine*:

"There are only three schools of forestry in the United States, none of which are more than two years old; one in connection with Cornell University, . . . one at Biltmore, and one just established in connection with

²*The Berkeleyan*, "Published Monthly, During the College Year, by the Students of the University of California."

³Dumke, Glenn S., *Boom of the Eighties in Southern California*, p. 248.

⁴Gay Jr., Leslie F., Unpublished thesis, *History of the University of Southern California*, p. 87. USC Library.



Daniel Coit Gilman, 1831-1908, President, University of California, 1872-1875

Abbot Kinney, prominent southern California conservationist and member of the first California State Board of Forestry



the University of Southern California. . . . A number of gentlemen of large experience in forestry matters and prominent in the movement for forest preservation consented to become members of the faculty. . . . The course this year will cover only three months, consisting of 3 lectures per week. It is planned to expand the course for another year, and to make the instruction sufficiently extensive to render the graduates expert foresters."

The University of Southern California Year-Book for 1898-99 contains a "School of Forestry" section. It states that the school "aims to afford suitable training for young men who contemplate entering the forestry service of the Government, which has now established reservations aggregating more than 40,000,000 acres." Listed are eight subject matter fields covered in the lectures and the names of 14 students enrolled in the course.

Kinney saw to it that this undertaking got publicity and encouragement. In March, 1899, the Forest and Water Society of Southern California gave its endorsement.⁵ In July, the American Forestry Association⁶ at its meeting in Los Angeles adopted a resolution stating that it "learns with much pleasure of the establishment of the Forest School of the University of Southern California and that it urges upon the Federal forest authority the desirability of cooperating with it in its good work."⁷

In his book, *Forest and Water*, published in 1900, Kinney wrote:

"We have opened in Los Angeles . . . the first forest school in California; the first on the Pacific Slope, the first west of the Alleghenies. It is an auspicious event and hopefully the precursor of a new era. It is high time for us to make a study of our forests and of their importance and proper treatment. We are without foresters in America. We need foresters.

"The forest conditions of California and West are different from those in any other country. They are entirely different from those of the Adirondacks where Cornell students are studying and where they are employed. . . . There is from this fact the promise of a career to young men in taking up this work."

The January, 1900, *Sierra Club Bulletin* said:

"One of the most gratifying evidences of the growth of forestry sentiment in Southern California is the flourishing condition of the . . . school established a year ago. . . . One . . . could perceive how the formation of this school had reacted upon local civil engineers and others to greatly increase their interest in forestry problems."

Stimulating public interest was USC's chief contribution. Its forestry school was short-lived. It "was continued during the remainder of the year with considerable success, and under more favorable circumstances would, doubtless, have become a permanent department . . . But owing to uncertain financial situation its work was suspended. . . ."⁸ The history of the University of Southern California, published in 1930, mentions neither the school nor Kinney's efforts to get forestry education underway.⁹

⁵The *Forester*, April, 1899, p. 91.

⁶Abbot Kinney had been its vice-president for California since 1889.

⁷The *Forester*, August, 1899, p. 78.

⁸Gay Jr., Leslie F., op. cit., p. 251.

⁹Hunt, Rockwell D., *The First Half-Century*.

EFFORTS IN NORTHERN CALIFORNIA

Meanwhile, efforts to establish forestry schools began on both the Berkeley and Stanford campuses. The February, 1899, issue of *The Forester* reported that the California State Board of Trade had appointed a committee (John P. Irish, Craigle Sharp, and W. H. Mills) to promote chairs of forestry at both universities, and that the recently organized Society for Conserving Water and Forests had adopted a resolution "petitioning the present legislature to create a school of forestry in connection with the State University." W. H. Mills of San Francisco and Kinney were vice-presidents of this society.

Elliott McAllister, in the June, 1899, *Sierra Club Bulletin*, said this about the society's efforts: "... the committee on legislation ... went to Sacramento in hope ... that an unsalaried commission be created to report upon the forests of the State and that a department of forestry be organized at once at the University of California to supply men to carry out the suggestions of the Commission. ... The bill ... relating to forestry did not reach final passage in the Legislature. The organization of a forestry department in the University was not included ... owing to objections raised by the Governor. ... Let us hope that the authorities of our Universities will not overlook the ranking importance of the subject. ..."

In July, 1899, the State Board of Trade sought federal financing. The January, 1900, *Sierra Club Bulletin* reported that "Congressman Kahn ... agreed to advocate in Congress a bill appropriating a certain amount for the establishment of several schools of forestry ...; the hope being to secure in this way an amount sufficient to establish one of these schools at the University of California. In anticipation of this, Senator Perkins has recently introduced a resolution in Congress asking the Government to assign the use of the Lake Tahoe Reserve (over 135,000 acres) to the University of California ...". And the *Daily Californian* of February 14, 1900, reported that Kahn had introduced a bill in Congress providing "that the Lake Tahoe Reservation be granted in trust to the Regents."

On August 21, 1899, the *Pacific Rural Press*, through its editor Professor Edward J. Wickson of the University of California College of Agriculture, commented: "The subject of forestry instruction was advanced at all conferences we attended. Desire was expressed that the State University be provided with expert instruction so there might be trained a good supply of men to undertake forest management. ... Pinchot ... says that if the Government forest survey is undertaken, he can furnish opportunity for field work for many forestry students."

Of great significance was the appointment of Benjamin Ide Wheeler as president of the University of California in the fall of 1899. Fresh from Cornell, where the first forest school in the United States had been established just one year earlier, he was conditioned to give leadership. In his inaugural address on October 25th, he said, "Not only the naked hills of California, but the whole western slope of the continent call for a special study of the forest problem. A school of forestry is an earnest and instant need."¹⁰

These remarks prompted the *Pacific Rural Press* to carry, in its Novem-

¹⁰University Chronicle, 1899, p. 25.

ber 11 issue, a lengthy editorial on the forestry profession. Here are quotes:

"Forestry education is . . . one of the pressing needs of the day, and it must be met. . . all our greater universities have provisions for instruction in many branches which are proper components of the course in forestry.

"This is the case at the University of California . . . The underlying sciences . . . are ready for alignment in a forestry course . . . as complete as that of Cornell as soon as the keystone of the arch—the chair of forestry is provided. . . Our young people are demanding forestry education. Some of the most important and unique problems in forestry must be worked out on this coast."

EARLY ACTIVITY AT BERKELEY

Hilgard

Before Wheeler's inaugural, there had been considerable forestry-oriented activity by several Berkeley faculty members. Professor Eugene W. Hilgard and Charles H. Shinn were the earliest to demonstrate great interest in forestry; they were followed by professors Edward J. Wickson, Arnold V. Stubenrauch and Willis Linn Jepson.

Hilgard was the organizer of the Agriculture Department of the University and the founder and first director of the University Agriculture Experiment Station in 1875. He also served as dean of the College of Agriculture from 1897 until his retirement in 1905. Although an eminent soil scientist, he became nationally known for his interest in tree culture and forestry. Among his correspondents were Sargent, the distinguished arboriculturist, and such forestry pioneers as Bernhard E. Fernow and Gifford Pinchot.¹¹ Before Wheeler came to Berkeley, Hilgard handled all matters pertaining to forestry. After 1890, he was ably assisted by Shinn who became inspector of agricultural experiment stations.

Hilgard started tree planting experiments. In 1879, he reported: "Considering the subject of forest culture as one of great importance to California I have endeavored to obtain . . . seeds of as many trees as seemed likely to offer a chance of success in some one of the various climates in the State."¹²

In these experiments, Hilgard gave priority to useful hardwoods, first from eastern states and then from foreign lands. In an article, "Forest Trees for California", which appeared March 7, 1888, in *Garden and Forest*, he explained:

"Only the mountain oaks can to [a] certain degree subserve the ordinary purposes of hardwoods and no California tree, save perhaps these, could be successfully worked into axe helves, hoe handles, or other agricultural implements of any durability . . . Practically all of the hardwoods used in California must be imported. . . It is thus natural that when trees have to be planted, the preference should be given such as are likely to supply this great need, and . . . the first thought should turn toward Eastern forest trees that serve these purposes so well. . . experiments . . . with Eastern trees have been eminently unsatisfactory. . . hence substitutes have been sought in other climates, notably in Australia . . ."

¹¹Hilgard Papers, U.C. Archives, Berkeley.

¹²Report of Professor of Agriculture, 1879.

In 1893, Hilgard looked forward to a much enlarged program. The University had acquired, with the abolishment of the State Board of Forestry, the Santa Monica and Chico forestry stations—essentially experimental forest nurseries.¹³ To direct the work, Hilgard had assigned the eminently qualified Shinn. Efforts to obtain adequate operating funds failed in the 1895 and 1897 legislatures, and in December, 1898, the University considered abandoning the stations. But Hilgard saved the day by writing, December 8, 1898, to University President Martin Kellogg: "Forestry is rapidly coming to the front in the United States and it would be a serious step backward to relinquish now the investments made..." On December 30, he wrote Pinchot in reply to a proposal for cooperation in the propagation of forest trees: "We are not only willing but anxious to cooperate... We have now two forestry stations... We have for years tried to get funds for tree planting on Mt. Hamilton... The foresting of the mountains of Southern California is an especially important problem."

Although forestry was being taught, as Hilgard once wrote to Fernow "incidentally as connected with economic botany," his letters show that a forestry school was ever in his thoughts:

"I suppose that you know about the bills in Congress for endowing with \$5000 per annum our University, for educational work in forestry, and also for a National School of Forestry in Washington. All your influence should be exerted on Congressmen and their friends to secure the passage of these bills..."¹⁴

"I am most thoroughly in sympathy in the proposition to establish a Forestry Course in the University, even though there has been no demand for such instruction. I think the University ought to offer instruction in advance of demand, whenever financially possible. At the present time, however, the Regents have declined to provide instruction in Sugar Beet culture and Sugar Making for which there is a lively demand, on the ground of insufficiency of funds, it is hardly probable that they will take immediate action favorable to your proposition. It will doubtless be referred to a committee and will there receive my earnest support."¹⁵

"As to [a] School of Forestry we are most cordially in sympathy with the movement for its establishment. Lack of funds only prevents us from starting it."¹⁶

"It does seem to me that our stable institutions, the State Universities, which avowedly look forward to centuries to come, could exert a more direct influence upon forestry matters on that very account."¹⁷

When the California Forest and Water Society appointed a Commission of Forestry in 1899—"to devise means of protecting the forests of the State from destruction by fire or wanton depredations, and recommend means of preserving forests and storing and distributing flood waters of the State"—Hilgard topped the list of five appointees.¹⁸

¹³Clar, C. Raymond, *California Government and Forestry*, p. 156.

¹⁴Letter Hilgard to Kinney in 1895.

¹⁵Letter Hilgard to Kinney in 1897.

¹⁶Memo Hilgard to Wheeler commenting on a letter from Kinney to Wheeler in 1899.

¹⁷Letter Hilgard to Pinchot in 1899.

¹⁸*The Forester*, June, 1899, p. 136. The other four were: Professor W. R. Dudley, Stanford University; Abbot Kinney, Los Angeles; Warren Olney, Sr., San Francisco; George Fowle, Placer County.

Shinn

Charles H. Shinn's forestry activities are seldom reflected in University publications, but his influence was great in stimulating forestry interest both within and outside the campus.

When he died in 1924, Paul G. Redington wrote in an article in *American Forests and Forest Life*:¹⁹

"Sitting at the feet of his father in 1862, Charles, then a boy of 10 years of age, heard that forward looking men declare that, at least, one-third of our land should be in tree growth 'for the public welfare'. From that time on his interest in forestry was a definite thing and quickened with the years. . . . As early as 1878 we find that Charles Shinn spoke on forestry before the Chit-Chat Club of San Francisco. That same year he also wrote a number of editorials which appeared in leading California papers, advocating the 'perpetual reservation and State control of the forests of the Coast Range and the Sierras, so that forests might be systematically used according to sound principles of Forestry'." The *Stockton Record*²⁰ called Shinn the "missionary of California forestry," and said: "It was in 1890, that Mr. Shinn was asked by Dr. E. W. Hilgard to take the position under him of inspector of agricultural experiment stations . . . This position he held, visiting and reporting upon four farm and two forestry stations, keeping in touch with progressive agriculture and the beginnings of forestry in the state until 1902."

Concerning this period at the University, Mrs. Julia Shinn wrote Pinchot in 1937: "Incidentally, he gave a series of lectures in forestry—gathered from books entirely—before agriculture students."

During this period prospective foresters were on the campus and Shinn was urging more. Under the heading "Forestry Students Return" in the October 10, 1900, *Daily Californian* was this item: "Guy W. Eddy, G. W. Parsons, and Mr. Hyde . . . who together with H. T. A. Hus '97 have spent two months in Del Norte and Humboldt Counties in the forestry service . . . have returned to Berkeley. . . . The University has been asked to find three students who are willing to do forestry work for the United States . . . from now until November 1 at a salary of \$25 a month with all expenses paid."

A related story in the same issue quoted Shinn as saying: "Within the next few years there will be openings for a great many young men with a technical and practical education in forestry." The paper added, "It is to be hoped that enough people will be interested to warrant the establishment of a department in the University. It is also to be hoped that several courses in Forestry will be given in the next Summer School. In this way teachers, farmers, orchardists, fruit growers, and others who need the knowledge such courses would give, may have the opportunity to attend them."

Thus, Shinn wanted both professional and extension courses in forestry. According to Redington, he was always "preaching forestry, writing forestry, and doing forestry." In effect, he was the University's first Extension forester.

¹⁹ August, 1924, p. 490.

²⁰ July 5, 1924.

Stubenrauch

Professor Arnold V. Stubenrauch was closely associated with Shinn in the work of the field stations, including tree planting. When Shinn left in 1902 to become head ranger of the Sierra Forest Reserve, Stubenrauch filled the vacancy. The University president's report for 1902-04 mentioned Stubenrauch's planting experiments with promising eucalyptus at the Santa Monica station. Knowledge gained from work in the forestry stations and from working with Shinn qualified Stubenrauch to participate with Jepson in the summer forestry lectures in 1903.

Wickson

Edward J. Wickson, who had begun with the University in 1879 as lecturer in practical agriculture, in 1905 succeeded Hilgard as dean of agriculture and in 1907 as director of the Experiment Station. He became greatly interested and well-informed in forestry, perhaps from close association with Hilgard and Shinn. Wickson's association with the *Pacific Rural Press* had begun in 1875 and, for a number of years, he was the assistant editor with the title "special contributor." In 1898, he became the editor with the title "horticultural editor." This weekly paper had, in 1898, an average circulation of 8,856. By 1899, Wickson had become a most articulate advocate for forestry. The *Press's* index for a six-month period in 1899 lists articles or news items on forestry and forestry education under 13 headings. Wickson had written the knowledgeable editorial on forestry education of the November 11, 1899 issue immediately after Wheeler's inaugural. It included a suggestion for beginning small at little cost. All that was needed at the outset was a single addition to the faculty, a chair of forestry. The suggestion went unheeded, but it remained in Wickson's mind and he brought it up again after becoming dean.

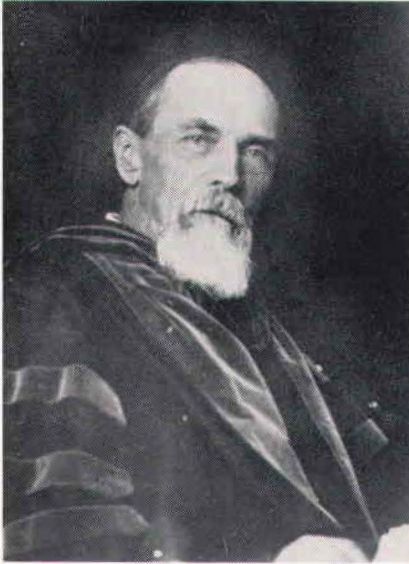
Jepson

Willis Linn Jepson received his PhB from Berkeley in 1889 and began teaching botany in 1891. Emanuel Fritz, his close friend and confidant, wrote, "Dr. Jepson played an important role in forest conservation in California since the turn of the century. [He] . . . was detailed by . . . Wheeler to attend various forest conservation meetings as official delegate. He thus became acquainted with Pinchot, Fernow, Shinn, Lukens and others of the early forestry pioneers."²¹ Later Jepson was to have an important part in the organization and activities of a student forestry club.

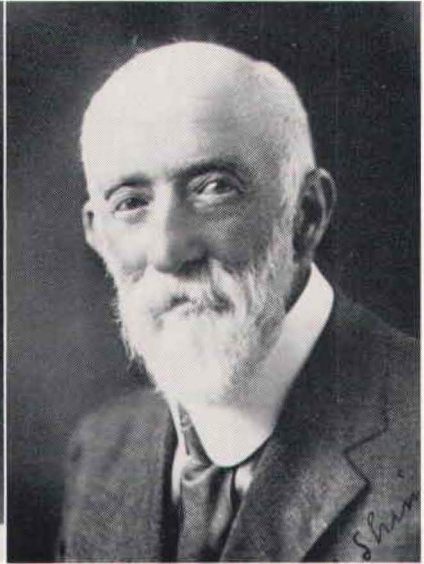
Wheeler

Although Wheeler had said in his inaugural address that a forestry school was an "instant need", he also pointed out that "the growth of the student body in 10 years . . . from 306 to 1665 has taxed the ability and resource of the regents." He knew the money for forestry would be difficult

²¹ *California Forester*, April, 1947, p. 71.



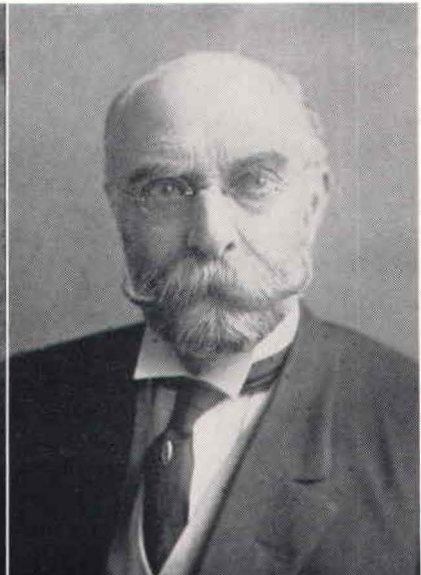
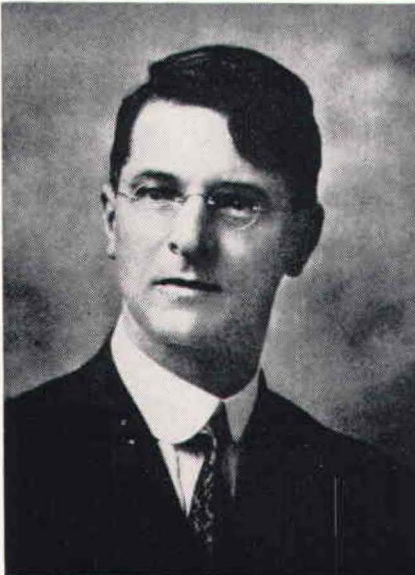
Eugene W. Hilgard, Professor of Agriculture, 1874-1904; Dean, College of Agriculture, 1896-1904



Charles H. Shinn, "missionary of California forestry"

Arnold V. Stubenrauch conducted tree planting experiments and, in 1903, helped Prof. Jepson with the summer forestry lectures at Idyllwild

Edward J. Wickson, Dean, College of Agriculture, 1905-1912



to get. Yet he chose to go after a sizable sum. In his first report in 1900, he stated: "The establishment of a School of Forestry . . . cannot be done . . . with any means which are now in prospect. It is doubtful whether the work should be undertaken unless an annual income of \$20,000 to \$30,000 is assured." Later, he was to pare down this amount but not enough to pass the legislature.

He sought endowments from private sources but "always met with the reply that this is something the state should provide."²² Thus, his decision was to ask a special biennium appropriation of \$25,000 from the 1903 legislature.

To stimulate support for such legislation, Wheeler brought Fernow to Berkeley for a series of lectures in the 1902 summer session. Also, he asked help from the California Club and the California Water and Forest Association. The Fernow series included nine public evening lectures by stereopticon and a three-week, one-unit course of five lectures per week. The stated object of the credit course was "to give a comprehensive view of the whole subject of forestry with sufficient detail of technical aspects and methods of the art."

Help from the California Club

The still active California Club of San Francisco has the distinction of having sponsored the first forestry school bill introduced in the state legislature. This club of public-spirited women was organized in 1897 and incorporated in 1902 "to aid through organized effort . . . whatever tends to the best interests of the City and State." The forest school bill of 1903 was one of its first major projects.

In March, 1902, Wheeler suggested that the club pay the expense of bringing Fernow to California. Unable to afford the \$500 asked for, the club, as evidence of its interest, contributed "\$10.00 to pay the fee of some student who would otherwise be unable to take the course." And a few months later, the minutes of its Board of Directors recorded a Mrs. Harndon and a Mrs. Scoville as actively helping Wheeler in his effort to establish a forestry school. The University Regents' minutes for November 11, 1903, recorded as "laid over" the club's request for endorsement of its bill. Subsequently the club distributed copies of a proposed bill and a flyer which said: "The need of guarding against forest fires and of lumbering tracts, so that the industry may be permanent, necessitates the establishment of a School of Forestry, where a sufficient corps of trained men may be graduated to take charge of the forests and administer them scientifically. . . . This is a vital necessity to California . . . In view of the vast and many sided interests involved, your help is solicited to secure from the Legislature an appropriation . . ."

The California Federation of Women's Clubs, whose forestry committee was chaired by the wife of the distinguished botanist J. G. Lemmon, backed the bill strongly.

The Federation's *Club Life* in January, 1903, carried a lead article, "A Forestry School in the State University," pointing out the great need, and containing a copy of the proposed bill and the full text of the California Club flyer.

²² *Water and Forest*, October, 1902, p. 11.

The California Water and Forest Association helped by featuring in the October, 1902, issue of *Water and Forest* an article by Wickson entitled "Forestry Education in California" and a statement by Wheeler on "Forestry in the University." Also, at its annual meeting in December, 1902, it adopted a resolution to "support the bill proposed by the California Club."²³

Identical bills, as proposed by the California Club, were introduced in the legislature by Senator Ralston of Melones and Assemblyman Walsh of Oakland. But the club failed to muster much other support for the appropriation. *Pacific Coast Wood and Iron*, spokesman for the lumber industry, carried neither an editorial nor a news item about it. Even the Sierra Club was lukewarm. Its *Bulletin* of February, 1903, remarked: "It [the forest school] is not of such importance as the acquirement of the denuded lands of the State, the suspension [of State land sales] and classification of the public lands in California, the transfer of the forest reservations from the Land Office to the Bureau of Forestry, or the protection of the reserved forests from fire, but it is a good thing. Such a department would help in the educational campaign in favor of forest preservation."

The *Sacramento Record-Union* opposed the bill. In an editorial, "The University and Forestry," it said on December 21, 1902:

"A public-spirited women's club at San Francisco has mooted the question of asking the coming Legislature for an appropriation in the sum of \$25,000 to establish a School of Forestry in the University of California.

"The school of forestry connected with the State University will accomplish nothing practical. It is not to be trusted with a fund of this kind. The sum of \$25,000 given to the Governor of the State for the purpose of instituting inquiry through employed agents, or a Forestry Commission already educated on the subject, might be the beginning of intelligent legislation; but \$25,000 given to the State University will never be heard of again.

"... The owners of private lands simply propose to cut the forests down, cut them into boards and sell them for what they can get ... in short, to raze them to the ground. There is, therefore, no employment for intelligent forestry, and students in such a school would be acquiring a very useless profession.

"... a school connected with the university would be an absurdity. The university is not fit to be trusted with the care of this subject. There is a demand for immediate investigations and immediate remedial measures, and this demand far outweighs the indirect and very slow process of educating men to be foresters by the theoretical and dilatory university methods."

The 1903 bill had seemed well timed; Governor George C. Pardee was conservation-minded; and the Senate did pass the bill in March. But as early as February 3 the minutes of the California Club forecast "... the probable failure of the forestry bill in the Assembly ..." The gallant ladies "declared they would fall with their faces to the foe."²⁴

²³*Forestry and Irrigation*, December, 1902, p. 488.

²⁴About three years later, the California Club got behind an effort to get federal money. Its Outdoor Art League Department in December, 1905, resolved that "the people of California hereby request Congress to pass, without delay, the bill granting the State of California 5 per centum of the net proceeds of all cash sales of public lands within said state, such monies to be funded according to law for the benefit of the common schools, including a State School of Forestry."

The governor constantly urged economy on the legislators and the *San Francisco Chronicle* headlined a story on state finances with "The General Fund will be Drained by the End of the Financial Year." Perhaps this economy-mindedness was the reason why the Assembly failed to act.

The Jepson-Stubenrauch lectures

On the heels of this defeat, Wheeler arranged for summer lectures by Pinchot at Berkeley and by Jepson and Stubenrauch at Idylwild, Mt. San Jacinto. The circular announcing the Idylwild session stated:

"The course will consist of 10 lectures by each of the instructors. . . . Dr. Jepson will treat the subject from the botanical standpoint, explaining and illustrating the biology of trees, with special reference to their life history and botanical characters; he will also describe the trees and forests of California. Professor Stubenrauch will deal with the economy of the forests, their uses and abuses, silvicultural methods and problems of afforestation and reforestation."

The Jepson-Stubenrauch lectures got headlines in both northern and southern California newspapers.

The *San Francisco Chronicle*, which had not spoken out earlier in the year on behalf of the School of Forestry bill, said on May 11, 1903:

"The University of California is making a noble effort to fulfill its whole duty to the State. . . . Its latest departure is in the establishment of a summer school in silviculture.

"It is hoped funds will be found for carrying on University work both in forestry and silviculture on a scale which the importance to our people demands. . . . and it is hoped that the University will be able, as its authorities desire, to establish and maintain forestry and silvicultural stations in all typical districts of the State."

The southern California newspapers gave generous coverage:

The *Pasadena Daily News* headlined a story on August 8, 1903: "First School of Forestry West of the Rocky Mountains."

The *Los Angeles Express* wrote on August 11, 1903: "Southern California owes President Wheeler and these professors . . . a debt of gratitude for having made this section the field for this pioneer work. . . . In this course they have been assisted by T. P. Lukens of the United States Department of Agriculture and Ralph W. Hoømer of the Government Bureau of Forestry."

The *Pasadena Evening Star* declared on August 12, 1903: "Dr. Walter Lindley, who is an enthusiastic friend of the forests, cannot be given too much credit for his untiring efforts in cooperating with the Department of Agriculture at Washington and with the faculty at the University of California, ultimately overcoming all obstacles and establishing a summer school of forestry . . . Dr. Lindley intends to make the forest school at Idylwild a permanent feature."

Publicity of this kind had little effect on state legislators. In 1905, a request for \$25,000 again was approved in the Senate and killed in the Assembly.

The Wickson Report

Before the 1907 session, the outlook was hopeful. Two legislative defeats and a 1906 committee report, under the chairmanship of Wickson, had persuaded Wheeler to ask for less money. Also, during 1906, the lumber industry was being strongly urged to endow a chair of forestry at Berkeley. Yet, the "pattern of failure" was repeated in the 1907 legislature when only \$10,000 was requested.²⁵

The Wickson committee had been established upon the prompting by students.²⁶ On January 31, 1906, James Sutton, the recorder of the University, wrote Wickson: "We are having a good many inquiries about courses in forestry. . . . Would it be advisable for us to make up a curriculum for prospective students in forestry? Might it not be possible to negotiate a treaty with one or more eastern Universities, whereby our students or graduates may complete their professional studies in this field on the best possible terms?" Again he wrote Wickson on March 19: "Every day or two I get letters from people who want to study the subject. . . . Something more tangible in the way of a curriculum would bear good fruit. . . . How would it be to appoint a Committee to consider the subject?"

Wickson must have welcomed the prospect of a committee backing his ideas. On March 23 he wrote Wheeler: "The Recorder . . . writes me the accompanying letter . . . , and as reply involves the beginning of systematic forestry instruction which is included in my Recommendations to the President for the coming year, I beg leave to address my answer to you and to send the recorder a copy thereof.

"If there must be delay in constructing a forestry course from top downward we can reverse the process, with little cost. Providing an Assistant Professor, who shall undertake especially the silvicultural side, we can first do something with what we call our 'forestry stations'; second provide instruction in dendrology and silviculture and third, at the same time collect into proper sequence all courses in natural science, agriculture and civil engineering now given in the University which are included in an approved forestry curriculum. I think we can in this way prepare pupils systematically so that they can complete the curriculum of the eastern schools during a year's absence. At the same time we would have our work organized and ready for a Professor of Forestry and a working forest laboratory on one of the reserves would be provided for.

"If this seems to you desirable and feasible I could approve the suggestion of the Recorder that a committee be appointed and report upon the subject, the committee to be drawn from the departments of botany, civil engineering, and agriculture."

On April 2, the recorder announced that Wheeler had appointed a special Committee on Forestry, comprising professors Edward J. Wickson (Dean, College of Agriculture—chairman), William A. Setchell (Botany),

²⁵Clar, C. Raymond, *California Government and Forestry*, pp. 218, 297.

²⁶Among these students was Jesse R. Hall of the class of 1905 and father of John S. Hall '35. Hall wrote to Wieslander (February 23, 1964) that in 1903, "I began talking the matter [of being a forester] over with Hilgard, Jepson, Wickson, Setchell and others. They all favored the idea and helped steer my courses . . . with the idea . . . that I would go to Cornell or Yale and get a Master's Degree in Forestry." Hall got the degree from Yale in 1909 and started to work on the Plumas National Forest that same year. In 1946, he retired as supervisor of the Stanislaus National Forest, thus completing 37 years of forestry pioneering in California.

Charles G. Hyde (Engineering), and Joseph N. LeConte (Engineering Mechanics).²⁷

The earthquake of April 18, 1906 delayed the work of the committee, but by June 6 its report had been sent to Wheeler. The report²⁸ stated:

"We have carefully examined the curricula of eastern Forestry schools and compared the elements thereof with the courses of instruction now given in the University of California, to ascertain their equivalence and correlation. As a result of this study we submit the following:

"First: a draft of a 'Pre-Forestry Course', of which a copy is transmitted herewith. This will serve two purposes: (a) suggestive to students who desire to take one or more years in the University in order to gain advanced standing in an eastern institution offering a full forestry course; (b) involving a schedule for graduation from this University which shall best prepare for a post-graduate course in forestry at such an institution.

"Second: the committee is convinced that a student pursuing this proposed Pre-Forestry Course will not only cover the subjects included in an eastern forestry curriculum, but will enjoy a more full and thorough development of these subjects in this University because our work is upon a two term (rather than a 3 term) per year basis and this permits more satisfactory instruction in certain subjects which in some eastern institutions must be more or less fragmentary. It may also be noted that the Pre-Forestry Course which we propose has close engineering relations and is in fact consistent with ultimate acknowledgment of the successful student as a forest engineer. This is the end to which your committee believes university instruction in forestry must attain to be true to its name.

"Third: it should be noted that all instruction indicated in this Pre-Forestry Course is now given in the University of California, except the special subjects marked with an asterisk (*)²⁹ in the Senior Year. These pertain to forestry policy and practice and your committee is convinced that provision for an Assistant Professor of Forestry would cover these subjects for the present, and that the University can offer a full forestry course when such an officer begins his work. The installation and equipment of a Department of Forestry can follow as soon as the additional cost thereof can be provided."

²⁷Loren E. Hunt, lecturer in Civil Engineering, was subsequently added to the committee. Jepson probably would have been the Botany representative on the committee had he not been in Europe. LeConte, no doubt, was appointed because of demonstrated interest in forestry. In 1902, he had considered taking a forest supervisor position. However, he gave up the idea when Pinchot in a letter on February 3, 1902, to W. R. Dudley of Stanford (see details later in this chapter) made it plain that "his duties would require his whole time throughout the year."

²⁸The Wickson Report, referred to in numerous correspondence sources, became the object of a widespread search by Wieslander and Casamajor in the preparation of this history. Many strange and dusty records depositories around the University were searched in vain. Finally, on October 22, 1963, Mrs. Esther Johnson, Forestry librarian, came upon the handwritten original tucked away in a mislabeled envelope and recognized it as the long searched for document. It was a red-letter day for amateur historians.

²⁹The special subjects were: Silviculture, 6 units; Forest Mensuration, 3 units; and Lumbering, 3 units.

The day after submitting the report, Wickson followed up with this letter to Wheeler:

"I hear that you are going east and I earnestly request you look at the Forestry Report . . . Possibly it may be convenient for you to confer with Mr. Gifford Pinchot and get his opinion of the scheme. If you can supply us with an assistant Professor it may be worthwhile to look into the recent performance of Allan R. Powers . . ."

On July 12, Wheeler replied: "I am very anxious to have a teacher of Forestry at the earliest possible moment. I agree with the report of the committee and shall hope at an early date that we may be able to begin instruction. Of course it will not be possible, under the circumstances, to begin instruction this coming year."

The "circumstances" were "owing to local disasters [occasioned by the earthquake] and the certain reduction of University income in the immediate future . . ."³⁰ Wickson must have been deeply disappointed that the report did not lead to a forestry school. However, it gave the recorder what he had asked for—a hand-out outlining a four-year pre-forestry curriculum. And this kept alive the prospect that someday there might be a forestry school.

Industry support

Pacific Coast Wood and Iron, which had been dormant during the legislative battles of 1903 and 1905 regarding the School of Forestry bills, suddenly woke up. What aroused the publication was a proposal by F. E. Weyerhaeuser that the lumber industry endow a chair of forestry at Yale University. S. L. Everett, *Wood and Iron's* publisher, sought to divert any such money to Berkeley instead. Even the thought of lumbermen endowing Yale gave Everett high blood pressure. Here are quotes from his editorial "A Great Mistake" that appeared in the issue of February, 1906.

"Just imagine starting a college of agriculture in the midst of Death Valley to let young men learn how to raise sugar beets and crab apples! It is just as peculiar to establish this school of forestry . . . at Yale . . .

"Take on the other hand, the establishment of such a chair at the University of California . . . but a few hours trip from the greatest forests now being exploited in the world.

"... Let the lumber manufacturers of the Eastern and Southern States look into this business before they raise any funds for Yale . . . Let the Western manufacturing circles attend to it that none of their funds go so far back East . . ."

Everett appealed to Wickson enclosing the editorial. Here are quotes from Wickson's reply:

"I took the liberty of bringing the matter up in my Seminar Course . . . where it was quite actively discussed. We are certainly impressed with the justice of your contention that the great forestry school of the United States should be located in California and we are glad to cooperate with all public-

³⁰ Wickson to A. H. Hodgson May 15, 1906.

spirited individuals and organizations which are working toward that end. I was obliged, however, to deprecate the reflections made upon Yale University . . .

"I shall take the liberty of transmitting the correspondence and your editorial to President Wheeler, to whom, of course the designation of our policy and procedure properly belongs."

The March, 1906, issue of *Wood and Iron* followed up with almost two pages under the heading, "A Pacific Coast Chair of Forestry." It led off with this paragraph:

"This journal seems to be the only one on the western slope that has the necessary amount of coast patriotism at heart to urge the location of the Chair of Forestry on the shores of the Pacific. The National Lumber Manufacturer's Association is endeavoring to raise funds for the establishment of a Chair of Forestry at Yale, way back in the elm-shaded precincts of classic New Haven. It is akin to the location of an oyster bed in the shoals of Kansas—this establishment so distant from the great timber belt."

Thus went unheeded Wickson's admonishment about reflections on Yale. Under the caption, "What Professor Wickson Says," Everett did not quote from Wickson's letter, but carried instead a part of his address, "A forestry school's work," before the Agricultural Club. However, a letter from Wheeler was printed in full. Here are excerpts:

"I am most vigorously in sympathy with your idea as expressed in your article . . . Certainly we ought to have the School of Forestry at the University of California. A number of our students have been forced to go East . . . I have recommended the establishment of a School of Forestry repeatedly in my Biennial Reports . . . It would seem to me that, with five thousand in salaries and five thousand in equipment, we could begin perfectly well. In fact, I believe we could start with seventy-five hundred. . . . The trouble is that the University of California is impoverished in the midst of California's greatest prosperity."

Everett commented as follows: "President Wheeler's view on the subject of the State University's meagre funds are well known and shared by graduates of that great growing institution, and this poverty should be relieved, but a Chair of Forestry, privately endowed, will be free from neglect of the State politicians."

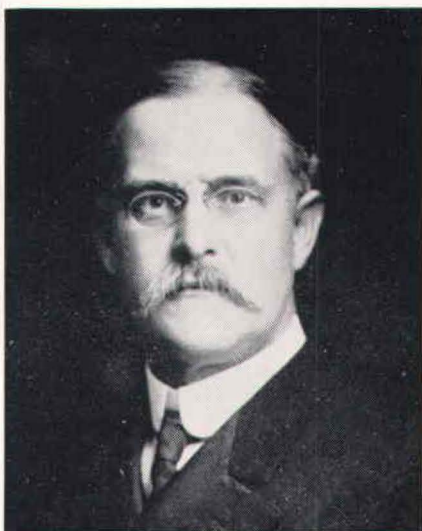
Everett also reproduced an editorial from the *San Francisco Call* which said in part: "The University of California and Stanford University . . . are nearest to the great lumber interest that needs the foresters and proposes to train them. Then why not endow a forestry school in one of these universities? . . . why waste such an endowment on Yale? . . . The only dendrological clinic there is furnished by the elms of New Haven . . . *Wood and Iron* opposes the Yale proposition and upon grounds that should be accepted by the lumber interests."

During the biennium following the 1909 session of the legislature, Wheeler had the funds to start forestry instruction. The money must have been included in the University's budget since nothing was said about a private source and no special appropriation had been asked.

Ironically, nothing resulted.

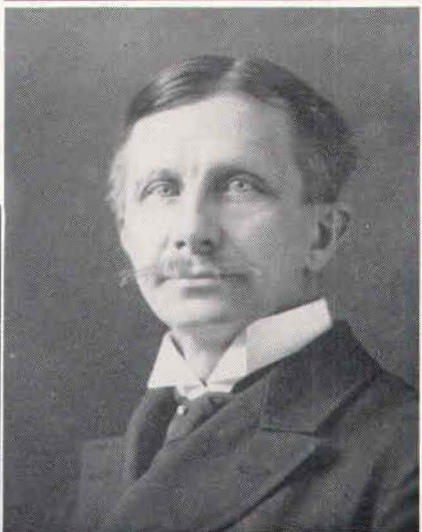
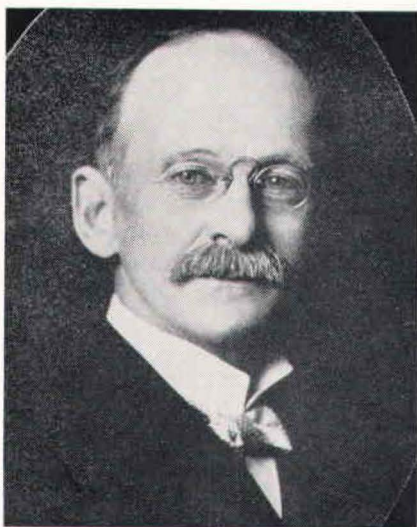


William B. Greeley, L.B., U.C., 1901



Benjamin Ide Wheeler, President,
University of California, 1899-1919

William Russel Dudley, Professor of
Botany, Stanford University, 1893-
1910



Bernhard E. Fernow, U.C. Lecturer
in Forestry, 1902

Greeley

Wheeler kept hoping he could get William B. Greeley³¹ to head the work. He did not succeed. This is revealed by the following excerpts from the Greeley papers³² which also indicate the direction both Wheeler and Greeley thought forestry education should take.

On May 22, 1909, Greeley noted in his diary, "Wrote President Wheeler of the University of California again declining instructorship in forestry."

On August 4 of the same year Wheeler wrote to Greeley: "Two men prominent in your profession have recently told me that you ought unquestionably to accept the headship of our department of forestry, and that it was impossible that you could have understood the importance of the position when you declined. . . . I have offered the position to no one but yourself . . . We are prepared to build up here a first-rate forestry department. I should wish to begin with one man and an assistant and expect him to spend his first year looking the ground over and shaping up the department; that is, he would not be expected during the first year to give more than a minimum of instruction. In the second place I should expect and desire him under any circumstances to spend at least one-half his time in the field. He could possibly maintain some connection with the [Forest] service. I desire the work to be so organized here that all students will spend at least one-half their time in the field. We wish to make an arrangement whereby our students can, with or without pay, serve under the government from the beginning for a period of months each year. The salary I should offer you for the first year would be thirty-six hundred dollars. . . . I do not see how you can avoid giving the matter at least very serious consideration. It seems to me to involve for you a matter of plain duty. The University of California ought to be naturally the place where the best forestry school of the West should be maintained."

Greeley's answer, dated August 16, contained the following passage: "... Insofar as the salary and the other essential features of this position are concerned, I could not ask for a more generous offer or for a more attractive opportunity to develop a strong school of Forestry under what appear to me to be practically ideal conditions. After careful consideration, however, I regret that I must again decline your offer . . . In my judgement, H. H. Chapman of the Yale Forest School is the strongest available man . . . If you wish a man of less academic and more practical experience, I suggest that you consider Dr. Judson F. Clark of Vancouver, British Columbia. . . . Dr. Clark is a splendid instructor and a man of keenly wide awake and aggressive personality. . . . I believe he is admirably fitted for the position . . ."

Fourteen months later, on October 18, 1910, Wheeler once more wrote to Greeley: "We have never yet put our School of Forestry into form; in fact, I have not offered the headship in it to anyone but yourself. Are you still disposed to remain in the Forestry Service? If so, whom would you mention as the man we ought in first line to consider for our head? The

³¹ William Buckhout Greeley was a prominent member of the student body and member of the debating team during Wheeler's first two years as president at Berkeley and one of four student speakers at his own graduation on May 15, 1901. His subject was entitled: "The historical spirit in practical politics." He received a Bachelor of Letters from the College of Social Sciences and honorable mention for distinguished scholarship.

³² Greeley Papers, University of Oregon, Eugene.

name of Mr. Raphael Zon has been mentioned to me very earnestly. I should like to know what you think of him."

Greeley could not be persuaded. He replied, October 25: "... I regret that conditions which determined my former decision ... have not changed ... I would regard Mr. Zon as a very strong man for the chair of Scientific Forestry in any of the Schools in this country. I would not regard him as a very strong man for the Directorship of a School of Forestry or a University Department devoted to that subject. ... He is not the type of man who could interest practical business men in the work of a Forest School; nor is he a type of man who could develop the lumbering and engineering features of Forest instruction which, in my judgement have been its most serious deficiencies in the schools already established ..."

It is apparent that Wheeler did not try very hard to get anyone but Greeley. He was set on this man whom he knew well as an outstanding student. Greeley had embarked on a career teaching history and, not liking it, had turned to forestry.³³ Subsequently he rose rapidly in the U. S. Forest Service, demonstrating outstanding professional and executive capacity. Thus, it is understandable why Wheeler wanted him and why Greeley was so little interested. Also it can be concluded from these Wheeler-Greeley letters that, had Greeley accepted, the forestry course would have stressed logging engineering and business aspects of forestry.

THE ACTIVITIES AT STANFORD

At the time Wheeler was attempting to start forestry instruction at Berkeley, another great university president, David Starr Jordan, tried the same at Stanford. Wheeler largely carried the ball himself, but Jordan, no less eager, had an ardent forestry advocate do it for him. In effect, William Russel Dudley, Professor of Botany from 1893 to 1910 and friend of Pinchot, spearheaded the effort at Palo Alto.

Dudley

Being intensely loyal to Stanford, Dudley could not bring himself, or lead the Sierra Club, to speak out strongly for legislation that meant a forestry school at Berkeley first. As editor of the forestry notes in the Sierra Club *Bulletin*, he had written the faint praise for such legislation that appeared in the February, 1903, issue.

Abrams, his close associate and successor, wrote in the *Stanford Alumnus* of February, 1911: "... Dudley ... directed his energies toward the establishment of courses in forestry at Stanford. For a number of years he planned toward this end and finally, just as success seemed probable, the fateful April 18 [1906 earthquake] wiped out every promising hope of realization."

Nevertheless, Dudley's hope continued. The Fifth Annual Report of the President of the University for the year ending July 31, 1908, includes this statement by Dudley:

"At the present time a majority of the men registered in botany have

³³ Morgan, Jr., George T., *William B. Greeley*, 1961.

expressed a desire to enter the profession of forestry. One graduate, Mr. Ernest G. Dudley [the professor's nephew] is now in the Yale School of Forestry, and others are prepared to follow unless a professorship of Forestry is established here. We have laid down a course preparatory to forestry, but we cannot train men properly for the profession itself without the aid of technical foresters as instructors, who could well be attached to this department [botany]. With such addition a considerable number of students, alert and ambitious men would come to Stanford; and in the establishment of such instruction, we should be fulfilling our highest function, namely our duty toward the State and the United States. The graduates of the eastern schools are no doubt well trained in eastern conditions, and know eastern trees. When coming here, they must inevitably and do make mistakes concerning western tree life and in dealing with western lumber and grazing interests. The great forest reserves are all in the west, and if we had a forest school at Stanford, beside our men to the manner trained, we should also draw here for further study, eastern forest school graduates. The demand for trained foresters is far greater than our University authorities realize . . ."

Dudley's plea almost got results, as these excerpts from the Greeley diary reveal:

"... Dr. Jordan of Stanford University writes suggesting Assistant Professorship in forestry in charge of new department which he proposes to organize."³⁴

"... Wrote Dr. Jordan again declining the Chair of Forestry at Stanford."³⁵

These offers preceded by several months those of Wheeler in 1909. Had Greeley been inclined to head a forest school, Dudley's fervent hope of having one at Stanford first might have been realized. And then, perhaps, a school would never have been established at Berkeley.

Stanford-Berkeley agreement

Greeley suggested other possibilities but nothing came of them. Jordan's hand was stayed by a "gentlemen's agreement" with Wheeler: the University of California would stay out of Ichthyology and Fisheries (Jordan's specialties) provided Stanford would stay out of Ornithology, Mammals, Agriculture, and Forestry.³⁶ It must have been a reluctant Jordan who had made such an agreement. A few days before his death he said to Mrs. E. G. Dudley "with tears in his eyes" that the great disappointment of his presidency was failing to get a forestry school.^{37, 38}

³⁴ Greeley diary January 30, 1909.

³⁵ *Ibid* February 19, 1909.

³⁶ Interviews with Ira L. Wiggins and George S. Myers, Stanford University, in November, 1963, and again with Wiggins in June, 1964. All of the details of the Wheeler-Jordan agreement had been related to Wiggins by LeRoy Abrams and George J. Peirce, associates of Dudley in the Botany Department. Wiggins had also seen the pertinent Dudley letters among which was one to Pinchot. To Dudley, dedicated as he was to getting a forestry school, this agreement had been heart-breaking. Everything about the agreement except the inclusion of Agriculture and Forestry, had been handed down to Myers, present head of Ichthyology at Stanford but he said, "If Abrams had said it was so, it was so."

³⁷ Interview with Mrs. E. G. Dudley, January, 1963.

³⁸ In 1926, Stanford planned to establish a graduate school of forestry provided the federal government located its forest experiment station there as it was invited to do.

By the fall of 1911, interest in starting forestry instruction on the Berkeley campus was at low ebb. Apparently, Wheeler now considered it less urgent. However, the organization of a forestry club revived the interest. The story of the pre-forest-school activities of this club and its role in the establishment of a school is told in the next chapter.



**Willis Linn Jepson, Professor of
Botany**



**John C. Bridwell, Professor of
Entomology**

CHAPTER 2

The Early Days of the Forestry Club

A. EVERETT WIESLANDER

THE Forestry Club came about as a result of a course in Forest Insects that was given during the fall semester of 1911. The instructor was John C. Bridwell from Oregon State College at Corvallis. Among others enrolled in this course were four would-be foresters: Joseph T. Saunders, Frank B. Herbert, W. Powell Smidt, and A. Everett Wieslander. These four students frequently met for "bull sessions" in a little room adjoining Bridwell's office in the Entomology Building just west of Sather Gate. One day Smidt thumbtacked to the outside of the door a 3" x 5" card on which he had printed "FORESTRY CLUB" in green ink. Bridwell happened by, saw the card, opened the door, and remarked: "Seriously now, why don't you fellows organize a club and try to get a forestry school started?"

Organization

The idea stuck. It was discussed on Bridwell's field trip to Redwood Canyon, and later with Professor Jepson of the Botany Department. Jepson agreed to help organize such a club. Professor E. B. Babcock and George A. Coleman, an assistant in Entomology, gave encouragement. It was decided to organize at the outset of the spring semester.

On January 26, 1912, the *Daily Californian* carried the following news story:

"Originating among the students of the University interested in forestry, a new college organization will take definite shape this afternoon at a meeting which has been called for 4 o'clock in Room 13, Agriculture Building." (Budd Hall).

Twenty-six students and four faculty members (Babcock, Bridwell, Coleman, and Jepson) met that afternoon to organize the club. Russell T.



Entomology Field Trip. October 1, 1911. (L. to r. — W. P. Smidt, F. B. Herbert, J. T. Saunders)

Robinson was temporary chairman and Knowles A. Ryerson, secretary pro tem. Judging from a lively discussion of club aims, the majority seemed conservation-minded rather than professionally interested in forestry. A committee of five (Saunders, Herbert, Smidt, Wieslander, and Jepson) was appointed to draft a constitution.

A week later the constitution was adopted and the following officers elected: J. T. Saunders, president; F. B. Herbert, vice-president; A. E. Wieslander, secretary; W. P. Smidt, treasurer; and Professor W. L. Jepson, sergeant-at-arms. The constitution stated that the purpose of the club was "to promote the general and academic interests in forestry among the students and faculty of the University and the people of California and to maintain a closer fellowship among all students interested in forestry."

Two grades of student membership were provided for: Active membership for those whose courses were planned to lead to a degree in forestry; and associate membership for other students interested in forestry—with all privileges of the club except holding of office or amending the constitution. Thus control rested with students whose primary interest was the establishment of forestry instruction at the University. Active membership among the 23 charter members was held by V. S. Brown, Carroll F. Glenney, Frank B. Herbert, Ray R. Holeman, F. Paul Keen, Will C. Mathews, Leo W. Meyer, Ralph E. Noddin, Russell T. Robinson, Joseph T. Saunders, Ovid L. Sears, W. Powell Smidt, A. Everett Wieslander, and Harry S. Yates. The associates were Adelbert L. Chaffin, Earl R. Eichner, Roy M. Hagen, Knowles A. Ryerson, and Edgar Woodcock. Honorary members were E. B. Babcock, John C. Bridwell, George A. Coleman, and Willis Linn Jepson.¹

¹U.C. Forestry Club Minutes.

Activities

The activities of the club, before formal forestry education started, covered a period of five semesters. Presidents of the Forestry Club during this period were: J. T. Saunders, spring, 1912; F. B. Herbert, fall, 1912; A. E. Wieslander, spring, 1913; F. P. Keen, fall, 1913; W. C. Mathews, spring, 1914.

During the first semester of the club (spring, 1912), four meetings with speakers were held, a forest legislation committee chaired by O. L. Sears was set up, and important contacts were made. To get speakers, help was first sought from Coert DuBois who was the district forester for U.S. Forest Service in California. He declined to help in any way. The response from State Forester George M. Homans was quite different. "I am very much interested," he said in a letter to Sears dated February 28, 1912, "in your effort to secure a course in forestry at the University If there is anything this office can do to assist in any way, we shall be only too glad to have you call upon us. There are three of us in this office, any one of whom would be glad to meet with your club . . ." Homans was the first speaker from his organization.

The first person to address the club was the eminent forest pathologist, E. P. Meinecke. Another noteworthy speaker was Harry D. Tiemann, a wood seasoning specialist from the U.S. Forest Products Laboratory at Madison, Wisconsin who was conducting seasoning experiments at a sawmill operating in a large eucalyptus stand in the Berkeley hills.

State Forester Homans provided the club with a list of San Francisco lumbermen to be approached for support. He also enlisted the help of George M. Cornwall, publisher and editor of *The Timberman* who editorialized:

"Of all the five coast timbered states, there is not one which possesses greater natural advantages for maintaining a live, well-equipped school of forestry than does California There is and will be for many years to come an unsupplied demand in the State for trained foresters, skilled logging engineers, and expert knowledge of the entire operation from the tree to the stump. . . . it is the duty of the State to help provide the technical training needed"²

Cornwall, like Greeley, believed that forest management should begin with a good job of logging. This required logging engineers, an essentially nonexistent profession. He thought the lumber industry should ask the state universities of the West to train such men. Toward this end Cornwall, with the help of industry leaders, launched the "Pacific Logging Congress" at the Alaska-Yukon-Pacific Exposition in Seattle in July, 1909.

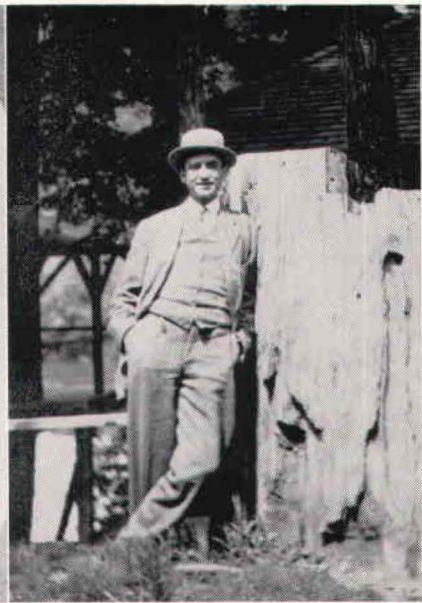
At this Congress, Frank H. Lamb, a timber operator of Hoquiam, Washington, presented the case for university-trained loggers, declaring: "I am not afraid that any of our college-bred men immediately driving you older experienced men from the field, but I do say a fuller understanding of the basic principles of the various technical sciences involved would enable you much easier to meet quickly and successfully the problems that arise."³ Three years later at the Fourth Congress, Lamb delivered a paper entitled

² *The Timberman*, June, 1912.

³ *The Timberman*, August, 1909, p. 32.



**George Morris Homans, California
State Forester**



**Trueman D. Woodbury, U. S. Forest
Service**

"The Necessity for the Establishment of a Course of Logging Engineering in our State Universities."⁴ This Fourth Congress petitioned "the state universities of California, Oregon, Washington, Idaho, Montana, and British Columbia to provide courses in logging engineering . . ." It also appointed a committee in each state to follow through.

The California committee included W. W. Peed, Hammond Lumber Co; G. X. Wendling, Weed Lumber Co; and C. R. Johnson, Union Lumber Co. Thus, these and other California lumbermen were conditioned to respond when, later at a critical time, Cornwall asked them to write letters urging the University of California to undertake instruction in logging engineering and forestry.

After the summer vacation in 1912, so few members appeared at the first fall meeting of the Forestry Club that the officers doubted the club could survive. To revive interest, W. B. Greeley was persuaded to address a club-sponsored evening meeting on October 1. Greeley, a distinguished alumnus of the class of 1901 and considered the "live wire" in the Forest Service, spoke on "Problems of the Forester." He drew a large audience. After the talk Jepson, who had introduced Greeley, announced that the next meeting of the club would be held on October 9. On that date, a large number of members showed up. Greeley had saved the day.

Calling on President Wheeler became an important activity of the club members. He had set up a students' hour during which he was accessible without appointment. At each of these hours the club had one or more members

⁴*The Timberman*, August, 1912.

on hand. When first called upon, Wheeler told of his efforts to find a suitable head for the school and that he was still trying. Wheeler had made overtures to Judson F. Clark, a lumber businessman in Vancouver, British Columbia, and Irving W. Bailey, then assistant professor of plant anatomy at Harvard University. Wheeler was still leaning heavily on the counsel of Greeley in his search. On April 10, 1912, Wheeler had written to Greeley:

"I find that Mr. Clark is not ready to leave business and go into academic life yet. When he does go into such life, he says he does not want to be the head of a school. I am again, therefore, disappointed. I like the appearance of Bailey; he seems, however, too much of an indoor research man. Am I wrong about this?"

In his reply, April 27, Greeley wrote: "Prof. Bailey has written me that if he were ever placed in charge of a forest school, his policy would be to develop a school of logging engineering, adapting the instruction primarily from the business and engineering standpoint although, of course, including substantial work in silviculture and technical forestry as developed in this country and abroad. This to my thinking is exactly what forestry instruction in the United States means and what should be done at the University of California when your course is initiated. In spite of his lack of familiarity with local conditions, I believe that Bailey is probably the best man available."

Time passed, and still no action was taken. In October, 1912, in anticipation of the 1913 legislative session, the Forestry Club representatives approached Wheeler and asked if they should work for a special appropriation and, if so, how much. He did not advise how it might be done but suggested that \$215,000 be sought! He could not have taken the club seriously; he himself had failed to get even \$10,000 in this way!

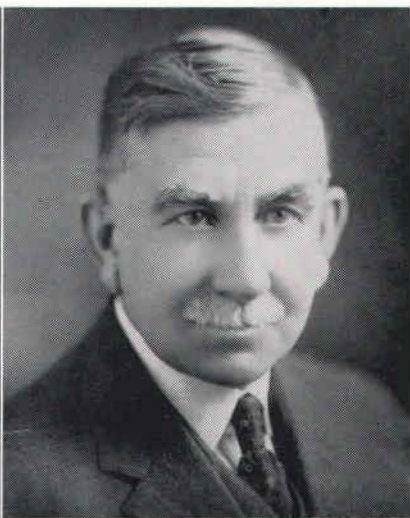
In early November, Wheeler told a Forestry Club group that Fernow had convinced him not to start a school at all.⁵ There were already too many

⁵Bernhard Fernow was dean of the Forestry Faculty, University of Toronto.

**Thomas Forsyth Hunt, Dean, College
of Agriculture, 1912-1924**



**George M. Cornwall, Owner and Edi-
tor of "The Timberman"**



in the country. The one at the University of Washington was sufficient for the West Coast. Wheeler also said that further discussions should be held with the College of Agriculture's Dean Hunt rather than with him. The club sent a letter to Cornwall, suggesting that perhaps a barrage of letters from California lumbermen might help change Wheeler's thinking.

The prospect for forestry education in California was at an ebb.

Hunt

To plan for and direct a greater College of Agriculture, Thomas Forsyth Hunt had taken over as dean on October 1, 1912. From a forestry standpoint, no better choice could have been made. Hunt had already one forest school to his credit. *Forestry and Irrigation* for January, 1907, recorded: "During the past summer [1906] plans have been maturing for the establishment of a four-year course in forestry at Pennsylvania State College . . . , the project has assumed definite form since Prof. Hunt of Cornell became Dean of the college [Agriculture]."

The club found the dean eager and anxious to get forestry instruction underway at Berkeley. It arranged for him to speak at its meeting on December 4th. The announced subject was "Forestry Work and Its Opportunities" but his speech consisted mainly of reading letter after letter from California lumbermen urging the establishment of instruction in logging engineering and forestry. He concluded with the announcement that \$42,000 to establish a Division of Forestry had been included as a last item in the College of Agriculture budget. He went on to say that the State Board of Control had lopped off \$300,000 of the College's total. All of it would have to be restored by the 1913 legislature if the Division were to be established. Not an optimistic outlook!

During the spring semester 1913, the worrisome problem of uncertain attendance at club meetings was licked and a successful campaign was waged for legislative approval of the full College of Agriculture budget. Fred V. Holmes, a new associate member, came up with the solution of the attendance problem. He suggested dinner meetings, field trips, a dance, and a banquet to promote closer fellowship among members. As in any good club organization, Fred was given the job of implementing his own suggestions.

The start was a dinner meeting at Wieslander's home with about 15 members present. Knowles A. Ryerson, an articulate and dynamic member of the club, gave an after-dinner "pep talk." He succeeded beyond expectations in stimulating enthusiasm and from then on the club was very much alive. Meeting attendance was good and two field trips, a dance, and a banquet were held that semester. Warm friendships that have lasted over the years developed among club members.

Political activity

Ryerson chaired a committee that sent out letters to every institution giving a forestry course and to every state office to obtain data on the forest resources of each state and the amount spent for forestry education in each state. This was done at the suggestion of T. E. Loynahan, secretary and treas-

urer of the California Forest Protective Association. The purpose was to show that California, despite great forest interests, was spending nothing for forestry education while other states with smaller forest resources spent a great deal. With this ammunition, the club wrote a letter to Loynahan asking for lumber industry backing for the College of Agriculture budget.

In this same 1913 budget session of the legislature two bills had been introduced to provide for better forest fire protection.⁶ The first bill, termed the "Conservation Commission and Lumbermen's Bill," provided for "an industry operated fire department." The second bill might be called the Homans' Bill because the state forester was its warm supporter if not the actual draftsman. It provided for a "state operated fire department." The lumbermen had the support to pass the first bill but were afraid of a pocket veto by Governor Hiram Johnson. On the other hand, there was a good chance that he would sign the Homans' Bill if it passed. And they were afraid it might be passed.

The Conservation Commission and Lumbermen's Bill did pass the legislature but, to no great surprise, it died by pocket veto of Governor Johnson. The College of Agriculture budget to implement Hunt's program of expansion, including a Division of Forestry, was passed.⁷ The first club banquet on April 25, 1913 turned out to be a milestone. Of the 26 members, 21 were present. Professor Jepson was toastmaster. The speakers were Dean Hunt, representing the University; Trueman D. Woodbury, the U.S. Forest Service; George M. Homans, the State Forest Service; and Charles L. Trabert,⁸ of the C. A. Smith Lumber Co, the lumber industry. Hunt closed his talk by announcing that on that very day Wheeler had authorized a professor of forestry as a first step toward establishing a Division of Forestry. Thus, the objective for which the club had been started on January 26, 1912, has been essentially achieved 15 months later.

Hunt soon began his search to find a head for the new division. On June 5, 1913, he wrote to Greeley: "The University of California is still seeking to secure a Professor of Forestry. President Wheeler informs me that the position has been offered to you on one or more occasions and that in each case you have declined the offer. We should be very glad to have you consider the matter again if you feel like doing so, but assuming your decision is irrevocable, we desire your judgment concerning other men. . . . There is a possibility that either Professors Mulford, Spring, or Recknagel might become available. I will be obliged to you if you will give me your opinion as to the relative desirability of these three men for our work in California. I should also be glad of suggestions concerning other men. I may say that we hope to secure a man at a salary not to exceed \$4000 per year, but we would probably pay a larger salary to secure the right man if he were available and were worth it."

⁶ Details of this story may be found in: Clar, C. Raymond, *California Government and Forestry*, p. 350-54.

⁷ The lumbermen letters came in while Agriculture's budget was being prepared. Perhaps the astute Hunt put the forestry item last hoping that it might work to get any cuts fully restored, which it did.

⁸ Trabert merits further mention. It was quite by accident that the club got to know him. C. R. Johnson, president of the Union Lumber Co, had accepted an invitation to represent the lumber industry at the banquet. At the last moment Johnson could not come and prevailed on Trabert to substitute for him. It was the beginning of a friendship between him and the club members that was to last well after the forest school was organized. He and Mrs. Trabert, along with Dean and Mrs. Hunt, chaperoned the club dances. He found summer jobs for club members. Because he was an interesting speaker, the club members always looked forward to having him at meetings and banquets.



The First Forestry Club Field Trip. (L. to r.—Herbert, Saunders, Ryerson, Keen, Holmes, Wieslander and Miller)

Celebration

During the school year 1913-14 the need for political activity no longer existed. So the club settled down to such mundane things as lecture meetings, field trips, and organizing a baseball team. T. D. Woodbury, in charge of silviculture in the U.S. Forest Service office in San Francisco, had become a good friend and warm supporter of the club. Through him the club was able to by-pass the passive attitudes of the district forester, Coert DuBois, and arrange for an interesting series of lectures by the heads of different fields of Forest Service work.

Four noteworthy events marked this remaining pre-forest-school period. The first occurred on August 27, 1913, when Professor Walter Mulford of Cornell University addressed the club on "Opportunities for Foresters." The second was the announcement, in November, that Mulford had been appointed to head the new Division of Forestry. The third was the appointment, in January, 1914, of Merritt B. Pratt, assistant supervisor of the Tahoe National Forest, as assistant professor to teach the first forestry course and prepare the ground for Mulford's arrival in August. The fourth was the second annual banquet on February 14, 1914.

The banquet honored two faculty members: Professor Pratt and Dr. Edwin C. Van Dyke. Van Dyke, a physician who had deserted his profession for his hobby, had succeeded Bridwell as the instructor in forest entomology. A stimulating teacher, he influenced Keen and Herbert to embark on careers in forest entomology. In addition to honoring Pratt and Van Dyke, the banquet also served as a victory celebration. The honorees were the tangible evidence that the club's goal had been attained. Celebrating with the club members were Professor Jepson, who served as toastmaster, George M. Cornwall, who came down from Portland, T. D. Woodbury, Charles L. Trabert, and Dean Hunt.

Thus, the club concluded two years of active and successful growth. Its original objective—to help establish a forestry curriculum—was achieved. It was the first forestry club in the United States to precede formal instruction in this subject.

The end of the pre-forestry period at Berkeley came when three of the Forestry Club's charter members—Frank B. Herbert, F. Paul Keen and A. Everett Wieslander—received their BS in Agriculture (Pre-forestry) at Commencement in May, 1914. In December, 1914, another BS in Agriculture (Pre-forestry) was granted to Leo W. Meyer. These were the only four such degrees granted by the University of California.

During the five semester period of the Forestry Club's existence, before formal professional forestry instruction started at Berkeley, 45 persons were elected to membership in addition to the 23 charter members. The additional members were:

Spring, 1912—E. C. Garcia, A. C. Stewart.

Fall, 1912—E. J. Albrecht, Edward Aulin, F. N. Aylward, H. C. Bowman, George F. Cornwall (son of George M. Cornwall, owner and editor of the *Timberman*), M. J. Creuss, Robert E. Cuendett (Burton), C. V. Goodwin, Theodore Gould, Fred V. Holmes, Archie Kemppe, Orville R. Miller, Leland S. Smith, E. H. Trout, and J. R. Zion.

Spring, 1913—A. P. Flockart, Max J. Leonard, Robert Mayock, and Thomas E. Nelson.

Fall, 1913—Berg, Davis, Ansel F. Hall, G. L. Kendrick, Wendell T. Robie, and Ed Stiles.

Spring, 1914—A. M. Amundson, Coombs, Miss Downing, A. M. Edwards, J. F. Fahey, J. D. Gross, Loren Hadley, H. L. Hansen, R. E. Hardley, Ralph Heintz, Howard A. Houston, Professor Patrick B. Kennedy (agronomist and botanist who had taken charge of the University's research and teaching in forage crops), Keye, R. E. Mills, Professor M. B. Pratt, Murray L. Royar, Miss Sawyer, F. L. Sayre, and F. R. Wehe.



**Walter Mulford, 1877-1955; Professor of Forestry,
1914-1948; Dean, School of Forestry, 1947-1948**

CHAPTER 3

Walter Mulford

1877—1955

MYRON E. KRUEGER
EDWARD I. KOTOK

WALTER MULFORD headed the curriculum in forestry¹ at the University of California from its inception in 1914 until his retirement in 1947. Thus the history of the curriculum is largely concerned with Mulford both because of the length of administration and because of the imprint he made on forestry education in California and the United States.

Student period

Walter Mulford was born of Quaker parents at Millville, New Jersey, on September 16, 1877. Undoubtedly, his family training had much to do with implanting in him certain attributes which became his life-long characteristics. These included unfailing kindness, high moral standards, a well-organized and well-disciplined mind, a bulldog persistence in attainment of carefully considered goals, and the ability to differ with others without the bitterness of dissension.

Walter Mulford exemplified the young men who were willing to pioneer in a profession new to America, even though the prospects for gainful employment appeared limited. What attracted these men was more than an interest in the art and science of growing forest crops—there were elements of adventure, uncertainty and, above all, the opportunity for public service in the cause of conservation.

¹The curriculum in forestry was administered as a "Division," from 1914 to 1939, and as a "Department," from 1939 to 1946, within the College of Agriculture; and, since 1946, as a "School." This aspect of the history of the curriculum is treated in Chapter 4. To simplify the presentation in this book, and particularly in this chapter which is concerned with the history of Walter Mulford in relation to forestry education, the term "School" will be used throughout, regardless of the period of administration. This will also prevent confusing the Division of Forestry of the University of California with the Division of Forestry of the State of California.

In 1898 Mulford was a student in the College of Agriculture at Cornell University, pursuing courses in horticulture. Upper New York State at that time was expanding its plantings in orchards and vineyards. He must have already been interested in plant life and orderly management of trees, although these were to be nurtured to produce fruit crops.

Cornell University was an endowed private institution. Attached to it was the New York State College of Agriculture supported by state and federal funds. In those days the agricultural colleges were not regarded favorably by the faculties of Letters and Science or of older professional schools. This, undoubtedly, tended to bring the students and faculties of agriculture closer together, forming an aggressive group prepared to prove their worth.

The College of Agriculture at Cornell established in 1898 a forestry curriculum headed by an unusually vocal and impressive personality, Bernhard E. Fernow, a German-trained forester. Fernow had been the first chief of the Division of Forestry (forerunner of the present Forest Service) in the U.S. Department of Agriculture from 1886 to 1898. As head of the College of Forestry at Cornell, he also had charge of the 30,000 acre Cornell Forest at Axton in the Adirondacks, a gift to Cornell from the State of New York. The Cornell Forest was contiguous to the New York State Forest Preserves which, by a constitutional amendment in 1894, were to be maintained as perpetual natural areas. All cutting of trees was prohibited.

The Cornell Forest was of the hardwood type. It was Fernow's plan of management to clear-cut the hardwoods and replant with spruce. This was sound management, but the practice was irritating to those who had summer homes in the vicinity and to those who had been instrumental in securing passage of the constitutional amendment of 1894. Disapproval of Fernow's method of management led to the suspension of appropriations for the College of Forestry in 1903. The Cornell Forest was returned to the state as part of the Adirondack Preserve.

Nationally there was even greater turmoil regarding the wanton exploitation of forest lands and the mismanagement or loose management of publicly owned forest lands in the West. Our public land disposal policies were being questioned and subjected to public scrutiny. Timber operators were able to acquire, at relatively low prices, extensive holdings in the public lands, sometimes in questionable collusive transactions.

This was the atmosphere to which Mulford, a young student in horticulture, was exposed. This Quaker lad, subjected to the stimulus of conflict and concern, grasped at the opportunity to shift to forestry under the leadership of a dynamic teacher, Fernow, and to participate eagerly in this profession new to the United States. In the College of Forestry Mulford met and worked with other young men, devoted to conservation, prepared to battle for the cause with dedication beyond the call of duty. Among this group were Filibert Roth, Raphael Zon, and Ralph S. Hosmer, all articulate and defiant against destructive forest utilization and rigorous in pursuing public forest policy.

Mulford graduated from Cornell University in 1899 with the degree of Bachelor of Science in Agriculture and received his Forest Engineer degree from the New York State College of Forestry (at Cornell) in 1901.

Early career

Few jobs were open, and these were entirely in the public service. Mulford worked for a short period with James W. Toumey of the Bureau of Forestry conducting root studies. In April, 1901, he began his first job involving individual responsibility, as forester of the Connecticut Agricultural Experiment Station; in July, 1901, he became state forester of Connecticut, the first such position legislatively created in the United States. Mulford taught courses in the 1902 summer session of the Yale Forestry School at Milford, Pennsylvania.

The Yale Forestry School, established in 1900, and the influence of Gifford Pinchot, chief forester of the Bureau of Forestry and a Yale graduate, undoubtedly gave impetus to forestry in Connecticut. By 1903, Mulford began a detailed forest survey of a typical forest region of the state. Experimental tracts were established to study forest conditions, nursery practice, seed care, species-testing, planting methods and costs, seed sowing methods, woodlot treatment, thinning and improvement cuttings, and reforestation of burned-over and barren areas. The results of these studies were disseminated as an extension service to the forest owners of the state.

In 1904, Mulford joined the United States Bureau of Forestry to take charge of commercial tree studies in the southern Appalachian Mountains. In 1905, he spent several months in Europe in preparation for his appointment with the University of Michigan as Filibert Roth's assistant. Roth had known Mulford at Cornell. Mulford's studious attributes, his devotion to forestry, his courteous and gentlemanly deportment undoubtedly were noted by Roth. It was logical that Mulford was invited to join Roth at the new Department of Forestry at the University of Michigan in 1905. Thus, Mulford began in earnest his teaching career in forestry which had begun at Yale and was to include work in three institutions: the University of Michigan, Cornell University, and the University of California. Other faculty members who were with Roth and Mulford were Cary L. Hill, Olenus L. Sponslor and Professor Burns of the Botany Department.

The Forestry School at the University of Michigan in its early history was administered as a graduate school in the College of Letters and Science. Most of the forestry students had already received their Bachelor degrees at other institutions and in a variety of disciplines. In this middle western environment, with a student body comprised of individuals of highly varied basic training and regional cultural patterns, Walter Mulford started his career as a teacher in forestry. The task of the forestry faculty was to weave this diversity of material into a uniform fabric. Walter Mulford adjusted readily to this need, both in and out of the classroom. His teaching had philosophical content. His out-of-class counseling, to which he devoted much time, helped create a desire in the students to enter into this new, adventurous profession—almost as new to Mulford as to his students.

A natural teacher

That Mulford was a born teacher is illustrated by a specific example at the University of Michigan. E. I. Kotok, who later had a long and distin-

guished career in the U.S. Forest Service, recalls first meeting Mulford in the fall of 1909 as a graduate student in the School of Forestry in a pre-orientation course for new students. The students were instructed to come in field clothes but Kotok had no time to change and joined the group in his Sunday best. Mulford, lean, eager, and at a very rapid pace, led the panting pack through woodlots, shrubbery and fields for about an hour. Then, with the students resting on a grassy slope circling their professor, Mulford handed out blue books and asked them to briefly write what they saw, what they were looking for, what impressed them. Kotok, confused by the shrubbery and his concern to protect his clothes, simply stated: "I didn't see much because I did not know what to look for." (This statement plagued him for many years, since Mulford used it as a text: "You can't see unless you know what you are looking for." The example in field observation and the statement were used effectively by Mulford in subsequent classes at both Cornell and the University of California). Mulford gathered the papers, read some of them, and then proceeded to outline what a naturalist would have noted and what foresters must train themselves to do. His teaching led to a new world of minutiae forming ecological patterns. Thus, in the end, it became an exciting day to Kotok—this first venture into the outdoors with a dedicated teacher.

Roth and Mulford encouraged the formation of a Forestry Club—they always attended the meetings. (This practice was followed at the other institutions at which Mulford taught). The students listened to distinguished members of the faculty from other departments of the University on a diversity of subjects. Mulford suggested that they issue a printed Forestry Club publication, and encouraged campfire meetings in the fall. All these efforts were designed to bring the forestry students more closely together in a big university of many professional schools.

The lack of textbooks on American forestry forced these early teachers to create their own texts. At Michigan, Mulford taught two courses; one in Silviculture and another in Forest Policy and Economics. He built his course in Silviculture largely on his own notes taken as a student at Cornell, supplemented by his study of German forestry texts. His course in Forest Policy and Economics was based on Fernow's published volume—*Forest Economics*. European forestry texts in German and French covered a minimum number of species. In America it was necessary to deal with no less than 40 or 50 species and in a wide climatic and ecological range. Available to Mulford and his students were a number of Forest Service circulars and bulletins which in effect were the only source for material dealing with indigenous forestry. Students were also required to cover specific articles published in the *Journal of Forestry*, then edited by Fernow.

As a natural teacher, Mulford was keenly aware of the educational tools needed to present his lectures effectively, to maintain interest, not to outpace his class and, above all, to develop his themes in an orderly and precise fashion. There were few digressions and no story telling. It was all strict business.

At the first assembly of a class he inquired if any students had trouble with vision or hearing. To those he suggested they take front seats. He aired out the room between classes. He monitored the temperature of the room. Little matters in themselves, but they showed his concern with the physical

comfort of his students, with any detail that might handicap their attention.

All his lecture presentations were meticulously outlined. The portion of the outline appropriate for the day was always written on the board as he proceeded with the lecture. This method of presentation facilitated note taking by the students, and served to guide class attention from the general to the particular. Mulford saved enough time in his lecture period to clarify points raised by the class. He was never hurried; his timing was perfect. He recognized the limits of the attention span when a particular weighty matter was presented.

Three years at Cornell

By 1910 the forestry attitudes in New York State had cleared somewhat and the Cornell Board of Trustees again authorized the creation of a Department of Forestry in the College of Agriculture with Professor Mulford in charge. Mulford moved his residence from Ann Arbor to Ithaca on June 15, 1911.

However, the political tides were still strong. In 1910, Governor Charles Evans Hughes had resisted considerable political pressure and vetoed the establishment of a College of Forestry at Syracuse. When he was appointed to the U.S. Supreme Court, his successor, Governor John A. Dix, signed the law in July, 1911, creating the State College of Forestry at Syracuse University.

In the midst of these developments, Mulford was offered the deanship at Syracuse and refused. The rivalry and particularly the political activity concerning the universities of Cornell and Syracuse must have been distasteful to Mulford, as not being conducive to the orderly progress of forestry. He must have welcomed the pioneering possibilities suggested by the call, in the summer of 1913, to be interviewed as the head of the new forestry curriculum to be established at the University of California. He visited Berkeley in August, 1913, and was appointed in December to serve as head of the Division of Forestry in the College of Agriculture. The appointment was to take effect as of August 1, 1914, after he had completed the academic year at Cornell.

Although his tenure at Cornell was only three years, Mulford, as at the other institutions at which he taught, made a strong impression on his superiors, colleagues, and students. He assembled a strong faculty, consisting of Arthur B. Recknagel, Samuel N. Spring, and John Bentley. Recknagel followed his service at Cornell with many years of effective forestry work associated with pulp companies. Spring eventually became dean of the New York State College of Forestry at Syracuse University. Bentley's promising career was cut short by untimely death.

Before Mulford left Cornell, he witnessed the dedication of a forestry building in May, 1914. It seems highly probable that he had some responsibility for subsequently naming the building, Fernow Hall. The strength of the faculty and the record of Cornell forestry graduates show that Mulford had built well, even though the political strains of the Great Depression forced abolition of the curriculum in forestry in 1937.

Early years at California

At the University of California, a number of immediate problems confronted Mulford. He had to set up a curriculum that would fit into the general requisites or pattern of the College of Agriculture. The strong nucleus of students who had formed the Forestry Club (see Chapter 2) were anxious to study forestry. He had to decide whether to establish the curriculum on the undergraduate level or solely on the graduate level as at Yale. He followed the pattern of the College of Agriculture and other land-grant institutions in offering work on both the Bachelor of Science and Master of Science levels. The curriculum followed Mulford's strong belief, undoubtedly influenced by his earlier student association with Fernow, that the first two years of undergraduate work should consist mainly of thorough grounding in the humanities and the sciences basic to forestry. The professional courses were confined mainly to the last two years. This pattern later fitted into the development of junior colleges, permitting the students in forestry to take the first two years of work nearer home. Specialization was pursued in the graduate year or years. This plan, in essentials, has continued to the present time.

He had to recruit a teaching staff. Available teachers in forestry were limited. As at Michigan and Cornell, Mulford had to draw men for his staff from practicing professional foresters usually holding only Master's degrees. Such men were employed in the U.S. Forest Service, the Canadian Forestry Service, or state services.

Mulford was quick to perceive that, for American conditions, subject matter supplementary to traditional European forestry curricula would have to be introduced. He, therefore, soon emphasized fields of specialization within the forestry curriculum. At the very outset he had in mind a special curriculum in logging engineering. This was established by Donald Bruce in 1916. Greater emphasis on forest products began with the arrival of Emanuel Fritz in 1919. Courses in range management were introduced in the spring of 1922 under Arthur W. Sampson. Forest influences began in 1933 under the able control of Joseph Kittredge. Forest economics had always received significant emphasis as an important field of a forestry curriculum but was largely treated as a course in forest policy and administration. It became much more truly a course in economics when Horace R. Josephson first taught it in 1941-42. This aspect has received additional emphasis under Henry J. Vaux and John A. Zivnuska, through the offering of two courses—Forest Economics and Forest Policy.²

The California Forest and Range Experiment Station

Mulford many times expressed the desire that the School of Forestry at the University of California should become the center for Pacific Basin forestry. Therefore, in 1925-1926, when Congress approved the establishment of the California Forest and Range Experiment Station, Mulford undoubtedly exerted a lot of quiet but effective pressure to see that it was located on the Berkeley campus. Other institutions competed for the station. After extended study by Earle H. Clapp, Raymond E. Marsh and Edward

²For a detailed discussion of the problems of recruitment of the staff, the effects of World War I on the staff and the forestry curriculum development, see Chapter 4.

I. Kotok of the U.S. Forest Service, the decision was made to accept the offer of the University of California, largely on the basis that this arrangement would benefit the staffs of both the School and the Station. The new Station was warmly received by University President W. W. Campbell, Dean E. D. Merrill of the College of Agriculture, Comptroller (later President) Robert G. Sproul and, of course, Mulford himself.

The anticipated reciprocal benefits soon materialized. The staff and graduate students received incentive from the research work of the Station. The Station received incentives, not only from the School staff, but also from the faculties and facilities of the entire University. Mulford invited Kotok, the director of the Station, and members of his staff, to attend meetings of the forestry staff. Mulford also arranged that Kotok serve on certain special committees of the University. Mulford on his part served on a Special Advisory Committee for the Station and, as a member of the State Board of Forestry, supported a special California State appropriation to the Station for the initial work of Wieslander on the California vegetative type map and for the initial steps of a timber inventory.

The proximity of the California Forest and Range Experiment Station of the U.S. Forest Service made possible part-time and summer work for forestry students—especially attractive assignments for graduate students. An even more important benefit of the relationship was the emphasis it gave to the importance of research to which Mulford had long been committed.

Later the Station secured expanded quarters when the School of Forestry moved to the Forestry Building (now Walter Mulford Hall). The cordial and beneficial relations continued. It was with real regret, many years after Mulford's retirement, that the Regents of the University of California, under pressure from the state legislature and the exploding student population, were forced to ask all federal and state governmental agencies occupying quarters on the campus to seek space elsewhere. The Station, which had become the largest non-academic activity on campus, in 1959 moved two blocks away to downtown Berkeley. Despite the inconveniences, caused by this move, cooperative efforts by Station and University have continued to expand.

Beliefs and relationships

Mulford's view of the importance of research was taken into account in all of his additions to the staff, beginning with Sampson and Kittredge. He sought men who had earned doctorates. This held true not only for the newer specializations, but also for such older fields of forestry as forest management and forest economics. While forest protection had always been listed as one of the required fields of forestry, Mulford accepted the need to give it greater emphasis by establishing research objectives rather than have it exist as merely a supplemental, informational course for undergraduates.

Mulford did not try to duplicate in the School of Forestry disciplines or subject matter that were adequately provided in other departments of the University. He emphasized to prospective students that the Forestry School at California offered unusual opportunities for working with outstanding teachers and scholars in a variety of disciplines.

Mulford recognized and practiced full academic freedom, even though differing with members of his staff on positions taken on important public issues in the field of forestry. So far as is known, he never brought pressure on a faculty member to conform. He took the position that future events would correct a wrong-minded viewpoint. He tolerated and even enjoyed dissent, but abhorred dissension, rancor and vilification. He was a man of peace. He never indulged in personalities that could be considered derogatory. He never used a cuss word or related an off-color story. Nevertheless, he was sensitive to criticisms involving members of his staff, but he suffered in silence. He was a serene and compassionate man who engendered goodwill and fostered mutual respect and understanding in professional circles, both at the University of California and among other groups in which he participated. Yet he had a core of steel. He never wavered in matters of principle.

From the very beginnings of the School, Mulford established close ties with members of the U.S. Forest Service in the California Region. Coert DuBois, Paul G. Redington, and S. Bevier Show, successively regional foresters of the California Region, frequently consulted with Mulford on general California problems. They sought his recommendations on graduates of the Forestry School who were particularly suited for public service. Mulford always regarded public service in forestry highly. In the course of time, as more and more of his students entered the Forest Service and climbed the administrative ladder, his interest in the federal Forest Service increased.

The California State Division of Forestry, in the early days of the Forestry School, was limited in personnel and funds. It was not until the passage of the Clarke-McNary Act that the Division, with this federal aid and impetus, was able to expand to meet the difficult tasks in fire control on private forest and range lands throughout the state. Mulford played an important role in fostering state interest in its own forestry service.

Mulford had a strict code of ethics that leaned toward the puritanical, and yet he never preached or sought to chastise. Kotok recalls a talk on professional behavior that Mulford gave to the Forestry Club at the University of Michigan. He cautioned those who were to work in the rough, pioneer forest areas that they would be subjected to many pressures and exposed to vices. He voiced his hope that they would live as gentlemen, both in spirit and in acts.

Forest fire control

Control of wild forest and range fires throughout California continued to plague federal, state and county agencies. It reached a peak in the critical fire years of 1923, 1924 and 1925—years of drought and adverse fire weather. Mulford had a sad personal experience with wild fire. On September 17, 1923, a brush and grass fire which started in the Berkeley hills under conditions of extremely low humidity, swept downhill with hurricane fury over the city of Berkeley. It spread over 40 blocks to the edge of the campus, destroying more than 500 buildings. Mulford, whose home was on Spruce Street near the campus, heard the fire alarm and saw flaming buildings about three blocks north of his house. He changed to field clothes and



The Berkeley Fire — September 17, 1923. Looking northeast across University Ave. and Oxford St. Hilgard Hall in distance

proceeded toward the fire to help. He had hardly covered one block toward the fire when he looked back and saw his own house in flames. He hurried back, but too late to save most of his treasured papers, mementos and valuables.

Mulford, Metcalf³ and other foresters residing in the Bay Area had been pressing officials of Alameda and Contra Costa counties for an adequate fire control system to prevent such holocausts. This led to a cooperative agreement with the East Bay Water Company, Contra Costa and Alameda counties, and the state for a fire protection unit in the Berkeley hills. A road was built to Grizzly Peak and a lookout established.

The California section of the Society of American Foresters was actively campaigning for increased state funds for its Forestry Division not only for fire protection but also to widen its scope of work in other directions. Mulford played an important role in bringing together varied groups and interests in this campaign.

Mulford's support for a compulsory state fire control law, modeled after the State of Oregon's law, made possible its passage in 1923 against serious opposition. Through Mulford's efforts, B. A. MacAllaster, land commissioner of the Southern Pacific Co, C. Stowell Smith of the California White and Sugar Pine Manufacturers, and Willis J. Walker of the Red River Lumber Co joined in support of the act.

In his quiet way, Mulford inspired confidence and dissipated rancorous opposition. He listened to all sides and patiently made his own position clear. He had a keen sense of timing and waited until the atmosphere cleared before urging action. To some this appeared as a delaying action, but time and again Mulford's procedure proved the only effective means to resolve conflicts. He had the genius of accommodating strongly contrary forces without sacrificing his own position.

The forestry curriculum

Mulford exhibited daring in enriching and modifying the forestry curriculum. He was the first to recognize that the American forester would need more than the classical subjects—silviculture, forest management, dendrology, and mensuration, to meet the challenges of the job ahead. At the first opportune time, when trained teachers were available, he added the chairs for Range Management, Forest Influences, Forest Economics, Forest Fire Protection, and also provided for the development of a Forest Products Laboratory.

He did not deem it necessary to establish forestry as a curriculum within a School of Conservation. He visualized that forestry itself was an inclusive profession, depending on a variety of disciplines in which foresters with special training would conduct instruction. Except for the field of recreation, the forestry curriculum at California was oriented to prepare specialists in all the major fields of forestry. With limitations in funds under an exacting budget, Walter Mulford, without fanfare, created a forestry school with all important disciplines chaired by competent, trained specialists.

As a forestry teacher, he was in a good position to evaluate American

³Woodbridge Metcalf of Mulford's staff.

forestry text books. He recognized that American forestry texts should be written by members of the profession, based on American experience and research findings dealing with American species, forest types, and zones. In 1933, after a series of conferences with American teachers in forestry, he induced the McGraw-Hill Book Company to publish an American Forestry Series, for which he was appointed consulting editor. He continued in this capacity until 1950.

Mulford lived to see the expansion of forestry to all regions in the United States, not only in federal and state effort, but by lumber and pulp companies. Throughout his life he maintained the faith that foresters in the United States would some day earn the same respect for their professional accomplishments enjoyed by their European counterparts.

The many developments in which Mulford participated directly and influentially did not just happen. They came about because he spent a great amount of time in planning for them and then persisted, in an understanding way, to make them reality. This aspect of his methodical ways was subject to some criticism from his colleagues. To be able to think through his problems, he never did maintain an "open door" policy of easy accessibility. He welcomed conferences with students, faculty members and others; but the conferences had to be scheduled through his secretary. Only by such a regimen was he able to accomplish all the things that he did. He always went before the controlling authorities with the facts well in hand and arranged in the most logical manner. He might be turned down temporarily but his well-planned approach left him with the opportunity to try again.

Mulford's persistence in attaining goals had its humorous aspects. On one occasion when he had presented a certain plan to his staff for the third time and it was accepted, a staff member remarked, after the meeting: "Opposing Mulford is like fighting a featherbed—he will smother you in the end."

It was Mulford who laid the foundation for an expanded staff, strong in teaching and research. The staff members came to be highly respected by the faculty members of other University departments and of other forestry schools. In turn, this made easier the well-laid plans for School status, greater control by the forestry faculty over the granting of the doctorate, the construction of a forestry building, and the development of a Forest Products Laboratory. It is altogether fitting that the Regents of the University, after Mulford's death, authorized that the forestry building be named Walter Mulford Hall.

Professional recognition

During his professional career, Walter Mulford won both national and international recognition. He served as president of the Society of American Foresters in 1924 and was elected a Fellow in 1939. He was a member of the California State Board of Forestry, 1928–1930, and again from 1945 until his retirement from the University. He was president of the Board of Trustees of the Institute of Forest Genetics during 1932–1933, prior to its being administered by the U.S. Forest Service. He served as vice-president of the First World Forestry Congress, at Rome, Italy, in 1926. Mulford was

instrumental in founding the Executive Heads of Forestry Schools and served as its chairman during the period 1946-1948. It was a fitting recognition of his many talents and accomplishments that the University of Michigan granted him an honorary ScD in 1938.

A mere enumeration of the positions held and honors bestowed on Walter Mulford constitutes rather cold testimony as to the greatness of his stature. For a more definitive analysis of his character we must turn to his teaching and counseling of students for 42 years as a member of a faculty in forestry in three outstanding institutions of higher learning, the universities of Michigan, Cornell, and California. From his well-organized mind it was easy to acquire a clear understanding of the principles of professional forestry. However, his real worth stood forth in the manner in which the professional subject matter was so richly larded with instruction in character. His students were inspired not only to become competent foresters but to walk and deal with their fellow men with kindness, straightforwardness, and righteousness. There are many monuments to mark the trail of Walter Mulford but none can equal the many men in positions of responsibility who are better and more effective men for having studied under his guidance.

A family man

A highly important aspect of Mulford's life, and one on which he personally would have put a lot of stress if he were writing this account, is that of "family man," in the finest meaning of that term. Unquestionably, it would be wrong to say that he placed his family ahead of all other attentions of his life. All aspects of his life were well organized. In budgeting his time, he allotted specific amounts and periods of time for his family. He did not allow other matters to interfere with these time allotments. Nor would he have allowed members of his family to interfere, except in emergency, with time allotted to teaching or other professional duties. There were times for such things as family reading and family vacations. Somehow he found the time to take his family to Europe on his sabbatical in 1926. Arrangements were made for his children to be engaged in worthwhile education during the year while he made a study of forestry in several European countries and attended the First World Forestry Congress in Rome as its vice-president.

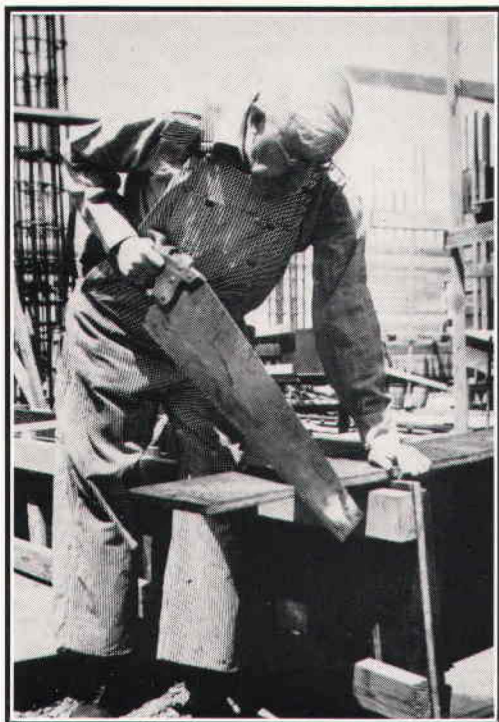
Mulford married Vera Wandling of Ithaca, N. Y. on July 1, 1903. They had four children—Lloyd, Alice, Mary, and Stewart. Lloyd died during the period of Mulford's service at Cornell. Alice, now Mrs. John C. McKenzie, lives with her husband at Lompoc, California, where he heads the staff of La Purisima Mission State Historical Park. Mary is the wife of Richard M. Eakin, professor of zoology at the University of California, Berkeley. Stewart graduated in mechanical engineering at the University of California and is in charge of the sea water desalinization project at San Diego.

Mrs. Mulford, Walter's helpmate of many years, passed away in 1952. This was a severe blow from which he never completely recovered. However, Walter Mulford continued his interest in forestry matters up to the time of his final illness. He died in St. Helena, California, on September 7, 1955.

Walter Mulford was a forester with faith in his profession. He had well-conceived goals for forestry and forestry education. Most of his desires for forestry at the University of California came to pass during the period of his administration. The few remaining ones were attained in the eight years of his life following retirement. Many of his ideas on forestry education were adopted by other educators. His name will loom large in history as a forester, an educator, a citizen, and a family man. In the many worthy accomplishments of his life, it would seem that Walter Mulford answered the clarion call of California enunciated by Sam W. Foss: "Bring me men to match my mountains."



Breaking Ground for the Forestry Building — March 19, 1947, Walter Mulford with Bill Finster, President of the Forestry Club



Walter Mulford helps speed
construction of the Forestry
Building



CHAPTER 4

The School

WALTER MULFORD'S appointment with the University of California began on August 1, 1914. World events beyond his control were to make the next few years a difficult and unlikely time to begin a new educational program.

At Mulford's first visit to Berkeley, in August, 1913, he had held conversations with Dean Thomas F. Hunt and President Benjamin I. Wheeler and spoken to the first fall meeting of the Forestry Club. Mulford had liked the challenges offered at Berkeley and accepted on the condition that he complete the academic year at Cornell. He returned to Cornell.¹

He was appointed professor of forestry at a salary of \$4,500 per year by the Board of Regents at their meeting on December 9, 1913.

THE FIRST STAFF

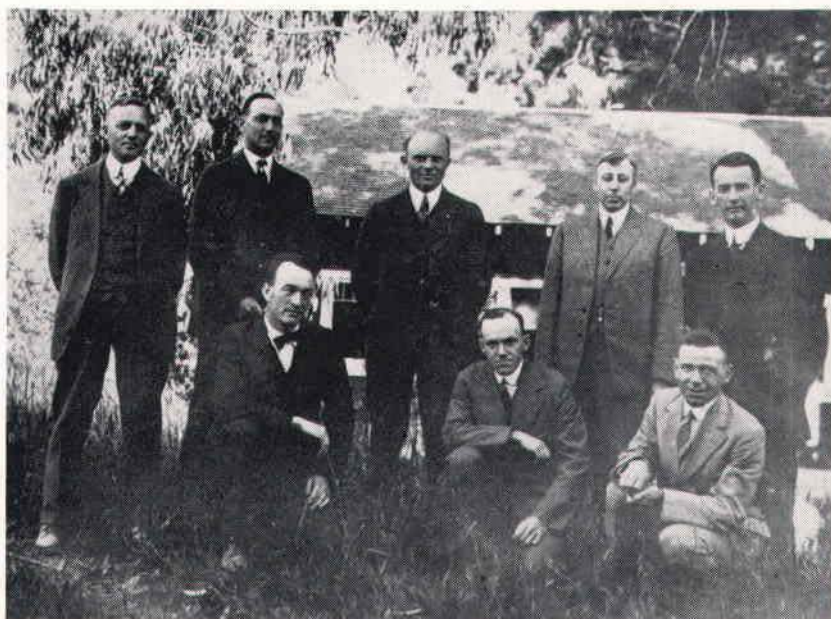
Dean Hunt had given Mulford full authority to choose his staff, with the one stipulation that an instructor for a nonprofessional forestry course was to be secured in time for the course to be given in the spring of 1914. The pressure, from the Forestry Club and extra-university groups, to begin formal instruction, was considerable.

From his headquarters at Cornell, Mulford, in his search for staff members, carried on extensive correspondence with friends and former associates in the only manpower pool of professional foresters available—the U.S. Forest Service. His first known choices for staff were Thornton T. Munger, forest examiner and silviculturist at Portland, Oregon; and Earle H. Clapp, forest inspector and silviculturist (and soon to be assistant forester in charge of research) in Washington, D.C.

Pratt

Because of the urgency of time to get the first staff member before the

¹Myron Krueger, who was at Cornell and a student in Mulford's silviculture class at the time, recalls that Mulford announced in his silviculture class that "next year I am going to the University of California at Berkeley to head a new forestry curriculum there." This was to have considerable effect on Krueger's career as well.



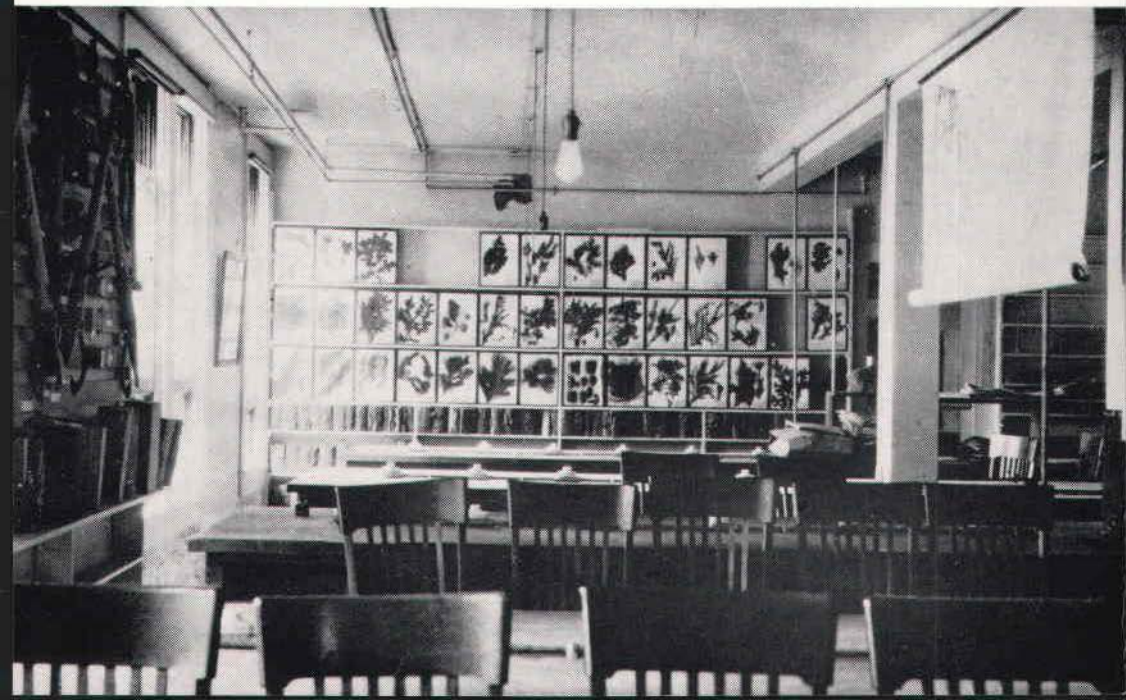
Pratt

Mason
KruegerMetcalf
DunningMulford
Muzzall

Bruce

The First Staff (rear) and First Graduate Students (front)

The First Classroom — Budd Hall



spring semester began in January, these men were asked to respond direct to Dean Hunt at Berkeley. On December 1, 1913, Dean Hunt, noting that he had not heard from Munger, wrote to Mulford that it had been announced that forestry instruction would begin in January and it was, therefore, very important "not to fall down in getting an instructor." Upon receiving this, Mulford took a trip to Washington for consultation with various people regarding possible candidates. Following these consultations and after returning to Ithaca, Mulford wired the job offer to Merritt B. Pratt, the deputy supervisor of the Tahoe National Forest at Nevada City, California, by night letter on Thursday, December 11. The offer was for an assistant professorship at a salary of \$2,000 per year. The telegram informed Pratt that Wm. B. Greeley, who was now the assistant forester in Washington, D.C., and Coert DuBois, the district forester in San Francisco, knew of the offer. Mulford asked Pratt to "wire reply collect not later than Monday morning" (December 15). Pratt accepted by night letter on Saturday, December 13. Pratt had been a student at Yale in 1903-04 while Mulford was Connecticut state forester and associated with the Yale Forest School, but there is no evidence of any other contact between these two men until this occasion ten years later. On December 23 Dean Hunt, obviously relieved, wrote to Mulford to say that Pratt had "already reported here for duty," was "very enthusiastic concerning his new relationships," and had "made a thoroughly good impression upon us." Pratt was appointed assistant professor of forestry commencing January 1, 1914 by the Regents of the University on January 13, 1914.

The first formal forestry instruction at Berkeley was Pratt's non-professional course, similar to today's Forestry 1, which began at 9:07 A.M. on January 14, 1914 in Room 2—Budd Hall, nearly two years after the first meeting of the Forestry Club.

Development of an educational policy

Mulford and his family moved to Berkeley about the first of August, 1914, the date of his appointment with the University.

His most urgent problem was the acquisition of a staff and he set upon it at once. Mulford wrote to Greeley on August 15 that he proposed to make offers to both Samuel T. Dana, assistant chief, Offices of Silvics and Forest Investigations in Washington, and David T. Mason, assistant district forester for District 1 at Missoula, Montana. Four days later Greeley responded:

My dear Walter:

Your letter of August 15 is received.

You are not only a rascal but a double-dyed villain to be trying to lift both Dana and Mason at the same time. Is there no limit to your insatiable appetite?

However, I am disposed to dare you to come on. If you succeed in obtaining either man, the drinks will be on me.

Dana is already back from Europe at Washington, so do your worst and do it promptly.

Very sincerely yours,
W. B. Greeley
Assistant Forester

Mulford replied September 7:

Dear Will:

Since I am a double-dyed villain, I might as well deserve the name. I have written Dana again, making him a definite proposition—a full professorship at \$3,000 per year. May the drinks be on you.

I have not heard from Mason yet.

As ever yours,
Walter Mulford
Professor of Forestry

In the meantime, and in addition to writing to Dana and Mason, Mulford had written to Woodbridge Metcalf, an assistant forester with the Canadian Pacific Railway at Montreal, Canada, to inquire of his availability and interest.

Every one of these early letters to prospective staff members contained Mulford's first statement of his concept of forest educational policy at Berkeley:

"My own policy regarding the development of the department—a policy which may, of course, not meet with the approval of the other members of the forestry staff when we are all gotten together—is that we should aim to build up the following lines of work:

1. Brief instruction in forestry to a considerable number of students from other lines of work. Just as is the case at Cornell, we plan to emphasize here the courses for future business men, lawyers, engineers, farmers and others, believing that by helping to put into every community a man or woman who has that sympathy with forestry which comes from having had a little instruction in it, we are doing much to further the cause of forestry. I believe that one or two courses in forestry are as legitimate a part of general training for university students as entomology, or philosophy, or Greek.
2. A four-year professional forestry course. I do not believe that many students will take this course, as the demand for graduates is limited. Nevertheless, we shall aim to make the course of the highest possible grade.
3. Research. I hope that every man on the forestry faculty may become an investigator and the authority in his part of the work for this section of the country. We hope soon to be able to announce graduate work leading to the Master's or Doctor's degrees. We expect to have a faculty of such size that each man on it will have a portion of the year free from teaching in order to study and do investigative work. I want to emphasize this point strongly in your mind. I have already drawn up a tentative schedule providing for

five professors in the faculty. If this is carried through, each man will have on an average about one-half of his time for study and research and in the course of a few years he should be able to attract to himself graduate students who wish to specialize in his line of work for this section of the country. We are to have an experiment station of our own and every facility will be placed at the disposal of members of the faculty who wish to make field studies in any section of California. We already have liberal funds available for paying all of the expenses of such field studies.

4. As soon as possible we hope to be able to make cooperative arrangements with the engineering department for giving a four-year course for logging engineers in which there shall be a good deal of engineering and some forestry. But the forest school is not to become a logging school."

His letters concluded with his own personal brand of persuasion and salesmanship:

"I do not need to remind you that university life in general offers many advantages. The stimulating associates with whom one is thrown mean a great deal. The freedom from politics and the stability of one's position are a great satisfaction. So far as the financial end is concerned, there are two advantages of which you may not be aware. The University of California, after six years of service, grants a Sabbatical leave of absence for one year with two-thirds pay. Most of us in figuring our finances count this as being really an addition of several hundred dollars on each year's salary. Moreover, members of the faculty receive a liberal retiring fund at the age of sixty-five from the Carnegie Foundation. That age is a long way off for us; nevertheless, it is a comfortable thing to which to look forward.

"So far as the particular advantages at this University are concerned, perhaps I can best express my own feeling of how great they are by reminding you that I have left at Cornell, in order to come here, work which I believe to have a great future—and work which I do not believe will be interfered with to any serious extent by the existence of another school in the State. I am no friend of the multiplication of forest schools. We have too many of them already. But I do believe that there is a great field ahead for a Forestry Division in this University along the lines I have indicated. The attitude of the University authorities is excellent and adequate facilities will be placed at our disposal as fast as we can reasonably expect."

Metcalf

Woodbridge "Woody" Metcalf was the first, after Pratt, to respond to Mulford's inquiries. It took from August 18, when Mulford first wrote to

Metcalf, until September 3 for Metcalf to accept Mulford's firm offer of an assistant professorship which Mulford had wired on September 2.²

Mulford apparently had some difficulty persuading the University officials that a man only two years out of school should be offered an assistant professorship and be paid \$1,700 per year. But he had known Metcalf very well as one of his students while he was teaching at Michigan between 1908 and 1911, had great confidence in his ability, and so persuaded the University officials.

Mason

At the same time that Mulford wrote to Mason in Missoula, he wrote to Ferdinand A. Silcox, the district forester and Mason's boss, telling Silcox that he was trying to interest Mason in joining him at Berkeley. Mulford said, "in case he (Mason) were interested and we were able to make it worthwhile for him to come, I would be sorry to handicap your work in any way; but you know somebody will have to be handicapped if we are to get the right kind of men here!"

Silcox replied: "There is, of course, no question whatever of Mason's ability to give a particularly strong course. My position is to encourage any man from District 1 to take up that line of work for which he is best suited."

Mason's reply on September 14, 1914, indicated surprise and stated that he was "greatly flattered to have you think of me in connection with the position in your forestry school." Mason doubted "very much if I should be interested in teaching as permanent work at any time in the near future, although possibly—say a few years from now—after I have put in my more active years in the service, the work might appeal to me." Within a week of Mason's letter, Mulford had received authorization from Dean Hunt to offer Mason a full professorship at \$3,000 per year. Mason's response to the firm offer consisted of six pages of questions related to his expected duties. Mulford answered every question, taking an equal number of pages, and closed by urging Mason to visit Berkeley "if it would make you feel any easier in your decision one way or the other."

On November 11, Mulford wrote Mason that "Dana has decided not to leave Washington." He regretted that he had been unable to appeal to Dana and then said, "Every cloud has a silver lining, and in this case the silver lining will interest you. If both Dana and yourself had decided to come, you would have been equals on the staff. I can now offer you an added inducement, namely, that if you come to the University, you will definitely be second in command of the forest school. I shall want to be away from Berkeley a good deal and you would be in full charge while I am away."

Mulford wanted Mason.

In anticipation of the pending visits of Mason and Samuel A. Stamm, a prospective staff member in forest engineering and mensuration, Mulford wrote to Dean Hunt on November 18. He was anxious for Dean Hunt to

²Woody married Nora Clements on September 26, 1914 and left immediately for Berkeley where they arrived on October 12 by way of Vancouver, B.C. on the Canadian Pacific Railway and by steamer to San Francisco. Woody recalls that he "came on the campus through the unfinished Sather Gate at the head of Telegraph Avenue, and across the open field now occupied by Benjamin Ide Wheeler Hall. The steel frame of the Campanile was up and the granite blocks were in place about halfway up to the platform. We were cordially greeted by Mulford and Pratt, and we enjoyed dinner with the Mulfords that evening."

meet both these men and also hoped that they would have the opportunity to visit with President Wheeler. He closed his letter with an appeal and justification for a five-man staff. He said, "Our present forestry faculty consists of three members. Regarding the need for increasing the staff to five, the following tables showing the number of the regular members of the forestry faculty at various universities is of interest—Cornell-five, Harvard-four, Michigan-five, Syracuse-nine, Washington-four, Yale-five.

"An important fact in this connection is that Harvard and Yale do no teaching except the training of professional foresters; at Michigan and Washington very little attention is given to anything except training professional foresters; but at California, just as at Cornell and Syracuse, we wish to give a great deal of energy to developing strong courses for non-professional students."

Mason, after some scheduling delays, arrived in Berkeley November 29. Stamm's visit coincided with Mason's. At that time, Stamm was the logging engineer for the Hamilton Logging Co of Hamilton, Washington, a position he had held for a little more than two years since receiving his MSF degree from the University of Washington in 1912. Metcalf's diary notes that on December 3 "Mulford hired a car and took Mason, Stamm, Pratt and me to see some of the areas in Berkeley, Oakland, and vicinity." Nothing further is known of the outcome of Stamm's visit, but certainly Mason made a strong recommendation that Donald Bruce, forest supervisor of the Flathead National Forest and a subordinate of Mason in District 1, be considered for professor of forest engineering.

Mulford, confident that he would get Mason, immediately wrote to Greeley, stating, "We are all greatly pleased that he (Mason) is to be with us, yet I cannot help regretting that it will necessarily cause you some real inconvenience. I want to tell you how much I appreciate your genuine unselfishness in telling me so freely about your very best men, and thus giving me a chance to try to get them away from you. There are not many men that would do this, and I shall not forget it in you. I am only sorry that I have to take advantage of it by robbing you, but we must have men!" Mulford was quick to apologize to Greeley for robbing him of his best men, but no doubt wondered how Greeley, a graduate of the University of California, could really object to his efforts to develop a good forestry school at Berkeley.

It is not recorded if Greeley ever bought Mulford the drinks he promised if Mulford were able to get Dana or Mason.

Bruce

When Mason returned to Montana, he was authorized by Mulford to incur whatever expenses were necessary to get together with Bruce to discuss the possibility of his coming to Berkeley also. On December 8 Mulford wrote to Greeley stating that he was also interested in Bruce and added that, "Apparently it will be an added inducement to Mason if Bruce comes at the same time." Greeley replied that the Forest Service had never stood in the way of outside opportunities for its employees but expressed his concern with the recent drains upon District 1 manpower: "Whether sufficiently serious to justify our requesting a withdrawal of your offer to Bruce, I am

not prepared to say. The problem falls upon District Forester Silcox rather than upon me." Greeley was feeling the pressure but the buck was passed to Silcox.

Mulford had already written to Silcox, who replied that Mason and Bruce were "two of the strongest men we have in the District" but "I have always taken the position that the choice should be left entirely open to the man to whom the offer is made, simply stating to him in all fairness and frankness what opportunities the Service offers and what the prospects are for future advancement." Mason wired his acceptance to Mulford on December 10, just two days after Mulford's letter to Greeley about Bruce. After Mason's emissary visit with Bruce on Mulford's behalf, Mulford entered into correspondence with Bruce. At year end, Bruce was still very much undecided as to what he wanted to do. "There is a fascination," he said, "about the work of the Service which makes me reluctant to leave it, but there are features of your offer which are exceedingly attractive." Bruce visited Berkeley on January 20, 1915 and Mulford arranged appointments with both Dean Hunt and President Wheeler. Bruce was still undecided after returning to Kalispell, Montana; but by February 18, Mulford asked Dean Hunt to request the appointment of Don Bruce as assistant professor of forestry at a salary of \$2,500 per year.

Mulford now had the five staff men of his original plans—himself, David Mason, Don Bruce, Merritt Pratt and Woodbridge Metcalf. Only Mulford, Pratt and Metcalf were on deck to teach in the spring, 1915. Mason and Bruce did not arrive in Berkeley to work until summer of 1915.

The division of labor of this first staff was: Mulford—general forestry and silviculture; Mason—forest management; Bruce—logging and engineering; Metcalf—dendrology and silviculture; Pratt—wood utilization.

The first three years

On June 21, 1915, Woody, in company with Supervisor Dave Rogers of the Plumas National Forest and Ansel F. Hall '17 selected the site for the first summer camp at the edge of the town of Quincy. The first camp session, which began about two weeks later, "just after July 4", was directed by Don Bruce as his first assignment with the University.

Mason arrived in Berkeley on July 24, 1915, and he was assigned teaching responsibilities at the Quincy Camp where he taught from August to October, and then finished the semester in Berkeley. Mason did no teaching in 1916, devoting most of the time to a lumber industry study for the Forest Service. He did teach in the spring semester of 1917.

Toward the end of 1916, Metcalf was assigned the job of administering the Santa Monica and Chico forestry stations which had come under University administration when the old State Board of Forestry had disbanded in 1891, and had been administered by the horticulture division since 1893.

On March 21, 1917, Pratt announced that he was going to leave the Division (School) and that he hoped to return to forest administration. He had decided that he did not care for teaching and Mulford, quite loyally, devoted a great deal of energy to help him with his reinstatement with the Forest Service. District foresters Roy Headley in San Francisco, and Paul

G. Redington in Albuquerque and Assistant Chief Forester William B. Greeley in Washington all openly indicated their willingness to reinstate Pratt, but his application was refused by Secretary of Agriculture, the Hon. D. F. Houston, who insisted that Pratt take a new examination to be given in the spring of 1918.

At this time, California state forester George M. Homans in Sacramento was operating with practically a one-man office. When it proved difficult for Pratt to get relocated with the U.S. Forest Service, he accepted the offer to become Homans' assistant. Pratt joined Homans on February 1, 1918, and was appointed state forester on November 25, 1921.

World War I

The United States entered World War I on April 6, 1917. The war mobilization nearly cleaned out the staff and students of the young forestry school. Most of the forestry staff had already joined the provisional military company organized about a month earlier by David P. Barrows, who later became president of the University. At the close of the semester, Mason took leave from the University and reported to the First Officers Training Camp on May 12, 1917.

Don Bruce was in charge of summer camp again until midsummer, when Woody Metcalf took over the last half. Of the total of four students at camp, two left for the Army and only two finished out the summer course. During the latter part of the summer, Bruce took military leave from the University and joined the Army.

Thus, by midsummer 1917, three years after his arrival in Berkeley, Mulford had lost Mason and Bruce to the Army, was to lose Pratt, and seemed about to lose Metcalf who wanted to join the war effort.

Fritz

Faced with the permanent loss of Pratt from the staff, Mulford had set about replacing him. His choice for this assignment was Emanuel Fritz. Fritz had joined the U. S. Forest Service in February, 1915, and his first job was as an assistant to David Mason on his lumber industry study in Region 1. That project terminated on June 30, 1915, about the same time Mason left the Forest Service to go to Berkeley.

Fritz spent the next year as fire control officer on the Coeur d'Alene National Forest in Idaho before going to the Fort Valley Experiment Station near Flagstaff, Arizona. It was here that Mulford contacted Fritz in the late spring of 1917. As with Mason and Bruce, Mulford urged Fritz to visit Berkeley so he could see the arrangements and discuss the details of his proposed appointment which he did in early July. On August 12, 1917, Fritz wired Mulford to "please propose my name to Regents for appointment." Mulford took quick action and on August 15 wired Fritz: "You are appointed assistant professor of forestry, salary \$1600."

At this point another complication set in. Fritz was subject to the military draft for which registration had taken place on June 5, and he stood 445th in the order of draft. Fritz suspected that he might be called to the draft because "only 6 out of the first 40 men in my group passed the

examination," but he noted to Mulford in his letter of acceptance that, "the examining officer found fault with my feet—said they were flat, but I would like to have him along tomorrow so I could play him out with some others on a hard mountain trip. I think I can make him change his opinion as to the seriousness of the defect." The next seven days Fritz kept busy. In addition to preparing to go to Berkeley where he hoped to arrive on August 20, he had "official visits from Chapman, Johnston, Leopold, Toumey, and a lot of Massachusetts Forestry Association people," and finally, "there came the very welcome though delayed news of my selection for the Officers' Training Camp." On August 23, 1917, Fritz departed from Flagstaff, not for Berkeley, but for his training camp at Leon Springs, Texas.

Charles H. Shattuck, former dean of Letters and Science at the University of Idaho, was hired for the fall semester, 1917, to teach Mason's courses. Metcalf was occupied with his classes and the statewide planning for protection from fire of farms and forest, and the administration of the Santa Monica Forestry Station. Mulford was busy with the organization of the Shasta County Farm Bureau. There were no forestry graduates during the year 1917-18, the only such year in the School's history.

By the fall of 1918, the war effort was in full swing and professional forestry education had ceased. The staff consisted of Mulford, Metcalf and, temporarily, Shattuck. Metcalf, assisted by Shattuck, taught a course in military mapping to more than 200 students and took an active part in the organization of more than 300 rural fire protection companies.

With the war finished in November, 1918, Mulford could count on the return of Mason and Bruce. On May 13, 1919, the University Regents appointed Lt. Emanuel Fritz, Commanding Officer of the 639th Aero Squadron, to assistant professor of forestry to begin July 1, 1919. Fritz was still scheduled to teach Pratt's courses, wood technology, forest products and utilization.

Mason and Bruce returned but Mason, more interested in forest industry studies than teaching, did not teach. His courses were taught in the spring of 1920 by Ernest V. Jotter, who came from the position of supervisor of the Trinity National Forest. In the spring of 1921, before he resigned, Mason taught his third and last semester out of seven years of University service, including one and one-half years of military leave.

ADMINISTRATIVE ORGANIZATION

The original administrative organization of forestry instruction was as a Division of the College of Agriculture in the University. The chairman (Mulford) was administrative head of the forestry program and was directly responsible to the dean of the College of Agriculture.

In the early years of forestry instruction at Berkeley, the College of Agriculture was organized in three units: the Agricultural Experiment Station, established March 1, 1888; the Agricultural Extension Service, supported by the Smith-Lever Act of May 8, 1914, established July 1, 1914; and the (teaching) Department of Agriculture. This Department consisted of 17 divisions: agricultural chemistry, agricultural education, agronomy, animal husbandry, citriculture, dairy industry, entomology, forestry, irriga-

tion, landscape gardening and floriculture, nutrition, parasitology, plant pathology, pomology, poultry husbandry, soils, and viticulture and enology. Not all of these divisions were located at Berkeley.

The initial growth of Forestry which had been fostered by Dean Hunt was sustained under his successor, Elmer D. Merrill, who became dean of agriculture in 1924. Merrill was succeeded in 1930 by Claude B. Hutchison, who served until June 30, 1952. Under Hutchison's administration the solid growth of Forestry led to progress in its status, first from a Division to a Department, and eventually to a School.

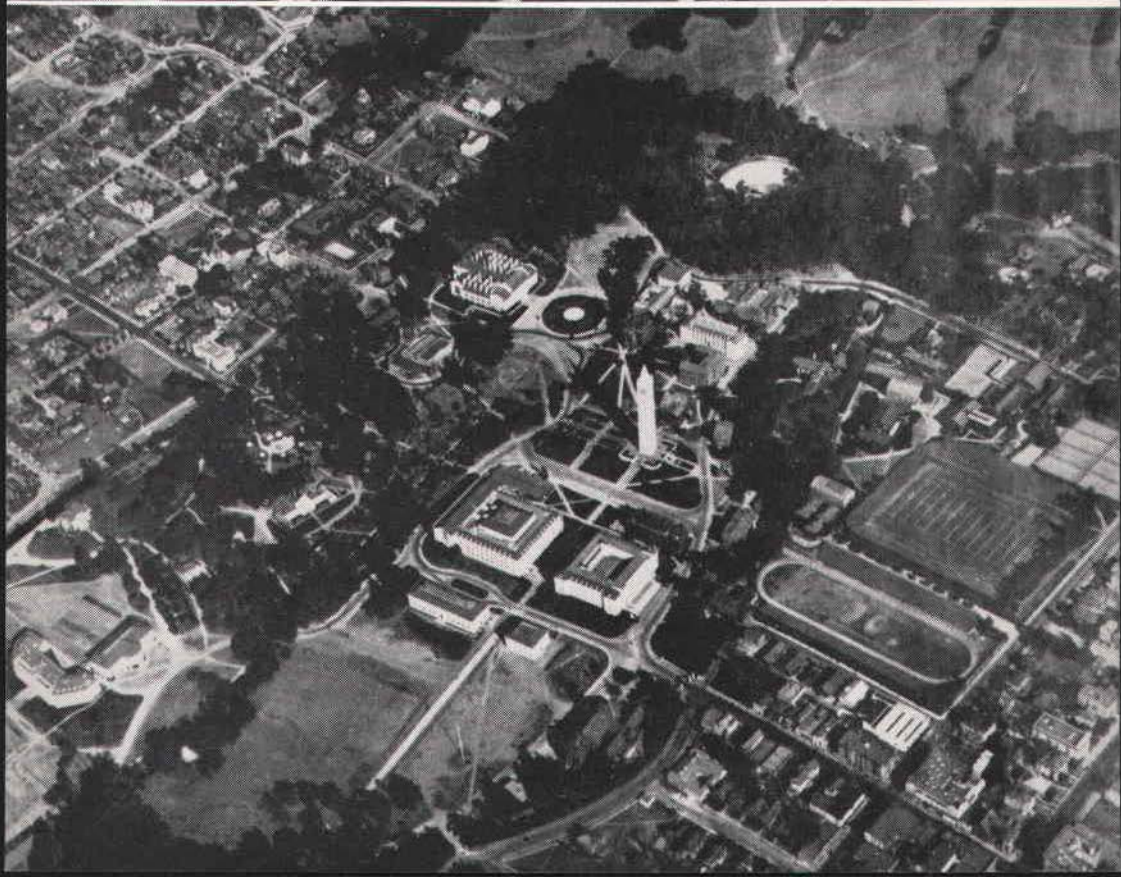
During the 1930's the number of undergraduate forestry majors grew rapidly, placing an ever-increasing burden on teaching, physical, and administrative facilities. As a result, the College of Agriculture was reorganized and the Department of Forestry was established on July 1, 1939, as one of four teaching units in the College, the others being Agriculture, Home Economics, and Veterinary Medicine.

Immediately after World War II, the College of Agriculture was again reorganized and, on July 1, 1946, the Department of Forestry became the School of Forestry within the University-wide Division of Agricultural Sciences. This Division includes the School of Forestry; the School of Veterinary Medicine; the Colleges of Agriculture at Berkeley, Davis, Los Angeles, and Riverside; the Agricultural Experiment Station; and the Agricultural Extension Service. The administrative head of the Division of Agricultural Sciences was designed as Vice-President-Agricultural Sciences, later changed to University Dean-Agriculture. Since 1952, this vital post has been held successively by Harry R. Wellman (now executive vice-president of the University), Daniel G. Aldrich (now chancellor of the Irvine Campus), and Maurice L. Peterson (the incumbent). These men have given sympathetic understanding and vigorous support to Forestry. As a result of their wise leadership, the overall strength and influence of the School was steadily enhanced during a critical period in University affairs involving difficult problems of growth, finance, and administrative reorganization.

The University of California at Berkeley today consists of the colleges of Agriculture, Chemistry, Engineering, Environmental Design, Letters and Sciences; and the schools of Business Administration, Criminology, Education, Forestry, Law, Librarianship, Optometry, Public Health, and Social Welfare.³

The head of a division or department is its chairman. The head of a school is a dean. Thus, Walter Mulford, who had been called Professor Mulford for 32 years, became Dean Mulford for his last year of active service with the University. The dean was directly responsible to the chancellor, the chief administrative officer for the Berkeley campus. But this change in the line of authority did not perceptibly weaken the close ties between Forestry and the College of Agriculture. The pre-forestry curriculum, covering the freshman and sophomore work necessary for admission to the School continues to this day to be administered by the College. Successive Berkeley chancellors have included Clark Kerr, Glenn T. Seaborg, and Edward W. Strong. One evidence of the breadth of educational vision of all of these men

³The schools of Education, Law, Librarianship and Social Welfare are graduate schools only. All others offer both undergraduate and graduate degrees.



has been their steadfast support to Forestry and their clear understanding of the contribution which this relatively small, but closely knit and strongly motivated group in Forestry could make to the Berkeley Campus.

THE UNDERGRADUATE CURRICULUM

The first announcement of courses in forestry was published in September, 1916, and shows the pattern of instruction available through Mulford's original staff.

<i>Course Number</i>	<i>Title</i>	<i>Units</i>	<i>Instructor</i>
1	Elements of Forestry	3	Mulford
2	Forestry Methods	3	Metcalf
99	Practice in Forestry	6	Bruce (in charge), Mulford, Mason and Pratt
—	Woodmanship (Proficiency required of forestry majors)	—	—
101	Forest Mensuration	3	Bruce
104	Silviculture: Forest Ecology and Natural Reproduction	5	Mulford
106	Silviculture: Artificial Reproduction	2	Metcalf
108	Timber Trees and Forest Regions	3	Metcalf
110	Forest Protection	3	Mason
112	Forest Utilization	3	Pratt
114	Wood Technology	3	Pratt
115	Logging	3	Bruce
118	Forest Improvements	3	Bruce
120	Forest Finance and Organization	5	Mason
122	Forest Administration and Policy	4	Mason
128	Conference	—	Pratt
202A-202B	Research	3-6	The Staff

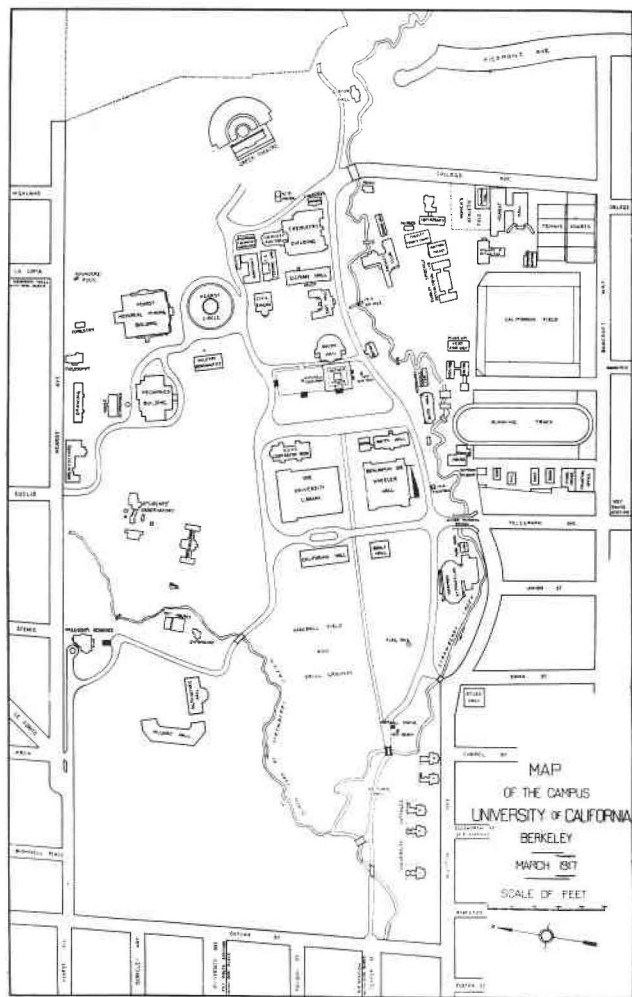
Illustrative of Mulford's first broad educational policy is this extract from the April, 1919, issue of the *Prospectus of the College of Agriculture*:

FORESTRY

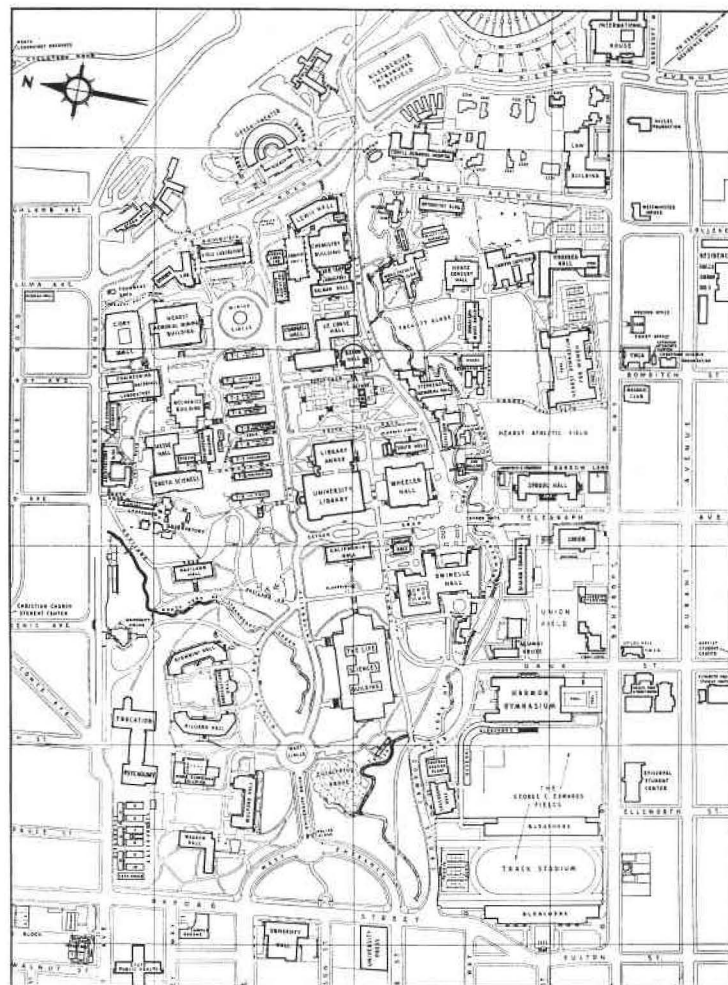
The Division of Forestry offers the following work:

1. A four-year professional course in general forestry, to train students for the practice of forestry in lines of work where the problems are not too closely specialized along engineering lines.
2. A four-year professional course in forest utilization, to prepare men for work as forest or logging engineers.
3. A five-year professional course combining the work in general forestry and that in forest utilization. This offers an exceptionally strong foundation for a career of wide usefulness.
4. A thorough college training for students who do not expect to practice forestry, but who may care to choose forestry as a means of securing a general education and a training which

Opposite page, above: The central campus area in 1913; below: A similar airview in 1919



Map of the Berkeley Campus in 1917



Map of the Berkeley Campus in 1964

would be useful in business life or otherwise. Any one of the three courses above may be used for this purpose, and for such students the course will be modified to meet individual needs.

5. Courses for students whose major work is in other lines, but who wish a general knowledge of the aims and methods of the forester, or who wish detailed technical instruction in certain parts of forestry, such as wood technology.
6. A special arrangement of courses for students in the College of Commerce who are preparing for the wholesale or retail lumber business.
7. A short course of twelve weeks, for men in the United States Forest Service or in the employ of lumber companies.

The development of the curriculum over the years can best be described as evolutionary. This evolution of lower division and upper division curricula is shown by tables listing representative years.

SUMMARY OF LOWER DIVISION CURRICULUM UNITS

for Selected Years

<i>Subject</i>	<i>1916</i>	<i>1924</i>	<i>1934</i>	<i>1940</i>	<i>1955</i>	<i>1964</i>
Bacteriology	4	—	—	—	—	—
Botany	6	8	12	8	5	5
Chemistry (Inorganic)	15	10	10	10	5	5
Chemistry (Organic)	—	—	—	3	3	4
Economics	—	—	6	6	6	6
Engineering (Surveying)	9*	6	6	6	3	3
English or Speech	—	—	6	6	6	6
Forestry	—	8-9‡	5	—	—	—
Geology	3	3	3	3	3	3
Genetics	4	—	—	—	—	—
Hygiene	2	1	—	—	—	—
Mathematics (beyond Trig.)	—†	—†	3	6	3	3
Military Science & Physical Education	8	8	8	8	8	2§
Physics	—	—	6	8	6	6
Plant Propagation	4	—	—	—	—	—
Soils	4	4	—	—	—	—
Statistics	—	—	—	—	3	3
Zoology	4	5	—	—	3	3
Elective	16-11†	19-14‡	3	6	6	13
Total	79*	76	68	70	60	60

*Including 3 units of summer work.

†Trigonometry (3) and Mechanical Drawing (2) must be taken if not completed in high school.

‡Plus a recommended 3-unit course in Range Industry.

§Beginning with the fall semester 1962, military science was no longer required.

SUMMER CAMP

	<i>1916</i>	<i>1924</i>	<i>1934</i>	<i>1940</i>	<i>1955</i>	<i>1964</i>
Following Year	Junior	Soph.	Soph.	Junior	Soph.	Soph.
Number of weeks	11	13	13	12	10	10
Units — credit	6	10	10	none	none	10

SUMMARY OF UPPER DIVISION CURRICULUM UNITS

for Selected Years

<i>Subject</i>	<i>1916</i>	<i>1924</i>	<i>1934</i>	<i>1940</i>	<i>1955</i>	<i>1964</i>
Botany	3	4	—	4	4	3
Economics	—	—	—	3	3	—
Accounting	4*	—	—	—	—	—
Business Administration	3	—	—	—	—	—
Labor Problems	2	—	—	—	—	—
Principles	—	6‡	6	—	—	—
Entomology	3	3	3	3¶	3¶	—
Forestry						
Administration & Policy	4	—	—	—	—	3
Conference	—	3	—	—	—	—
Dendrology	3	3	—	—	3	3
Ecology	—	3	3	3	4	4
Economics	—	3	—	—	3	3
Engineering						
(Improvements)	3	3	—	—	—	—
Introduction to						
Professional Forestry	—	—	—	3	—	—
Logging	3	3	—	—	—	—
Lumber Industry	—	3	—	—	—	—
Management	5	3	3	3	4	4
Mensuration	3	—†	3	3	4	4
Photogrammetry	—	—	—	—	3	—**
Planting	2	2	—	—	—	—
Protection (Fire)	3	2‡,§	—£	—	3	3
Range Management	—	3	—	—	—	—
Silviculture	5	3	3	3	4	4
Utilization	3	3	—	—	—	—
Wood Technology	3	3‡,§	—	—	3	3
Elective (forestry only)	—	—	7	—	—	—
Hygiene	2	—	—	—	—	—
Law (Commercial)	4	—	—	—	—	—
Mathematics	3	—†	—†	—†	—†	—†
Plant Pathology	3*	3	—	3	3-4	—
Soil Science	—†	—†	—	4	4	3
Statistics	—	—	2-4	3	—†	—†
Zoology	—†	—†	3	3¶	4¶	—†
Electives						
Free	5	21-20	19-17	29	16-14	—
Restricted	—	—	—	—	—	27††
Total	66	72	52	64	64	64

*Student to take Accounting or Pathology.

†Taken in lower division.

‡Courses so marked were the only *required* courses in 1924. All others were *recommended*.

§Student to take Protection or Wood Technology, whichever not taken in lower division.

£Required, unless already taken in lower division.

¶Student to take Entomology or Zoology.

**Elective.

††Requires 15 units of technical electives and 12 units of non-technical electives.

GRADUATE STUDY

In his first development of a policy for the new forestry school, Walter Mulford proposed a program of graduate work leading to an advanced degree, tying graduate study closely to the research work which was planned as one of the major responsibilities of the faculty. This proposal was quickly implemented. The University awarded the Master of Science degree in Forestry to Duncan Dunning and Alexander Muzzall in 1916 and to Myron Krueger in 1917.

Development of the graduate program was interrupted by World War I, and it was not until 1923 that any further Master's degrees were awarded. From that year on Master's programs were completed in every year except for 1943-45 when the graduate program was again disrupted by war. Reflecting the strong ties between graduate work and the research program of the School, the MS program was developed under Plan I of the Graduate Division, with the requirement for a thesis in addition to a minimum of 20 units of advanced study.

In 1932, the program was shifted to Plan II, requiring 24 units of advanced study and a comprehensive oral examination before a board of professors. This provided a basis for graduate study oriented to specialization and professional practice, but the research-oriented programs also continued. Many of the Master's students were encouraged to undertake research problems as a part of their programs, and for several years after 1932 some degrees were completed under the Plan I approach.

Master of Forestry

In 1946, an important new element was added to the graduate program. On the formal establishment of the School of Forestry, the award of the Master of Forestry was authorized. In 1947 six MF degrees were granted. The MF is the professional degree in forestry awarded by the University. The program represents completion of academic preparation for a professional career in forestry and requires 24 units of advanced study, a professional paper, and an oral comprehensive examination. With establishment of the MF program, the MS program was returned to Plan I and the thesis requirement, emphasizing the orientation of this program to specialization and research.

In the first few years following the establishment of the MF program, the majority of Master's students worked for the MF rather than the MS. During the past four years, however, there has been a swing toward the MS program, perhaps reflecting the increased emphasis on research in forestry which has been evident in recent years.

During the first 50 years of the school, 156 MS degrees in forestry and 74 MF degrees were awarded. Arthur W. Sampson served as graduate adviser in Forestry from the 1920's until 1932. From 1932 until 1954 the program was guided by Joseph Kittredge. He was followed in turn by Robert A. Cockrell, who served as graduate adviser through 1956, when he became associate dean of the Graduate Division. John A. Zivnуска has served as graduate adviser from 1957 through 1964.

The award of the MS in range management was authorized in the fall of 1953, with the first such degree being granted in 1956. Harold Heady has served as graduate adviser in range management through the full period of operation of the program. Twelve MS degrees in range management were awarded on the Berkeley campus from 1956 through 1964.

The award of the MS in wood technology was authorized in December, 1956, with the first two degrees being awarded in 1959. R. A. Cockrell served as graduate adviser in wood technology from 1956 until 1961. He was followed by Fred E. Dickinson. Eleven MS degrees in wood technology were awarded from 1959 through 1964.

Doctoral programs

Although Mulford was interested in the possibilities of a doctoral program as early as 1914, work at this level was slow in developing. In 1928, the Academic Senate of the University adopted the concept that Doctor of Philosophy programs should be based on fields of study, with the graduate groups guiding the programs being drawn from qualified faculty members in various departments. The development of this approach in such fields as botany, plant physiology, and soil science provided the basis for some members of the forestry faculty to participate in doctoral work and for forestry graduates specializing in these fields as applied to forestry to proceed to the PhD.

The first award of a PhD to a forestry graduate was made to Edward C. McCarty in 1927 in botany and biochemistry. The second PhD went to Walter Clay Lowdermilk in 1929 in forestry, geology, soil physics and irrigation. Early growth of such programs was slow. In 1936 PhD's in plant physiology were awarded to Irving H. Isenberg and Nicholas T. Mirov, and in 1939 the



Budd Hall — Forestry's "home" in 1914

PhD in agricultural economics was awarded to Horace R. Josephson. By 1945 a total of 13 PhD's had been awarded to forestry graduates.

World War II interrupted the progress of a number of men in doctoral programs, and following the war no further PhD's were awarded until 1948. From then doctoral work expanded steadily. By 1964 a total of 79 PhD's in programs related to forestry, range management, and wood technology had been awarded by the University. The distribution of these doctoral degrees by fields of study was as follows:

Agricultural Chemistry	1
Agricultural Economics	12
Biophysics	2
Botany	15
Business Administration	1
Engineering	1
Entomology	10
Genetics	6
Geography	1
Mechanical Engineering	1
Plant Pathology	4
Plant Physiology	15
Soil Science	7
Zoology	3
Total	79

These doctoral programs in forestry-related disciplines have clearly demonstrated their merit over the years. The achievements of the men who have completed the PhD at Berkeley reflect in part the thorough education in the fundamental bases of various forestry specializations which this approach ensures. Nonetheless, the forestry faculty recognized early in the development of this approach that certain central areas in the science of forestry cannot be covered effectively through programs in related fields of study.

In 1933 the forestry faculty proposed the establishment of a PhD program in forestry, with the emphasis on silvics. This proposal did not receive the support of the Committee on Graduate Students in Agriculture and no action was taken. With the expansion of the graduate program following World War II, another effort to establish the PhD in forestry was made during the period 1948 to 1950. The discussions between the School of Forestry and the Graduate Council served to improve the understanding of research in forestry and to increase the effectiveness of the doctoral programs in forestry-related fields, but again no action was taken.

In 1957 a third period of study of PhD needs in forestry was begun, culminating in 1960 with authorization for the award of the PhD in forestry. This program is complementary to the established programs in forestry-related fields, emphasizing silviculture, forest regulation, research methods in forestry, and an optional field related to the student's particular interests. The first award of the PhD in forestry is expected to be made in 1965.

With the development of the strong research program at the Forest Products Laboratory, the need for a PhD in wood science and technology



The Forestry Bungalow — Forestry's "home" from 1915 to 1917

became evident. A proposal for such a program was prepared, and the award of this degree was authorized in 1964.

Thus the close of the first 50 years of forestry in the University finds graduate study firmly established as one of the major activities of the School of Forestry. The graduate programs include the Master of Forestry program; Master of Science programs in forestry, range management, and wood technology; the PhD program in forestry; the PhD program in wood science and technology; and the various PhD programs in forestry-related fields of study.

LECTURESHIPS

It has always been the policy of the School to take advantage of the presence on campus of distinguished visitors and scholars, to hear from them and to encourage their exchange of ideas with students and faculty.

Under formal arrangements, two funds have been made available for honorarium and travel expenses to bring distinguished persons to Berkeley for the benefit of the School as well as the entire University community.

Winton Lectureship

In late 1954 the Winton Companies Fund gave \$1,000 to be used in some mutually agreeable manner toward the better understanding of forest industry problems. Through correspondence and conference between the dean and David J. Winton, chairman of the board of the Winton Lumber Co of Minneapolis, John Rosenberry, vice-president of the company, and

Richard S. Kearns, general manager of the company mill at Martell, California, it was resolved to develop the Winton Lectureship in Industrial Forestry. The objectives were:

To develop, in students and faculty of the School of Forestry, a better understanding of the problems, practices and goals of industrial forestry.

To furnish an opportunity for direct, effective interchange of technical ideas between personnel of the School and eminent foresters from the wood-using industries.

To study the place and significance of forest products industries in the American economy.

To explore the nature and extent of the forest land management which will be essential for the operation and permanence of these industries.

The first Winton lecturer was George L. Drake, a distinguished consulting forester and retired vice-president of the Simpson Logging Co of Shelton, Washington. Drake spent the week of April 16-20, 1956, at the School of Forestry. He was provided with an office where he held office hours for individual conferences. During the week he met for an hour or two with students from each of the different class levels. His one public lecture, of University and community-wide interest, was given on the evening of April 19, 1956, entitled: "The Public's Stake in Industrial Forestry." This talk was printed by the University to effect a broader distribution.

The Winton family and company management were sufficiently pleased with the development of the initial lectureship to extend it for one additional year. The second, and last, Winton lecturer was David T. Mason, senior partner of the consulting firm of Mason, Bruce & Girard of Portland, Oregon, the first professor of forest management at the School (1915-21) and a national leader in industrial forestry. Mason had a one-week schedule similar to Drake's and gave his public lecture on December 11, 1957, entitled: "The Development of Industrial Forestry in the United States."

Albright Lectureship

The second lectureship fund had its beginning in late 1959 when it was announced, at a University alumni dinner in New York attended by President-Emeritus Robert G. Sproul, that Horace M. Albright, distinguished member of the class of 1912 and American conservationist, was to be Regents' lecturer on the Berkeley campus. The Regents' lectureship supports the recipient for a month's residence at Berkeley.

It was not until the spring of 1961 that Albright could spare the time from his duties as president of the U.S. Potash Corp and chairman of the board of Resources for the Future to accept the honor. During the intervening year an anonymous group known as "Friends of Horace Albright" began a fund to endow a conservation lectureship in his name. This fund, now close to \$60,000, supports an annual lectureship and its publication.

Albright was in Berkeley for his Regents' lectureship during March, 1961, and gave his major public lecture, "Great American Conservationists,"

on March 13. Albright was with the National Park Service from its beginning in 1916, served as superintendent of Yellowstone Park and was director of the Service during the Hoover administration. His lecture was published as the first Horace M. Albright Conservation Lecture.⁴

The annual lecturer is selected by a campus-wide committee which seeks in alternate years, "scholars who have contributed broadly to the knowledge of natural resources" and "administrators of natural resources who have contributed significantly to public welfare."

Since 1961, the lecturers have been:

Marston Bates, Professor of Zoology, University of Michigan.
"The Human Environment." April 23, 1962.

Honorable Stewart L. Udall, Secretary of the Interior. "The Conservation Challenge of the Sixties." April 19, 1963.

E. Max Nicholson, Director-General of the British Nature Conservancy. "Conservation and the Next Renaissance." March 4, 1964.

Harold G. Wilm, Commissioner of Conservation, New York State. "Patterns for Action: Water and Recreation Resources." April 29, 1965.

SHORT COURSES

Short courses in financial and business management have been held on four occasions. The Yale School of Forestry developed, during the 1950's, a seminar program in industrial forest management. The great success of the program encouraged that School to hold additional seminars in other parts of the country in cooperation with other institutions.

The program consists of one- or two-week sessions with at least a half-day and usually a full day devoted to each topic. The program is moderated by the industrial forestry professor from Yale—E.T.F. Wohlenberg until his retirement in 1958, now Zebulon W. White—and each session is directed by a nationally known expert in the field of discussion. The students, numbering about 20 at each seminar, come from management positions in major private forestry enterprises.

The following Yale-U.C. Industrial Forestry Seminars have been held in Berkeley:

<i>Yale No.</i>	<i>Dates Held</i>	<i>Moderator</i>
5	1957, January 22 — February 1	E. T. F. Wohlenberg
9	1958, March 24 — April 4	E. T. F. Wohlenberg
14	1960, April 4-15	Zebulon W. White and Myron E. Krueger*
21	1963, November 11-15	Zebulon W. White

*White broke his leg just before this meeting and Krueger was prevailed upon to lead the sessions.

⁴Copies of this and succeeding lectures may be obtained from the School of Forestry in Berkeley.

The extension of forest products research through short course seminars has resulted, through 1964, in five subject matter sessions of about one week each, for a total of ten occasions. These were:

<i>Title*</i>	<i>Dates Held</i>
1. Short Course in Lumber Drying	December, 1956 December, 1957 December, 1959 February, 1962 November, 1964
2. Trouble Shooting in the Woodworking and Wood-Furniture Industries	January, 1958 March, 1959
3. California Hardwoods	March, 1961
4. International Seminar on Wood Machining	October, 1963
5. Conference on the Wood-Paint Interface	October, 1964

*Courses 1, 2, and 4 were held at the Forest Products Laboratory, Richmond, 3 was held on the Berkeley campus, and 5 was held in San Francisco.

RESEARCH PROGRAM

The College of Agriculture, with its origins in the Land-Grant College System, has traditionally sought to develop research on agricultural problems with an emphasis parallel to that of its teaching activities. Thus, establishment of the Division of Forestry within the College of Agriculture automatically gave to research a high priority as a long-run goal. Initially, the teaching program was of the greatest importance. But research was not ignored. Appointees to the faculty held research titles in the University's Agricultural Experiment Station along with their academic titles and were encouraged to devote up to half their time to formal research projects.

During the 1920's the small staff tackled concrete field problems, and several formal bulletins were produced. Bruce and Schumacher were active in mensuration research and growth and yield studies of California species. Sampson, assisted by Malmsten, was deep in range management and ecological studies. Metcalf worked on the eucalypts. Fritz concentrated on studies in redwood silviculture and management. Baker conducted research in seedling survival and other silviculture problems. Krueger directed his research effort to economic studies of the "new-fangled" tractor as a logging machine.

Later, Kittredge arrived to extend his meticulous work on forest influences to California conditions. Barr brought his incisive mind to the study of forest management and industrial forestry.

Much was done by the University authorities to encourage and develop a forestry research atmosphere on the campus.

Research collaboration

The School's research program received a boost in 1926 when the California Forest Experiment Station of the U.S. Forest Service was housed under its roof. This made possible coordination of and collaboration on practically all forestry research conducted in California.

By 1935, Mulford reported the following research and investigative units as operating in close cooperation with the Division of Forestry:

The California Forest and Range Experiment Station, USFS.

Forest Entomology Group, U.S. Bureau of Entomology.

Blister Rust Research Unit, U.S. Bureau of Plant Quarantine.

Western Headquarters for Division of Forestry, Wildlife and Education, U.S. National Park Service.

Extension Forester, U.S. Department of Agriculture.

Following World War II, increasing demands for information on forestry problems sharply stimulated the School's research activities.

On June 15, 1954, the University and the U.S. Forest Service executed a formal Master Memorandum of Agreement for Conducting Forest and Range Research. This basic agreement provides for a wide array of joint ventures in research and cooperative endeavors in the field of teaching. More than 70 specific projects have been carried out, and at present 19 different cooperative studies are under way with the Forest Service. Twelve of these involve one or more University departments outside of the School of Forestry.

During the past 15 years additional cooperative research programs have been carried on with the California Department of Fish and Game, the State Division of Forestry, the Division of Beaches and Parks, and Office of Planning; with the Federal Bureau of Entomology and Plant Quarantine, Forest Service-Region 5, National Park Service, Atomic Energy Commission, and with numerous agencies of local government and private groups.

Experiment Station research

By 1955, the forestry research program had become sufficiently important to justify appointment of the dean of the School as an associate director of the Agricultural Experiment Station. Paul F. Sharp, director of the Station from 1949 to 1962, worked energetically to expand forestry research efforts. The considerable attention which is given to forestry-related research by Agricultural Experiment Station scientists outside the School of Forestry provides a striking example of the benefits which the School has gained from its close identification with the rest of Agriculture. Agricultural Experiment Station departments of agronomy, agricultural economics, entomology, plant pathology, soils, and animal physiology are participating in research oriented toward forestry problems.

An outstanding development of this sort has been the growth of forestry research in the Department of Entomology. In 1956 the T. B. Walker Foundation initiated a five-year program of financial support for basic research on forest insects in Entomology. The University, in turn, was able to strengthen its own support of the program. Subsequently, the Walker Foundation provided additional funds which were augmented by grants from the Surdna Foundation and a number of California forest industries. As a result of this cooperative effort, a strong permanent staff of forest entomologists has been

established, led by Ronald W. Stark. The work of this group on the biology of bark beetles and on other insect problems is making significant contribution to reduction of losses from insect infestations.

In 1958, the Wildland Research Center was established within the Agricultural Experiment Station, with the dean of the School as its director. Through the Center, all of the research resources of the Experiment Station can be brought to bear on forest and wildland research problems, regardless of departmental lines.

Public Law 87-788 (The McIntire-Stennis Act) adopted in 1962 made federal funds directly available to the School for additional support of its forestry research effort. Although appropriations under the Law are still very small, the program shows promise for significant future expansion of research in keeping with the needs.

Under the Land-Grant College philosophy, the state and federal governments share the costs of maintaining our basic forestry research establishment. But grants and contracts from private companies and foundations are a vital and growing part of the research picture. Financial support from industrial and other private sources is providing a significant part of the money needed for research and, at the same time, is helping the research staff select the most important problems to be attacked.

Representative of the scope of staff research is the following list of current (1964) projects in the Agricultural Experiment Station:

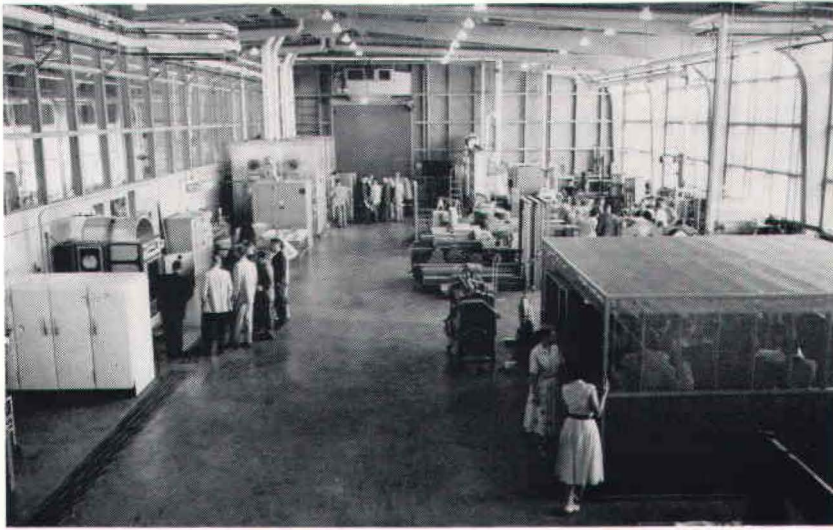
<u>Field</u>	<u>Title</u>	<u>Project Leader</u>
<u>Forestry</u>		
Silviculture-Ecology	Forest regeneration in California	E. C. Stone
	The interrelations between properties of forest trees and soil properties	P. J. Zinke
	The effectiveness of seed trees for natural regeneration	D. W. Muellder
	Significance of micro-site conditions for the establishment of natural seedlings of <i>Pinus ponderosa</i> and associated conifer species	D. W. Muellder
	Productivity and nutrient cycles in the soil-vegetation-animal system of Arctic tundra	A. M. Schultz
	An assessment of the ecological potential of redwood (<i>Sequoia sempervirens</i> [D. Don] Engl.)	E. C. Stone
	Studies in the development and maintenance of prescribed conditions in Big Tree forests	H. H. Biswell
	Aerial photo specifications for forestry purposes	R. N. Colwell
Management	Predicting the yields of young-growth stands in the Redwood Region of California	J. L. Lindquist
	Economics of fire protection on wild lands in California	J. A. Zivnuska
	Input-output relationships in the management of young-growth forests in California	R. F. Grah

	Multiband spectral reconnaissance for forestry	R. N. Colwell
	Simulation of tree growth by mathematical models	R. A. Cockrell
	Study of the technical properties of California woods	R. A. Cockrell
Marketing	The market structure and marketing practices associated with initial processors of timber obtained from small woodlands in California	J. A. Zivnuska
	Economic factors affecting the market for wood products in California	J. A. Zivnuska
	Economic development of prospects for the commercial forest resources and forest products industry of California	J. A. Zivnuska
	Intraregional competition in lumber and plywood marketing in the Western U.S.	J. A. Zivnuska
	Value growth performance of young growth of ponderosa pine	D. E. Teeguarden
Physiology-Genetics	The role of oleoresins in the metabolism of <i>Pinus ponderosa</i> Laws	E. C. Stone
	Quantitative genetic studies of California tree species	W. J. Libby
	White fir seed source study	W. J. Libby
Range Management	The biology, ecology, and utilization of California browse plants	A. W. Sampson
	Management practices to improve California range lands	H. F. Heady
	Brush seedling establishment and growth in relation to soil fertility level	H. H. Biswell
	The development and handling of browse species of brush for domestic livestock use	H. H. Biswell

THE FOREST PRODUCTS LABORATORY

The earliest research in forest products at Berkeley preceded that of forestry education. Beginning in April, 1903, the University's College of Engineering operated a timber testing laboratory in cooperation with the Federal Bureau of Forestry. This work was under the direction of Loren E. Hunt and, later, Arthur L. Heim.⁵ The Berkeley laboratory was one of several university laboratories doing similar work for the Bureau of Forestry. Some of these other laboratories were at the University of Washington, University of Oregon, University of Colorado, Purdue University, Yale University, and in Washington, D.C. and Charleston, S.C. The Berkeley laboratory was discontinued in 1909 when most of the timber test work was centralized at the new U.S. Forest Products Laboratory at Madison, Wisconsin, which opened on June 4, 1910.

⁵Hunt received his BS in Engineering from U.C. in 1893 and became assistant and later instructor in civil engineering. In 1902 he became an assistant city engineer for San Francisco. In March, 1903, he returned to the University with the title lecturer in civil engineering and was in charge of timber testing on the Pacific Coast for the U.S. Department of Agriculture, Bureau of Forestry. In this position he was in charge of the work in the laboratories at the University of Oregon and University of Washington. Hunt resigned from U.C. on February 1, 1909. Heim graduated from Purdue University in 1906 and received a civil service appointment as a timber testing engineer. He joined Hunt and was associated with the timber testing work in Berkeley most of the time until 1910 and in charge after 1908. Heim joined the U.S. Forest Products Laboratory in Madison, Wisconsin, and lives there in retirement.



The Main Processing and Testing Laboratory of the School's Forest Products Laboratory

In 1911, the Forest Service established a research dry kiln in the midst of the eucalyptus groves on the top of Berkeley hills. This program was under the direction of Harry D. Tiemann of the Madison Laboratory who was detailed to Berkeley for the assignment. Tiemann had invented a "water spray humidity controlled dry kiln" while he was at the Yale University Laboratory. After two years of research in drying Blue Gum (*Eucalyptus globulus*) it was concluded that the species was of no value for lumber and the project was abandoned. The research did lead to the "discovery of the cause and phenomena of collapse in drying woods containing inside free water" by Tiemann.⁶

Forest products research in Berkeley remained quiet for the next thirty years.

Planning the laboratory

In 1942, Wendell T. Robie (x'17), member of the State Board of Forestry and lumberman in Auburn, responded to a suggestion made by Fritz and got Assemblyman Allen G. Thurman to introduce a bill for the establishment of a forest products laboratory. The bill failed to pass but a resolution⁷ directed the University to make further study and report to the legislature in 1945. The report was prepared but was not needed because, at the close of the war, the University's extensive building program included both a forestry building and a forest products laboratory. The building was high on the priority list but the laboratory was near the bottom.

⁶Most of the material in the preceding two paragraphs was developed from information furnished by H. D. Tiemann and the U.S. Forest Products Laboratory.

⁷California Assembly Concurrent Resolution #62 (Res. Chap. 121—Statutes 1943, filed May 8, 1943).

Fritz, in Berkeley during World War II and busy on forest legislation, served as the principal planner for the laboratory on Mulford's staff. Cockrell had been assigned to the war effort at the U.S. Forest Products Laboratory at Madison, Wisconsin, and served there as liaison for the laboratory planning committee in Berkeley.

On November 3, 1945, Dean Hutchison added Cockrell to the Forest Products Laboratory Committee, consisting of Mulford (chairman), Fritz and Krueger, and asked the committee to recommend a suitable site. Space on the Berkeley campus was rapidly becoming critical and Dean Hutchison hinted that the Gill Tract, about four miles from the campus near the Bay and just south of the Albany Hill, might prove more spacious and acceptable. The full committee met on November 8 and 12. Mulford recommended that "eight acres in the northwest corner of the Gill Tract be allocated as the site for the Forest Products Laboratory." Detailed planning continued and Cockrell presented his "Suggested Details for Proposed Forest Products Laboratory at the University of California," to the committee on March 7, 1946.

About this time the activity on the proposed laboratory was slowed down because of higher-priority projects on the campus.

The Richmond site

In the fall of 1949, the College of Engineering began to develop plans for an engineering laboratory in south Richmond, about three miles north of the Gill Tract site. This new location offered some economies of utilities, policing, servicing and maintenance over the undeveloped Gill Tract site. No other location for the laboratory was seriously considered after this.

Arthur B. Anderson joined the staff as the first Forest Products Laboratory employee in May, 1950. By fiscal year 1950-51, the laboratory had climbed to the fourth ranking position on the University capital improvement priority list, and the legislature appropriated \$1,000,000. William R. Schofield, secretary-manager of the California Forest Protective Association, was instrumental in making known to the legislators the need and importance of this laboratory, dedicated to the wise use of California's renewable natural resources.

With the laboratory assured, planning went briskly forward. Cockrell was delegated as representative of the School in all aspects of planning and construction. In company with Robert Long, University architect, and Harold Baugh, University engineer, in the spring of 1951 he toured all public and private forest products laboratories on the West Coast to decide on the final planning details. Construction was begun on the 4.5 acre site of the 104-acre Engineering Field Station in Richmond in the spring of 1953. The major construction of the facility was completed in early 1955. Approximately \$350,000 of the original \$1,000,000 remained for physical and chemical research equipment, wood preparation equipment, including a sawmill and a dry kiln.

Buildings and equipment

The laboratory, constructed almost entirely of native California woods obtained largely through a joint bid of the member companies of the Cali-

fornia Redwood Association, consists of more than 20,000 square feet of floor space on one level in the main building. Other buildings contain a shop and wood machining research facility, a dry kiln and storage-sawmill building. The main laboratory, an "L" shaped structure, has six chemical and physical laboratories, a conference room, library⁸, darkroom, stockroom, optical analysis laboratory and staff and administrative offices in one wing. The other wing consists of a testing and processing area, five temperature-humidity rooms, power plant, and lobby. An important feature of the testing and processing area is the 80-foot clear-span width provided by the "boome-rang"-type laminated wood arch trusses.

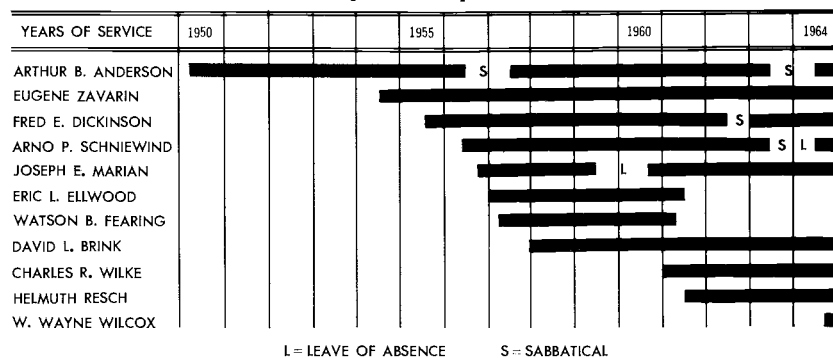
Of the six chemical and physical laboratories, four serve various phases of forest products chemistry research. These four have standard bench and hood units and equipment to isolate and identify organic compounds including gas and paper chromatography and fractionation, and the necessary accessories. One of the other two units houses equipment for micro-technique and photomicrography, the other is equipped for studies on timber physics and adhesives. The optical-analysis laboratory is used in the identification of various organic materials isolated from wood.

A variety of large equipment is installed in the testing and processing laboratories. The overall area, approximately 110 x 80 feet, houses large equipment and accessory items for investigations of mechanical properties, gluing and glued products, kiln drying, wood chemistry, and pulping and other chemical products.

The sawmill is designed primarily for the breakdown of logs and cants into test material.

On July 1, 1955, Fred E. Dickinson became the first director of the Forest Products Laboratory. Senior laboratory and project leader personnel⁹ and their periods of service are shown in the chart:

U. C. FOREST PRODUCTS LABORATORY Senior Laboratory and Project Leader Personnel



(Note: Charles R. Wilke is Professor of Chemical Engineering.)

⁸For details of the FPL library, see the library section of this chapter.

⁹As of 1964, the laboratory had a personnel of 41, including the director, project leaders, assistants, and supporting staff.

Research program

The research program of the laboratory is mostly financed with state funds from the University budget. However, certain projects have also received support of funds and/or materials from industry and federal and state agencies. These extra-mural funds extend and expedite the research effort. Industry support has made it possible to carry out projects of significant interest to a particular segment of the industry. From 1955 to 1964, 47 firms and 3 industry associations have supported projects through grants-in-aid and gifts of material and equipment amounting to approximately \$250,000. The California Division of Forestry, through direct contract support, has given significant assistance to the hardwood utilization research program. The laboratory's research program is organized under the University's Agricultural Experimental Station. Projects, current in 1964, were:

<i>Field</i>	<i>Title</i>	<i>Project Leader(s)</i>
Chemistry and Chemical Processing	The chemistry of California wood species	A. B. Anderson E. Zavarin
	Solvent seasoning of lumber and wood products	A. B. Anderson C. R. Wilke
	Study of chemical reactions of woods and barks	D. L. Brink
	Azeotropic drying and extraction of lumber, bark and wood residues	A. B. Anderson C. R. Wilke
	Taxonomic chemistry of coniferae	E. Zavarin
	Wood pulp liquor evaporation by immiscible fluid heat transfer	C. R. Wilke
	Chemistry of phlobaphenes and related polymeric phenolics from wood and bark	E. Zavarin
Physics and Physical Processing	The strength and related properties of California wood species with particular reference to the relationship between mechanical properties and wood structure	A. P. Schniewind
	Investigation of wood gluing as it relates to fundamentals of adhesion, the gluing properties of California species and the manufacture of wood	J. E. Marian
	Investigation of the drying characteristics of California wood species	H. Resch
	Evaluation of California hardwoods in terms of lumber grade yield	F. E. Dickinson
	A study of the wood machining process	F. E. Dickinson

The director and his staff consult frequently with the laboratory's Technical Advisory Council. This committee of 12 (four selected each year for three-year terms) is appointed by the chancellor of the Berkeley campus to advise him on the program of the laboratory. It is composed of forest products industry leaders¹⁰ and meets approximately twice a year. The council has proved valuable both as a source of advice on program objectives

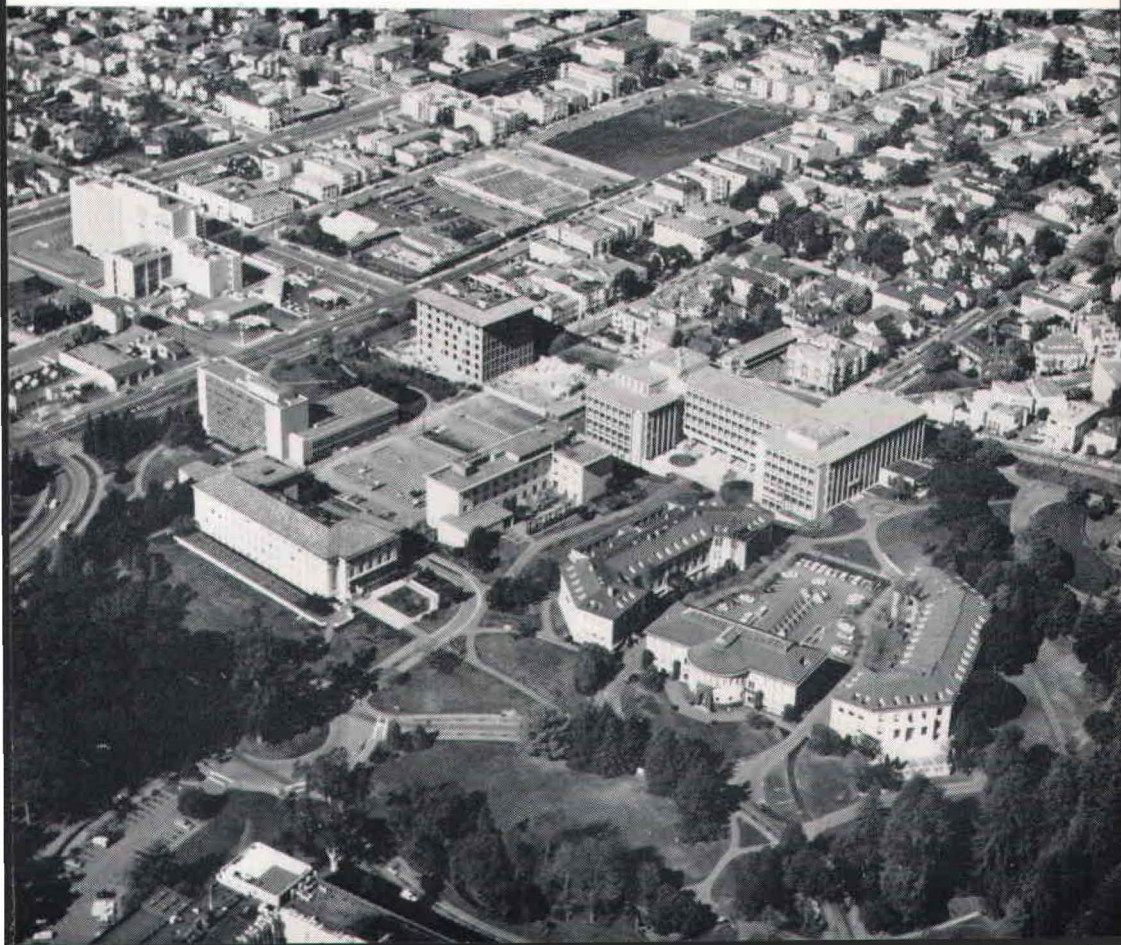
¹⁰See Appendix C for the Technical Advisory Council members and their terms of service.

and ways of reaching them, and as a channel for informing members of industry of the progress that is being made.

Cooperation on a wide range of research projects has taken place between staff members of the laboratory and members of the departments of chemistry, chemical engineering, forestry, mechanical, industrial, structural and sanitary engineering, pomology, plant pathology, and soils. This cooperation continues to grow as more and more interest in wood science and technology is developed in these other departments through contacts with the laboratory staff.

In September, 1962, William A. Dost, forest products extension specialist of the Agricultural Extension Service, joined the laboratory to assist in the wider dissemination of research results to the California people. In addition, laboratory staff members, through direct contact, publications, letters, seminars, and short courses, are making research findings available to industry and other interested parties.

Airview of the northwest corner of the Berkeley campus in 1964





Airview of the U.C. Forest Products Laboratory at the Richmond Field Station

QUARTERS

The Division of Forestry was initially housed in the basement of Budd Hall (the Agriculture Building), a large wooden frame building southeast of South Hall on the site now occupied by Moses Hall (until 1964 known as Eshleman Hall). In 1914, the office consisted of a single room that was heated by a coal stove and had three desks for the three staff members. Miss Holden, Mulford's secretary, who had come with him from Cornell, had a small secretary's desk in this office. An adjacent room, known as the east laboratory, was available to the forestry instructors. Metcalf moved into this room after noting that the office was "somewhat crowded." Modification of this laboratory space for forestry use included the installation of electricity for microscope lamp outlets at a cost of \$70; and the removal of boarding, water pipes, sinks, drains at a cost of \$16. By December, they must have been pretty well settled because they had installed a "new umbrella rack at the cost of \$2.25."

By January, 1915, the growing staff necessitated the move to new and larger quarters. This was accomplished by purchasing a portable office building, known as "the forestry bungalow," at a cost of \$1,150. This building consisted of seven rooms and was located on the low ground just north of the Hearst Mining Building, near the northeast corner of the campus. Five of the rooms were offices for the five members of the faculty, the other two were the main office for the stenographer and a small reading room. There was no classroom space during these early years; classes were held anywhere on the campus where unoccupied rooms could be found. The forestry bungalow office building was ready for occupancy on March 21, 1915.¹¹

The planning for the new agriculture building (Hilgard Hall) had begun at the time the portable building was ordered and two and a half years later, on August 15, 1917, the Division moved into the first permanent building with space planned for forestry use.

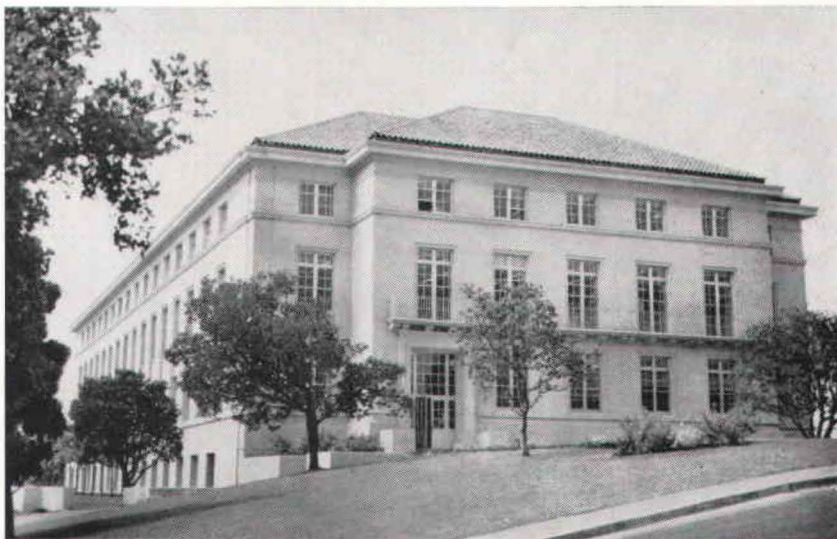
¹¹ Metcalf diary.

Here the Division had ample classroom and laboratory space to accommodate its normal growth for nearly a decade. The first major demand on the space in Hilgard Hall came in 1926 when the University agreed to house the new California Forest Experiment Station and gave up four rooms to its use.

Shortly after the Station had moved into Hilgard Hall, a new building, Giannini Hall, was planned for construction across the agriculture courtyard from Hilgard Hall. This building was about the same size and shape as Hilgard and was to house, ultimately, the activities of the Giannini Foundation for Agricultural Economics, which was established by private endowment in February, 1928.

Forestry was granted temporary use of part of Giannini Hall and moved from Hilgard in August, 1930. This move brought under one roof the Forestry School, the California Forest Experiment Station, the educational headquarters of the U.S. National Park Service, the forest entomologists and pathologists of the U.S. Department of Agriculture, the Blister Rust Control, and the extension forester.

Space was not only increased but also more usefully arranged. There was one office for each staff member, a comfortable site for the secretary and clerical staff, several study rooms for graduate students, and special laboratories for ecology, fire protection, wood technology, utilization, economics, and silviculture. There were also service and storage rooms, a small lecture room, and a combination lecture room and laboratory. The wood-working machinery room joined the new utilization laboratory. The fire protection laboratory was especially designed with fireproof walls and doors for actual experiments with fire and burning forest materials. For the first time there was a library worthy of the name—a whole room devoted to this exclusive use.



Walter Mulford Hall

Forestry remained in its "temporary" quarters in Giannini Hall for the next 18 years, until 1948, when the Forestry Building was completed. It was the second major building constructed on the Berkeley campus after World War II, the first being Lewis Hall, a chemistry building. Mulford had planned long and well, and his advance planning accounted for the high priority in the post-war building program of the University.

The School occupies some 22,400 square feet of space on the first three floors, including conference rooms, four undergraduate teaching laboratories, numerous research and graduate teaching laboratories, faculty, staff extension forester offices, and storage and library facilities.¹²

The Forestry Building was renamed Mulford Hall in the spring of 1956 after Walter Mulford's death.

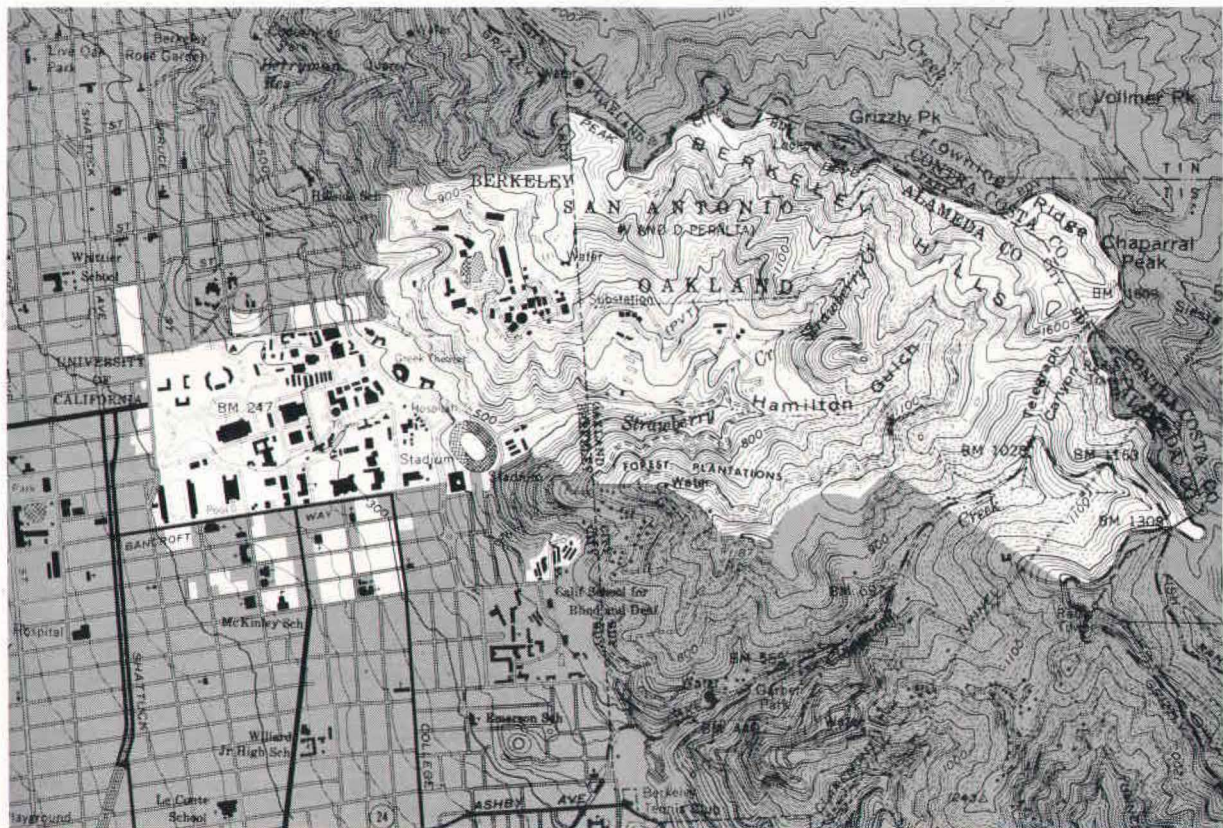
FIELD FACILITIES

For many years the forestry greenhouse was located in the Hearst Avenue greenhouse range on the northwest corner of the campus. In 1961 this greenhouse was razed to make room for Tolman Hall and other new structures. A smaller but more sophisticated research greenhouse on the Oxford Tract was built to replace it. Additional greenhouses and open-plot ground were developed for forestry use at the Gill Tract in Albany.

¹²Over the years several other units have occupied space in Mulford Hall with consequent close informal ties to the School. At various times these have included the University's Virus Laboratory, Kearney Foundation, Department of Plant Pathology and Department of Anthropology, and the Pacific Southwest Forest and Range Experiment Station. Since 1959 the Department of Genetics has been a permanent occupant of the top floor.



Forest plantations on the south side of Strawberry Canyon. Spring, 1958



The University of California at Berkeley. The major forest plantations are on the south side of the canyon

Strawberry Canyon and adjacent areas of the Berkeley hills support both natural vegetation and plantations of exotic conifers and eucalyptus. Many of these plantations were established by faculty members, the Forestry Club, and forestry classes of the early years. They now provide an increasingly useful area for teaching and research. Unfortunately, as pressures for building space increase, some of the early plantations have had to be sacrificed. However, campus planners have recognized the value and attractiveness of these often unique stands. Long-range plans call for preservation of as many of the plantation areas as possible, without loss of valuable building space.

Whitaker Forest

The School has been the beneficiary of a number of generous gifts of forest property. The first dates back to the year of the School's founding, 1914, when Horace Whitaker bequeathed a 320-acre tract of California big-trees to the University. Adjacent to Sequoia National Park, Whitaker Forest contains more than 200 old *Sequoia gigantea* veterans as well as several important groves of immature trees. Under Woody Metcalf's leadership the forest was developed as a site for 4-H Club summer campers, and for 30 years it provided for several hundred children a year a memorable outdoor experience. Because of rapidly rising maintenance costs, increased fire hazards, and other problems, the camping program was terminated in 1958. The forest now serves as a natural area and for research on management of the *Sequoia* type for maintenance of natural and aesthetic conditions. In 1964, the School faculty designated a fine grove of young sequoias as the Woodbridge Metcalf Grove, in recognition of Woody's long interest in the property.

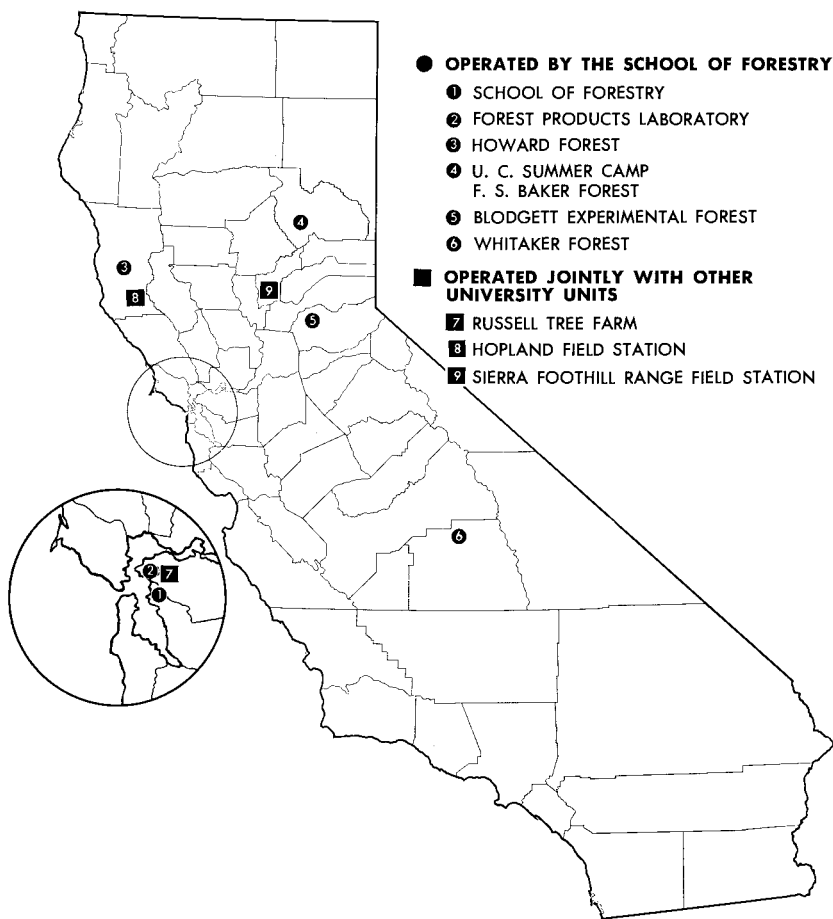
Howard Forest

Howard Forest, a 90-acre tract of young Douglas-fir and woodland-grass, bestrides the Redwood Highway in central Mendocino County. A portion of the area is leased to the Division of Forestry and serves as an important base for its protection activities in the North Coast district.

Blodgett Forest

Because of Cornell's unfortunate experiences with the Adirondack Forest Preserve, which Mulford had witnessed, he took an understandably cautious view toward large-scale acquisitions of forest land by the School. But in 1933, as a result of the good offices of Swift Berry, General Manager for the Michigan-California Lumber Co, that company offered to donate to the University 2,680 acres of prime young-growth mixed conifer forest near Georgetown in El Dorado County. After walking the boundaries, Myron Krueger brought back a very favorable report. The property was given to the University and named Blodgett Forest in honor of John Blodgett, then president of the Michigan-California Co.

During the next 20 years Percy Barr took the leadership in preparing inventories and installing simple ecological and growth studies. Numerous

LOCATION OF SCHOOL OF FORESTRY RESEARCH FACILITIES

graduate students (including Grah and Vaux) got their baptism in research during summers spent at Blodgett. By 1956, local markets and the forest itself had developed to the point where experimental cuttings were economically feasible. Since then, housing for research staff and the major elements of a permanent road system have been installed; plans for long-term management of the area as a demonstration forest have been developed; and a number of major research projects including work in silviculture, entomology, aerial photography, and forest management are now based on the forest. In 1962 the University purchased a 160-acre inholding to round out the Blodgett Forest ownership.

Baker Forest

The major facilities at Meadow Valley where summer camp is held (see Chapter 6) are on an area covered by a Forest Service special use permit. The University, however, acquired 80 acres of cutover land immediately south of that area in 1948. The tract was purchased in order to protect the Camp water supply and has been used as a testing site for exotics as well as for student exercises. This tract has been named the Frederick Storrs Baker Forest by the faculty in recognition of Baker's many contributions to the School.

Other field facilities

In 1962 the School took custody of the University's half interest in the Russell Tree Farm in Briones Valley north of Lafayette. This 320-acre tract in the Berkeley hills is of strategic value because it provides both wildland conditions and some excellent experimental plantations within a few minutes' drive from the campus.

Members of the faculty, particularly Heady and Biswell, have played an active role in the development and use of the Hopland Field Station and the Sierra Foothill Range Station. These stations are operated by the Division of Agricultural Sciences for use as research sites by a number of interested departments. They represent important grassland and chaparral types and therefore provide valuable areas for conduct of the School's research on range and watershed problems.

FORESTRY LIBRARY

Many individuals have played a role in the development of the forestry library. Each one, consciously or unconsciously, has been influenced by Walter Mulford's vision of "making our library one of outstanding excellence." As a member of the first class to graduate with a major in forestry in the United States, he lived in a particularly favorable period and location to collect the professional publications which began to appear on the subject. He avidly collected everything that was issued by the United States government and by the ever-widening group of state agencies, universities and colleges who became interested in forestry. These materials he kept as part of his personal library through his years in the South, in Connecticut, Michi-

gan, and New York. But when he began to build the forestry collection at California, he gave his entire collection of unbound materials to the Division. This proved fortunate because his personal library was completely destroyed in the 1923 Berkeley fire.

California's exceptionally complete collection of early U.S. forestry materials depends not only on Mulford's basic collection, but also on his habit of encouraging every faculty member to collect materials and add them to the Division's collection. Thus, unpublished papers of early conferences and minutes of important meetings were brought to Berkeley for permanent keeping.

Faculty librarians

In the years before professional librarians arrived on the scene, various faculty members wrestled with the task of maintaining library materials. As early as November, 1914, Woodbridge Metcalf worked with the pamphlets in the Division collection. He was the first faculty member responsible for supervising the forestry library. He served in this capacity and as liaison with the University library until 1926. Books were ordered through the main library and shelved there, except for a few charged permanently to the Division and kept in faculty offices for reference. Unbound pamphlets were kept in the forestry library. Because the quantity of pamphlets rapidly got out of hand, Metcalf had reprint and pamphlet materials bound into volumes by subject and shelved in the main library, along with bound periodicals and books.

When Metcalf assumed his duties as extension forester in 1926, the care and nurture of the library was delegated to Frederick S. Baker. On December 2, 1927, Mulford wrote to Baker, "You have my strongest support in what you will find will be an interesting and strenuous project." Baker not only concerned himself with the acquisition of materials, but with improving access to the pamphlet collection through refinement of a forestry literature classification system. In 1928, he sent a memorandum to Mulford saying, "The further I go into library work, the larger the job appears." The final version of the classification was issued May 20, 1930, after consultation with various faculty members in their subject specialties. However, the use of the system, for several reasons, proved difficult; the need to have additional clerical help in maintaining the library had become pressing.

The arrival of Percy M. Barr (in 1932) led to redistribution of divisional duties, and Barr was assigned to supervise the library. Mulford secured special permission from the president of the University to formally establish a divisional library, and Barr called in Reginald B. Gordon, a library consultant to make recommendations. The report was submitted in January, 1933, and work to implement the proposals got underway immediately. Major efforts were directed toward cataloguing the pamphlet collection, particularly the bound volumes in the main library, using standard library rules. The classified catalogue was abandoned in favor of an author-title-subject catalogue. Mrs. Mary Lathe, who had been working under Barr as stenographer and library clerk, was persuaded to go to library school and get professional training. This she did on a part-time basis in 1934-35, with

Miss Avakian stepping in to provide library service during the hours Mrs. Lathe was in class. In 1935, Mrs. Lathe began service as the first full-time librarian for the forestry library; a landmark achieved through the encouragement and support of Mulford and the staff of the Forestry Division.

Expansion

In 1934, Mulford wrote a memorandum to Barr suggesting an acquisition policy which guided development of the book collection over the years: "The receipt of a new second-hand catalogue from Koehler in Leipzig stimulates me to the suggestion that we keep everlastingly at the campaign to assemble not only pamphlets, but as many books as possible in our field. I know that you have been steadily at it . . . we would like to be always on the lookout for the purchase of libraries of German or French foresters, as well as picking up individual second-hand volumes as opportunity offers . . . I hope that we can assemble everything that is available and worthwhile in English, German and French." Pursuing this same interest, Mulford wrote to Harold Leupp, head librarian of the University library, in the midst of World War II, asking him to be particularly alert for any outstanding European forestry library which might come on the second-hand book market at the close of the war. Such a collection did appear on the German market and the main library appropriated funds that allowed the forestry library to secure many volumes. Mulford also enlisted the support of Edward I. Kotok, director, California Forest and Range Experiment Station, and S. B. Show, regional forester for the California region, in acquiring primary and archival materials from the Forest Service. The riches of the library collection at the present time are testimony to Mulford's broad and ranging interest. Other assiduous collectors on the staff were Metcalf, Sampson, Fritz and Kittredge. The donations of material received from alumni and friends over the years, particularly F. Paul Keen '14, Ansel F. Hall '17, Tom H. Harris '27, Clarence T. Quick, Willis W. Wagener (MS '28), William E. Bullard, Jr. '35, Edward N. Munns, and Stephen N. Wyckoff, have contributed to the eminence of the collection.

Professional librarians

In November, 1936, Mrs. Lathe resigned and Miss Edwarda M. Adams was appointed librarian, with the responsibility of property custodian added to her duties. The library at this time was located in Room 228 Giannini Hall. By 1941, more study space in the library was needed, so Room 121 Giannini Hall was assigned as an "overflow reading room." Miss Adams was succeeded by Miss Ruth Elizabeth Weis in 1942. Reporting to the Special Libraries Association in September, 1943, she gave the size of the library as approximately 1,000 volumes in the Departmental library, 8,000 volumes in the main library stacks, and about 7,000 pamphlets. Miss Weis, as did her predecessors, provided sound professional service in the development of the library. Each librarian built on the work which had gone before rather than redoing and devising new systems. Thus, a useful tool, indeed a unique tool, was fashioned from their cataloguing of pamphlets and periodicals. Mrs.

Maxine Johnson succeeded Miss Weis, serving for one year, 1945-46.

Miss Mary Lida Eakin¹³ took up her duties as librarian in September, 1946. Plans for a library to be a part of the proposed Forestry Building were already in the blue-print stage. During 1946-48, Miss Eakin worked out many details in library plans and furnishings with the University architects. It was during these postwar years that the growth of the library accelerated. The need for additional professional staff had been recognized by Mulford, and the School provided for the establishment of an assistant librarian's position beginning July 1, 1948. On this same day, the status of the library was changed from "departmental library" to "branch library," with administrative and budgetary matters handled by the University library rather than the School. The general library made an exception to its centralized acquisition policy, allowing Forestry to continue collecting publications directly from all over the world. The completion in 1948 of the Forestry Building with its spacious library quarters was the highlight of a banner year for the library. Now all the forestry books were brought together under one roof, all SD's (block location for forestry books in main library stacks) and the dendrology books located in biology library were transferred to the forestry library. In the next two years, the library lengthened its hours of service from 40 to 63 hours a week.

Forest Product Laboratory library

No sooner had the move been accomplished than more planning for future developments was required. In June, 1949, the School sent Miss Eakin to Madison, Wisconsin, to observe the organization of the U. S. Forest Service Forest Products Laboratory library, in preparation for the construction and staffing of a Forest Products Laboratory library at Berkeley. Through correspondence with other forestry libraries and exchange of publications with forestry and forest products research organizations throughout the world, publications on wood technology, wood construction, and pulp and paper materials were acquired. A substantial revision of the library's subject-heading list to include forest products subjects was completed by 1952. By 1955, when the laboratory had been completed, the library resources to support the expanding research activities of the School in the forest products field were well in hand. A small working collection of books was transferred from the Forestry Building to the laboratory library, in effect establishing a sub-branch library. A half-time professional librarian was appointed in 1956, and by October, 1958, William Berges was appointed to serve as full-time librarian for the laboratory library.

In July, 1958, Miss Eakin transferred to the Giannini library and Mrs. Esther Johnson moved up from assistant to forestry librarian. Mrs. Johnson continues the tradition of service to students and faculty established by her predecessors. In 1963, the Theta Chapter of Xi Sigma Pi elected Mrs. Johnson to associate membership in the society.

The forestry library in 1964 is fortunate to have enough room to accommodate its present collection of 17,500 volumes and 15,000 pamphlets with sufficient space for continued growth in the years ahead. It is indeed

¹³Her brother, Richard M. Eakin, had married Mulford's youngest daughter, Mary (Polly) in 1935.

testimony to the long-range planning of Mulford and to the work of faculty and librarians alike, that both the physical facilities and the resources of the library continue to be a major asset in the education of foresters at the University of California.

EXTENSION FORESTRY

Extension establishes a formal route for the flow of information from the research worker to the user in the field. It "markets" the research through the basic county agricultural extension staff to the casual user and directly to the professionals. It also serves as a "feed-back" mechanism to inform the researcher of field problems.

The Clarke-McNary Act of 1924 made provision for the use of cooperative federal money for educational work in the field of forestry within the rural community.

Section 5 of the 1924 law authorized the Secretary of Agriculture to cooperate with the proper state officials "to assist the owners of farms in establishing, improving, and renewing woodlots, shelter belts, windbreaks and other valuable forest growth, and in growing and renewing useful timber crops."

In 1925 the Regents of the University of California provided the state share of the cost of maintaining an extension forester as a branch of agricultural extension service. An agreement was made by the Regents with the Secretary of Agriculture for that purpose.

Metcalf

Woodbridge Metcalf, on the teaching staff since the fall of 1914, was appointed extension forester on February 1, 1926.¹⁴

It has always been (and still is) the custom for staff members to spend some time on extension-type activities, in addition to teaching and research. Woody's particular talents and interests in extension activities made him a natural choice for this position, one of the first three extension foresters in the United States.

Woody dedicated his sound technical background, friendliness, and warmth of personality to key problems over the breadth of the forestry field. He is an outstanding authority on the characteristics and growth of Eucalyptus species and the general dissemination of information on planting and utilization of these species was an important part of early programs. Another early contribution was his encouragement of development of rural fire protection in California. Through his efforts more than 300 new rural fire control organizations came into existence which became the forerunners of the present more formal protection under the California Division of Forestry. His exciting fire control demonstrations are remembered by thousands who came to his meetings at high schools and farm centers all over the state.

¹⁴During 29 years after 1925 the Clarke-McNary contribution remained unchanged in the sum of \$1,620 towards Metcalf's annual salary. Remaining costs, including that of an assistant after January 1946, were borne by the state. After July 1955 the Smith-Lever Act of May 8, 1914, supplanted the Clarke-McNary Act for this project. This note and above information relative to the Clarke-McNary Act are from C. Ray Clar, *California Government and Forestry*, p. 595.



Woodbridge Metcalf

Rural fire control took giant steps forward during the early years when progress depended strongly on local interest and sympathy to the cause, and Woody knew how to develop such interest and sympathy.

Many of the attitudes of a generation of people depend on youthful exposure to dynamic ideas. This importance of youthful exposure was recognized by Metcalf, who created opportunities to talk and teach forestry out in the forest. Under his aegis an intensive program of summer camping was developed for 4-H Clubs. The outstanding example was the camp developed on Whitaker's Forest where 4-H Club members were exposed to scientific forestry through Woody Metcalf.

Other important programs were developed and disseminated during the early years. Among them were windbreaks for the citrus areas of southern California, growth studies on Sierra big tree and coast redwood, investigations of growth and utilization of cork oak in California, and demonstration of methods of preservative treatment of native woods.

Waltz

In December, 1939, the extension forestry staff was augmented by the appointment of Ralph S. Waltz '39, a former employee of Klamath Redwood Co where he had been chopping boss and timber cruiser. Waltz brought a strong commercial timber interest to the work and was soon involved in making an inventory and management plan for Whitaker's Forest, which at that time was under the direction of the extension forester's office. War was imminent, and both extension foresters worked intensively on rural fire prevention and control to conserve resources. Waltz took military leave and entered the Navy in 1943. He resigned from the Extension Service in October, 1945, to enter the agricultural chemicals field.

Grah

The second extension forester position was refilled in January, 1946, by Rudolf F. Grah, MS '41¹⁵, who came with the experience in rubber production in South America and previous work as field assistant in the School of Forestry. The immediate postwar period was marked by intensification of industrial forestry, with a recognized need for new techniques and technical background. In response to this demand, industrial foresters, working through the California Forest Protective Association and its secretary-manager, William R. Schofield, arranged for the U.S. Forest Service, the California Division of Forestry, and the School of Forestry to hold a short course for field foresters. The success of this initial effort was so great that it was continued with the University extension forester as organizer and director of the Forest Management Field School.

Beginning with the second school in 1949, the course has been held annually, and brings the latest and best technical information directly to practicing field foresters. Instructors are drawn from the U.S. Forest Service, the California Division of Forestry, the University, the state colleges, and private industry on a qualification basis to get the best possible instruction. More than 1,000 men have attended the sessions which have lasted from three days to three weeks, most of them five days. Schools are attended by approximately 40 to 50 men with some sessions accommodating nearly 80. A list of forest management field schools including the date, subject and location will be found in Appendix D.

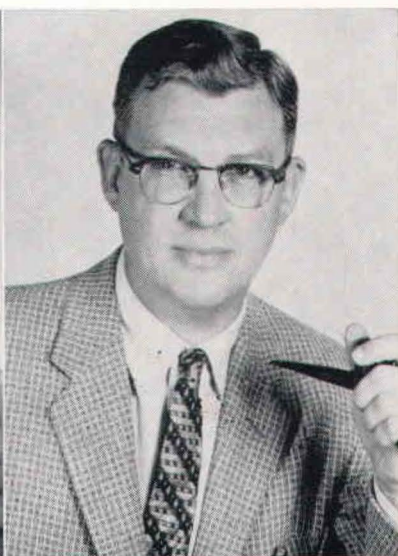
Gilden

Christmas tree production gained prominence in the extension program in the postwar years. Metcalf had worked closely with selected growers before the war to develop Christmas tree plantation management techniques. These beginnings provided the technical background for an expanded program starting in the late 1940's. This effort was aided by the arrival in January, 1956, of Edward E. Gilden, MS '62, to fill Metcalf's position, after his retirement in February of that year.¹⁶ Ed Gilden brought vigor and zeal to extension as well as advanced experience in working with small woodland owners and Christmas tree growers in Oregon and Washington. The Christmas tree program expanded to include production in natural stands and market reporting, and new emphasis was given the small woodland forestry program.

By the end of the 1950's the extension program operated over a broad field to service the professional forestry group with current research material. Extension worked with nonprofessional owners on small forest property management and marketing problems, developed and extended Christmas tree management techniques, and concentrated on the core area of tree growing and forest management. Extension's role in relation to the California Division of Forestry program with small forest property owners was clarified during this period by mutual recognition that the Extension

¹⁵See Chapter 5 for photograph of Grah.

¹⁶Grah had transferred from extension to the teaching staff of the School in 1955.

**Edward E. Gilden****James P. Gilligan**

service would handle the broad educational program, including new research results, and the Division would concentrate on local service to small owners.

Gilligan

A new dimension was added to forestry extension work on August 1, 1957, with the staff addition of James P. Gilligan. Gilligan, a graduate of the University of Michigan and previously a professor of silviculture at Oklahoma, had outstanding interest and activity in forest recreation with particular reference to wilderness areas. His talents were used immediately by making him head up the University's contractual responsibilities for a national survey of wilderness areas with the president's Outdoor Recreation Resources Review Commission. Depth was thus added in the multiple-use field and closer ties developed with wildland interest groups such as the Sierra Club, sportsmen's associations, and conservation organizations, based on Gilligan's prominence in the fields of interest encompassed by these groups.

Dost

A third extension forester was added on September 1, 1962, when William A. Dost joined the extension staff in the field of wood science and technology. Dost, a graduate of the University of Washington, had been a wood technologist for several years with the California Redwood Association and brought a first-hand working relationship with industry to the position. Short courses in kiln drying and aspects of wood processing and use are included in this new program which aims to promote the application of new research results in the wood science field.



William A. Dost

Extension forestry has been an effective and important part of the overall School of Forestry effort, and its program has kept pace with the changing emphases of research in the School. In some cases it has led the way. Its role will become increasingly technical. As the School research staff moves into more basic research, extension will probably pick up a portion of responsibility for applied research with field plots and test application and demonstration of new techniques.

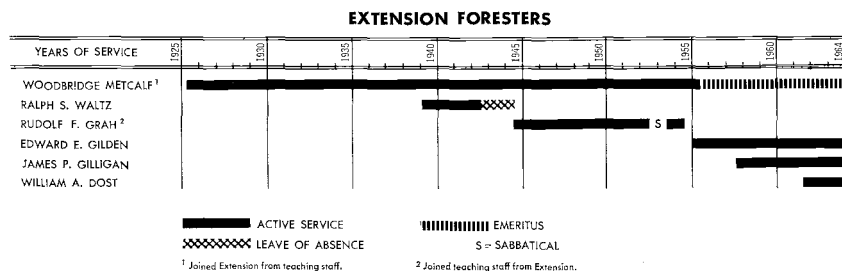
CROSS-CAMPUS RELATIONS

For 50 years the Berkeley campus of the University has provided the School with an extraordinary setting, combining intellectual stimulation with natural and architectural charm. But the location at Berkeley has meant far more than these evident advantages.

Perhaps the most significant benefits the School derives are from the richness and variety of cross-campus courses to which forestry students have access, and from the renowned teachers who are available. Lest students neglect such opportunities, the forestry curriculum requires each of them to get substantial exposure to the broadening influence of an education in the University as well as one in forestry.

Similarly, campus-wide student activities in organizations, publications, and athletics provide unrivaled opportunities for development of leadership and maturity, as well as for gaining experience in a variety of practical affairs. Many foresters have taken advantage of these opportunities and their achievement is partially indicated in appendices A & H.

In addition to these basic resources of the Berkeley campus the faculty and students of the School have ready access to such significant specialized agencies as the Bancroft library, containing rare material in the history and



economics of forestry and forest industry; the Botanical Garden and the Museum of Vertebrate Zoology; the Computer Center, the Operations Research Center, and the Statistical Laboratory which collectively provide a superb foundation for the development of "mathematical" forestry; and the Counseling Center, the Placement Center, and the Student Health Service which meet with extraordinary effectiveness important needs of students in their personal, academic, and professional lives.

The debt which the School owes the rest of the campus has, over the years, been amply repaid. For example, a number of faculty members of the School have served in important campus-wide (or University-wide) administrative posts. On more than one occasion Walter Mulford served as acting dean of the College of Agriculture. Myron Krueger, at the end of World War II, organized the University's program under the G.I. Bill of Rights as state-wide coordinator of Veterans' Affairs. P. M. Barr served for several years as special assistant to the vice-president and provost of the University. And, since 1956, Robert A. Cockrell has been associate dean of the Graduate Division, bearing a major responsibility for the conduct of the whole graduate program at Berkeley.

Much of the University's overall planning and administration is accomplished with the help of numerous committees of the faculty. To such committees the School of Forestry has rendered a service well out of proportion to its total numbers. Representative of this service over the years is this partial listing:

Statewide Committees:

- Advisory Committee on Development of the Miller
- Property (Santa Cruz) R. A. Cockrell
- Coordination with State Colleges R. A. Cockrell
- Undergraduate Scholarships R. F. Grah (Chairman)

Committees of the Academic Senate:

- Committee on Committees R. A. Cockrell
- Committee on Courses P. M. Barr (Chairman)
- Committee on Privilege and Tenure R. A. Cockrell
- Committee on Research P. M. Barr
- Committee on Schedule M. E. Krueger
- Committee on Schedule R. A. Cockrell
- Committee on Schedule E. C. Stone
- Committee on Schedule P. M. Barr
- Committee on Schedule H. J. Vaux (Chairman)

Committee on University Welfare	M. E. Krueger (Chairman)
Graduate Council	J. A. Zivnуска
Representative Assembly	R. N. Colwell R. A. Cockrell H. J. Vaux
Undergraduate Scholarships	R. A. Cockrell (Chairman) R. F. Grah (Chairman)

Chancellor's Committees:

Advisory Committee on Discrimination	R. A. Cockrell (Chairman)
Advisory Committee on Joint Activities of Faculty and Alumni	R. A. Cockrell (Chairman)
Building and Campus Development	P. M. Barr (contributed to post WWII reorganization) M. E. Krueger R. A. Cockrell J. A. Zivnуска E. C. Stone (These men have provided continuous representation for 20 years.)
Committee on Public Relations	H. J. Vaux (Chairman)
Committee on Recognition of Distinction in Teaching ..	R. N. Colwell
Committee on the Work Study Program	R. F. Grah
Counseling Center Advisory	R. A. Cockrell
Natural Resources	H. H. Biswell P. J. Zinke
Placement Center Advisory	P. Casamajor
Russell Property	H. J. Vaux (Chairman)
Student Affairs	R. A. Cockrell H. J. Vaux
Student Housing	F. E. Dickinson
University Affairs	F. E. Dickinson

THE U.S. FOREST SERVICE EXPERIMENT STATION

The story of forestry in the University of California would not be complete without at least a brief account of the growth of the Pacific Southwest Forest and Range Experiment Station which was born on the Berkeley campus and which grew to maturity in intimate association with the School of Forestry.

Indeed the interest of the federal government in forestry research at the University antedated by several years the establishment of the forestry curriculum. The timber testing program between 1903 and 1909 in the College of Engineering and the eucalyptus drying experiments between 1911 and 1913 were the earliest forest products research efforts of the U. S. Forest Service in Berkeley.¹⁷

Establishment of the Station

On March 3, 1925, Congress adopted Public Law 542, which authorized the Secretary of Agriculture to establish and maintain a forest experiment

¹⁷For more detail, see Forest Products Laboratory section of this chapter.

station "in California and the surrounding states." Beginning in the fiscal year 1926-27, \$32,412 of federal funds were made available for the California Forest Experiment Station.¹⁸

Edward I. Kotok was appointed as director, and Berkeley recommended as location over Riverside, Stanford University, and San Francisco, because of the affiliation and association with the Division [School] of Forestry.

The logic and good sense of locating the new forest experiment station close to and in conjunction with an established forestry school was evident and Secretary of Agriculture Jardine reported in the fall of 1926 that Berkeley had been chosen as headquarters of the California Forest Experiment Station¹⁹ particularly because of the fact that the State Agricultural College and the State Agricultural Experiment Station form a part of the University of California. "These divisions of the University," stated the Secretary, "parallel for agriculture land use many lines of investigation which must also be undertaken for the production of timber crops. At Berkeley there will be an excellent opportunity for close cooperation with the forest school, which is a part of the University, while through the Extension Service the results of the forest research can be quickly carried to the forest owner. The location at Berkeley will be advantageous also since all forest regions of the state can be quickly and easily reached from there. I expect this station to become the leader in the development of sound practices in the management of the timber and watershed resources of the region. I am certain that the communities and institutions which have offered facilities for this Station will cooperate most heartily with the Department and the Forest Service in the development of the new Station and in furthering forest production in California."

Projects

The first field operations were located at the Feather River Station near Quincy, the Cow Creek area on the Stanislaus National Forest, and the Devil's Canyon Nursery near San Bernardino.

Kotok's first major effort as director was to raise the cooperative funds necessary to early growth of the Station. The California general budget in July, 1927, earmarked \$20,000 for the biennium for the Station (enough to support approximately two men for two years at that time). Kotok was able to get \$2,000 per year each from the City of Santa Barbara and the counties of Santa Barbara and Los Angeles.

One of the earliest projects undertaken by the Station, begun in October, 1926, was the vegetative type mapping of the wildland areas of the state. Wieslander was placed in charge of this project. In assigning Wieslander to the project, Kotok told him that "if you don't finish the project in two years, I'll be very much surprised." When Wieslander retired in June, 1956—with the inventory work expanded to include wildland soil mapping and the forest survey, and still far from complete—he reminded Kotok that it had turned out to be "the longest two years I'd ever experienced."

¹⁸For a more complete story of the Experiment Station see C. Ray Clar, *California Government and Forestry*, p. 593.

¹⁹About five years later the Station name was changed when the words "and Range" were inserted in the title after Forest, because intensive mountain range studies were added to the growing list of experimental projects.

Cooperation with U.C.

The Station and its projects became an important source of part-time, full-time and career employment for U.C. foresters, particularly during the depression years.

By the spring of 1935 there were 70 U.C. foresters working for the Station.

Since then, no regular tabulation has been made of U.C. foresters working for the California Station, but it is doubtful if there was ever a larger number than at that date in the mid-1930's. In 1964 approximately 40 U.C. foresters were employed by the Station.

Meanwhile, as mentioned before, the University assisted the Station with space allotments, as the space needs for School and Station increased over the years. In 1930 they both moved from Hilgard into Giannini Hall, and in 1948 to the newly completed Mulford Hall. From 1948 to 1959 the top floor of Mulford and additional space elsewhere in the building housed much of the Station's staff. This close physical association between Station and School provided multiple benefits for both. Station staff members consulted frequently and informally with the faculty and took part in lectures and seminars at the School. A number of cooperative research studies were made, several of which produced classics in the California forestry research literature.

In 1959, after 33 years of association under the same roof with the School, the Station had become the largest nonacademic activity occupying University space within ten minutes' walking distance of the main library (the University criterion for prime teaching space). With the strong pressure for space, the University reluctantly had to ask the Station to leave the campus. At its present location, three blocks off the campus, the Station continues its close association with the University under a longstanding cooperative agreement.

In the 38 years of its existence, the Station has had six directors: Edward I. Kotok, 1926-1940; Murrell W. Talbot, (Acting), 1940-1945; Stephen N. Wyckoff (BS, U.C. 1914, Plant Pathology), 1945-1954; George M. Jemison, 1954-1957; R. Keith Arnold (BS, U.C. 1937, Forestry), 1957-1963; John R. McGuire, 1963-present.

On April 15, 1959, the name of the Station was changed for the second time. The new name, Pacific Southwest Forest and Range Experiment Station, was to properly reflect the associated forest research activities in the new state of Hawaii.

In 1964, the Station employed more than 300 scientists and supporting staff—and had, in addition to the headquarters in Berkeley and a research center for watershed, silviculture, and products studies in Hawaii, five program locations and 14 long-term experimental areas in California. It also conducts experimental work at several short-term study areas in cooperation with private and public agencies in California and Hawaii. A Master Memorandum of Understanding providing for research cooperation between the University and the Station has resulted in the School of Forestry directly participating in many of the Station's research activities. The extent of this cooperative research effort is steadily expanding.

CHAPTER 5

The Staff

THIS chapter contains biographical sketches of all persons who have held teaching titles and responsibilities during the School's first 50 years. The first section is devoted to the deans. The second section contains the biographies of all teaching staff who have held appointments of a permanent or indefinite-time nature, shown in the chronological order of their addition to the staff. Practically all of these men also hold corresponding titles in the University Agricultural Experiment Station and some in the Gianinni Foundation. Only their academic titles are shown. The third section, a table, includes all persons who have held temporary teaching appointments. The fourth section is about our principal lady helpers who, devotedly, have kept the administrative wheels moving smoothly.

THE DEANS

Walter Mulford

Born: Millville, New Jersey, September 16, 1877.

Died: St. Helena, California, September 7, 1955.

BSA, Cornell Univ., 1899; FE, N.Y.St.Coll. of For. (at Cornell), 1901; hon.ScD, Univ. of Mich., 1938.

Professor of Forestry, 1914-46; Dean, School of Forestry, 1946-47; Professor of Forestry, Emeritus, 1947-55.

For Dean Mulford's biography see Chapter 3.

Frederick S. Baker

Born: Bridgeport, Connecticut, June 3, 1890.

Died: Berkeley, California, January 1, 1965.

FE, Colorado Coll., 1912.

Associate Professor of Forestry, 1926-36; Professor of Forestry, 1936-56; Acting Dean, School of Forestry, 1947-49; Dean, School of Forestry, 1949-55; Professor of Forestry, Emeritus, 1956-1964.



Frederick S. Baker

Fred Baker, second dean of the School, hailed from New England and generations of his students remember his Yankee skepticism as well as his silvicultural acumen. Baker grew up in Massachusetts, but devoted his forestry career to the West. He graduated with the forest engineer degree from Colorado College in 1912 and promptly took a research position with the U.S. Forest Service in Utah—his first boss being A. W. Sampson.

During World War I, Baker was temporarily assigned to procurement of black walnut for gunstocks, with headquarters in Washington, D.C. After his return to Utah, he continued with research there until 1921. At that point, his skill in writing and his broad interests led to his assignment to the Regional Office in Ogden in charge of information and education for the Forest Service in the Intermountain area. There he remained until appointed to the School faculty.

The list of some 14 papers which Baker published between 1912 and 1926, on subjects ranging from aspen ecology to the heirs of Jim Bridger, attest to his facile pen and native curiosity.

Those early years provided him with the wealth of experience which enriched his three decades of teaching, beginning in 1926. At certain times, as circumstances dictated, Baker taught such courses as forest planting, ecology, fire protection and the introduction to professional forestry. But the continuing focus of his teaching was the course in silviculture, Forestry 104, which he taught annually from 1926 until he retired three decades later. An outgrowth of his early teaching, and a tool for his subsequent work, was *The Theory and Practice of Silviculture* published in 1934.

From its first publication, this scholarly yet eminently practical book



"Bake" at the dedication of his portrait and demonstrating his favorite hat

was a standard text in its field. Its lofty reputation has been sustained in the extensive revision which Baker published in 1950 under the title *Principles of Silviculture*. But members of the 1934 silviculture class, the first to use this classic, admit to rather sketchy memories of its contents. The publishers had experienced serious delays in production, so that the book was not delivered until the last week of the semester. Baker remained undismayed. He simply assigned Part I for Monday, Part II for Wednesday, and a review of the whole for Friday.

His students learned the importance of careful observation as basis for silvicultural knowledge. But Baker stressed in a way that none will forget that a forest is a complicated place, that silviculture is an art even though based on science, and that what we don't know may be more important than what we think we know.

Baker, the teacher, was perhaps at his best at Meadow Valley. He was fascinated by the complex ecology of the old-growth Sierran forests and even after his official retirement, he devoted many weeks to careful studies of a natural reserve which the Forest Service established near Little Schneider Meadow. Following his retirement, the faculty designated the 80-acre University property at Meadow Valley (acquired during Baker's deanship) as the Frederick S. Baker Forest.

Baker's research during these faculty years centered on the relationship of light, temperature and water supply to the development of forest trees. It resulted in several articles published in the *Journal of Forestry*. He also served as a member of the Council of the Society of American Foresters and as an associate editor of the *Journal*.

When Dean Mulford retired in 1947, Baker was named acting dean; two years later, he became the second dean of the School, serving in that capacity until June 30, 1955. Under his leadership, the educational policies established earlier were confirmed and strengthened. He secured the first operating budget for the Forest Products Laboratory (which had long been a gleam in the eyes of Mulford, Fritz, and Cockrell), the laboratory building was planned and constructed, and the first director of the laboratory was appointed. When Baker became dean, retirement was in sight for most members of the "first generation" faculty. His selection of six new faculty members for appointment during his deanship made possible a smooth transition to the "second rotation" and maintained the faculty in a position of strength.

Not the least of Baker's talents was his flair for parody and pun. The faculty skits which flowed from his pen enlivened 30 years of Forestry Club meetings and even the staid *Journal of Forestry* unbent sufficiently to publish an occasional essay in which humorous fantasy was skillfully used to develop serious professional ideas. Finally, there were his water colors—done as a hobby—but marked with the same lightness of touch, sparkle, and sense of understatement that marked the man himself. They testify to Baker's ability to see the beauty of the forest along with its silvicultural aspects, and to interpret it for the pleasure of others. For, as he himself once said: "At least I can paint a tree that looks like a tree!"

In 1951, while driving down the Feather River Canyon from Camp on a hot summer day, a mishap, whose cause remains unexplained, landed car and Baker in the edge of the river. Almost miraculously, Baker survived the accident and he was able to resume his duties after an extended hospitalization.

On New Year's Day 1965, Baker passed away in Berkeley after a brief illness.

A judicious scholar, a challenging teacher, and a shrewd administrator—and to these talents Baker added the rarer embellishments of amiable wit, gentle iconoclasm, and warm friendliness, which (in the words of one of his former students) taught us all "that the whole business is fun."

Henry J. Vaux

Born: Bryn Mawr, Pennsylvania, November 6, 1912.

BS, Haverford Coll., 1933; MS 1935 and PhD (Agricultural Economics) 1948, U.C.

Lecturer in Forestry, 1948–50; Associate Professor of Forestry, 1950–53; Professor of Forestry (Forest Management), 1953–present; Dean, School of Forestry, 1955–65; Associate Director, Agricultural Experiment Station, 1955–65; Director, Wildland Research Center, 1958–65.

After completing an undergraduate curriculum in physics in his native Pennsylvania, Henry Vaux immediately headed for California and the forests of the West. He attended summer camp in Meadow Valley in 1934, and then proceeded directly to the MS in forestry in two years of study. Thus,

he is one of very few students in the history of the School to receive a MS degree in forestry without a prior bachelor's degree in forestry.

Vaux began his professional career in forestry as a brush-cutter for an engineering crew of the Crown Willamette Paper Co in Oregon. After two years of forest engineering work under the supervision of Harold P. Miller '22, he accepted a position as an instructor in forestry at Oregon State College. Serving there in the period of high enrollments from 1937 to 1942, he laid the foundation for both the high reputation and lasting friendships which have marked his career.

With his characteristic ability to rise to the demands of any occasion, Vaux even gave instruction in field dendrology, a subject which he had managed to avoid as a student. His deeper interests, however, were in economics, and he began his doctoral studies in agricultural economics at Berkeley while on leave from Oregon State during this period. In 1942, he turned to the South for experience, working in land ownership studies as a forest economist in the Louisiana Agricultural Experiment Station for a year. He was then commissioned in the U.S. Naval Reserve and spent three land-locked years in Washington, D.C.

Following World War II, Vaux returned to forest economics, accepting a research position in the Forest Service under H. R. Josephson (MS '33, PhD '39). A transfer from Washington, D.C., to the California Forest and Range Experiment Station in Berkeley enabled him to complete his doctorate with a study of lumber consumption in residential construction in California. During this period he began his work with William A. Duerr in a study of forestry economics research sponsored by the Society of American Foresters and the Charles Lathrop Pack Foundation. This work gave order and direction to the field and led to the publication, *Research in the Economics of Forestry*, released in 1953.

After completion of his doctorate, Vaux joined the faculty of the School of Forestry in the fall of 1948. Working with his forest economics teammate, John Zivnuska, who had been appointed to the faculty earlier in the same year, he moved energetically to develop instruction and research in forest economics and forest policy within the School. Although he also presented courses in forest economics for his first seven years on the faculty, his forte increasingly became his course in forest policy, which he has given every year since 1948-49. Both his personal qualities and his carefully organized and measured delivery serve to make this course a key element in student motivation and the undergraduate curriculum.

His research efforts have resulted in the publication of three major works which are models of effective economic analysis and clarity of presentation. These are his three California Agricultural Experiment Station bulletins, *Economics of the Young-Growth Sugar Pine Resource*, 1954, *Timber in Humboldt County*, 1955, and *Young-Growth Timber Taxation in Mendocino County*, 1961. He has also published a number of shorter papers on a wide range of topics in the general area of forest economics and policy.

The quality of his work and his leadership in his field soon brought national recognition to Vaux. When the University administration began a search for a successor to F. S. Baker as dean, one eastern forestry school executive expressed a common view by wondering why the University was



Henry J. Vaux

"looking the country over, when the strongest possible leader was already on the staff!" The University agreed, and on July 1, 1955, Henry Vaux was appointed as the third dean of the School of Forestry. Moving quietly but steadily, he met a variety of problems. There were immediate or imminent staff openings in silviculture, management, engineering, mensuration, influences, and protection. The Forest Products Laboratory under its newly appointed first director, Fred Dickinson, was about to move into a major period of staff development. The entire research program of the School was ripe for expansion and new direction.

Numbers cannot be the measure of a man, but it deserves note that in the ten years following the appointment of Vaux as dean, the budget of the School of Forestry increased nearly four-fold. Financial support for research from outside sources also expanded rapidly and in 1964-65 added an additional 27 percent to the total budget of the School. The number of regular academic positions in the Department of Forestry and the Forest Products Laboratory combined increased from 18 to 34 over the same period. In addition, an appreciable number of full-time research specialists are employed on project funds.

In addition to effectively developing the programs of the School, Vaux worked to marshal the full resources of the University to the problems of wildlands in California. He proposed and led in the development of the Wildland Research Center within the University structure, which provides the means through which interdepartmental research effort, developed from the state-wide university, can be brought to bear on problems of the 60,000,000 acres of wildlands in the state. He was appointed as first director of the



Forest engineer Vaux (about 1936)

Center in 1958 and has continued in this position. Vaux also worked effectively as a member of the team of U.S. Forest Service, State Division of Forestry, University, and private forestry leaders who developed the California Wildland Research Plan for coordinating the efforts of all research agencies concerned with the forests and wildlands of the state.

Good men are in great demand, and Vaux has been no exception. In 1951, he succeeded Walter Mulford as consulting editor of the American Forestry Series. In 1956 he was elected to the first of two successive terms on the Council of the Society of American Foresters. Here he did yeoman service on the Society's membership structure and took leadership in educational policies. He served as chairman of the Steering Committee of the Society's study of forestry education, which led to the publication, in 1963, of *Forestry Education in the United States* by S. T. Dana and E. W. Johnson. Subsequently, he has served as chairman of the Committee on Programs in Forestry Education which is charged with evaluating and encouraging action on the basis of this study.

Although incapacitated for three months as the result of a major heart attack in 1962, Vaux returned to his full duties in the same year and continued in his strong leadership of the School. He guided the organization of the 50th Anniversary Celebration of the School. Recognizing the opportunity provided by the planned conversion of the University to the quarter system in 1966, he led the faculty in the development of a revised and strengthened curriculum to be instituted at that time. Knowing that in forestry the first 50 years are only the beginning, he encouraged and stimulated the development of long-range plans to guide the School over the years ahead. With ten

years of administrative accomplishment nearing completion, Vaux requested that he be replaced as dean on July 1, 1965, so that he could devote his full energies to teaching, research, and professional responsibilities in the field of policy. On November 20, 1964, John Zivnуска was appointed by the Regents to succeed to the position as dean at that time.

Vaux is an honorary member of the California State Board of Forestry, a Fellow in both the Society of American Foresters and the American Association for the Advancement of Science, a corresponding member of the Society of Finnish Foresters, and a member of the American Forestry Association, the Forest Products Research Society, and the Sierra Club. Above all, he is a member of the California Alumni Foresters and an active member of the faculty who will continue to serve the School for many years to come.

THE TEACHING STAFF

Merritt B. Pratt

Born: Paw Paw, Illinois, October 3, 1878.

Died: Sacramento, California, October 28, 1945.

BS, Univ. of Chicago, 1904; MF, Yale Univ., 1905.

Assistant Professor of Forestry, 1914-1918.

Merritt Pratt was the eldest of five children whose father was a beloved and respected Baptist deacon and the town druggist.¹

Although small in stature, Pratt was an ardent athlete in his school years, being active in tennis, track, marathon running, inter-class football, and baseball.

Before attending Yale, Pratt worked for one summer on a hardwood study in the Mississippi Valley for the U.S. Bureau of Forestry. After receiving his MF degree he received an appointment as a forest assistant with immediate assignment to California. Pratt was assigned to the Tahoe National Forest in 1906 and became assistant supervisor there in 1909. It was on this job, in the fall of 1913, that Mulford reached him by telegraph and offered an assistant professorship which he promptly accepted.

Pratt's appointment brought jubilation to the members of the Forestry Club who had hoped and planned for two years to get forestry education started at Berkeley. His first course, given in the spring of 1914 when he was the only forestry staff member present, was nonprofessional in content but was taken by every possible would-be forester thirsting for knowledge about the field. Pratt proved to be an able counselor and friend of the students. He helped the organization of the Forestry Club baseball team, led numerous weekend hikes and, with Mrs. Pratt, chaperoned club dances.

With Mulford's arrival in August, 1914, and the beginning of professional forestry instruction, Pratt took on the teaching duties in the fields of wood technology, and forest protection and utilization.

After three years on the staff, Pratt informed Mulford of his intention

¹For an excellent biography of Pratt and a coverage of his part in California forestry see C. Ray Clar, *California Government and Forestry*, State of California, 1959. 623 p.



Merritt B. Pratt and Woodbridge Metcalf (in 1935)

to leave teaching and the University and return to administrative work. Unsuccessful in gaining reinstatement of his former civil service position with the U.S. Forest Service, Pratt, on February 1, 1918, joined his former Yale contemporary, George M. Homans, who had been state forester of California since February 25, 1910, as his only deputy. When Homans died in November, 1921, Pratt was appointed to succeed him by Governor Stevens.

In 1925 Pratt served as president of the National Association of State Foresters. He continued to serve as state forester until his retirement on December 31, 1944. This period of just over 23 years as state forester is without equal in the United States. Pratt served at the pleasure of four governors, a considerable achievement in view of the many serious attempts to remove him from office.

Pratt died at his home in Sacramento on October 28, 1945. Keeping a promise, his long time friend, Woody Metcalf, placed the urn of Pratt's ashes in a niche of a giant Sierra redwood tree at Whitaker Forest, the place they both loved so well. The bronze plaque on the "Pratt Tree" was given by his employees on the occasion of his retirement just a year before.

An additional monument to Pratt's memory is the state forest fire lookout station on top of Pratt Mountain in southeastern Humboldt County.

Woodbridge Metcalf

Born: Grosse Point Farms, Michigan, June 23, 1888.

AB 1911 and MSF 1912, Univ. of Michigan.

Assistant Professor of Forestry, 1914-21; Associate Professor of Forestry, 1921-56; Specialist in Agricultural Extension (Forestry), 1926-57; Professor of Forestry, Emeritus, 1957-present.

Woodbridge Metcalf has the unique distinction of having served the

School of Forestry for virtually the entire 50 years of its existence. He joined the staff in the fall of 1914. Previously he had worked on a variety of U.S. Forest Service assignments in the State of Washington and had served for 21 months as assistant forester, Department of Natural Resources, Canadian Pacific Railway in Montreal. Metcalf's undergraduate years at the University of Michigan coincided with Mulford's term as junior professor of forestry there. And Mulford knew a good man when he saw one. So, Metcalf was appointed assistant professor of forestry at the University of California on October 15, 1914. Metcalf taught the nonprofessional course "Trees and Wood" (Forestry 2) and the professional courses in silviculture, artificial reproduction, dendrology, forest protection, and summer camp.

During World War I, when professional forestry education was halted, he taught the course in military mapping in the officers training program in the University. Woody was also in charge of the Bidwell Tract in Chico and the Santa Monica Forestry Station in southern California. A large part of his effort during the war was to help organize nearly 300 rural fire fighting companies throughout California. These volunteer organizations provided much of the background experience out of which state-wide fire protection under the California Division of Forestry was later to emerge.

Metcalf used his sabbatical year in 1923-24 to visit 14 forestry schools and 12 forest experiment stations and nurseries across the country, and that winter he taught dendrology, silvics, and administration courses at the University of Minnesota in St. Paul.

Metcalf, appointed extension forester on February 1, 1926, held this position until his official retirement on June 30, 1956. He was asked to serve an additional year after his "retirement." Today, eight years later and 50 years since Woody came to Berkeley, it is difficult for his associates to understand just when or if he did retire. He still attends numerous national and local meetings and serves as host to many California visitors.

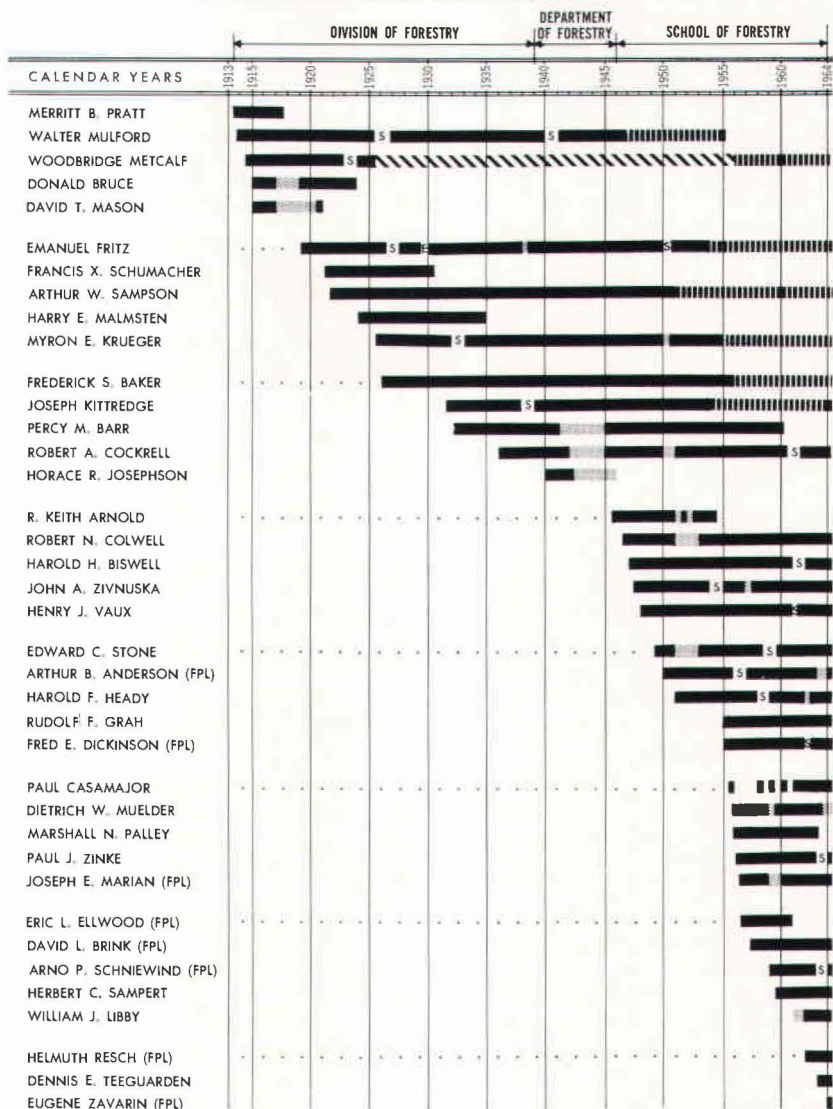
Certainly no California forester will ever sing or hear "Allouette" without thinking of Woody's enthusiastic and energetic leadership of that song.

Woody is a member of the national science and forestry fraternities Sigma Xi and Xi Sigma Pi. He is active in the California Conservation Council and has served as its president. He is an honorary life member of the Western Shade Tree Conference and a charter member of the California Christmas Tree Growers Association and secretary of the California Small Woodlands Council since its formation in 1952. Woody received the Nash Merit Award Certificate in 1954 for his work in conservation. He was elected a Fellow of the Society of American Foresters, in 1953. The California Alumni Foresters elected him to honorary life membership in 1964.

As a token of the esteem held for him by the School of Forestry and the University community, a grove of big trees (*Sequoia gigantea*) and his favorite quiet place on the Whitaker Forest was officially designated the Woodbridge Metcalf Grove.

Perhaps less well known are Woody's accomplishments as a sailor. While crewing for Glenn Waterhouse, a fellow U.C. agricultural extension worker, between 1931 and 1936, they won the International Star Class World championship in 1933 and the U.S. Olympic eliminations in 1936. They represented the U.S. in the Olympics at Kiel, Germany, that year.

UNIVERSITY OF CALIFORNIA FORESTRY TEACHING SERVICE OF REGULAR STAFF



■ ACADEMIC SERVICE ▨ EMERITUS
 ▤ LEAVE OF ABSENCE ▩ EXTENSION FORESTER
 S = SABBATICAL E = EXCHANGE
 FPL = FOREST PRODUCTS LABORATORY



Donald Bruce

Donald Bruce

Born : Newtonville, Massachusetts, July 23, 1884.

AB 1906 and MF (cum laude) 1910, Yale Univ.

Assistant Professor of Forestry, 1915-19; Associate Professor of Forestry, 1919-24.

Donald Bruce, the son of a New England teacher of French and German, was given a vigorous early education in mathematics and the classics. The mental discipline of four years of Latin and five years of Greek served him well when he attended Yale where he majored in mathematics and science and was elected to Phi Beta Kappa and Sigma Xi. He returned to his preparatory school where he taught, for two years, mathematics and physics on the same staff with his father.

Following his MF from Yale, Bruce joined the U.S. Forest Service and was assigned timber sales and survey duties in Idaho and Montana. In 1914 he was named forest supervisor of the Flathead National Forest in Montana. This was the position he held when he came to Mulford's notice at the time of David Mason's visit to Berkeley in December, 1914. Mason had worked with Bruce for a number of years and thought very highly of him. In a letter to Mulford, on December 17, 1914, Mason wrote about Bruce:

"He should, in my estimation, inside of ten years become the very best and most widely recognized logging engineer in the western half of the United States, which means the whole United States since the west is where the logging is to done mainly, and including British Columbia. There is a very great need for a man with Bruce's capacity to take hold of the whole problem of forest engineering, to systematize it thoroughly, to write the much needed books on timber estimating as a starter, and other features as

there is time, particularly including a handbook similar to Trautwine for the lumber industry. Bruce is probably better qualified now to write a book on volume tables and timber estimating than anyone else in the country."

Bruce joined the staff in July, 1915 and was the first summer camp instructor.

From the summer of 1917 until the summer of 1919 Bruce was on leave of absence from the University to the U.S. Army and served with the 20th Engineers in France where he rose to the rank of captain.

He returned to his teaching at the University in the summer of 1919 with a new appointment.

Bruce's rigorous mathematical approach to forest engineering and mensuration problems coupled with his excellence as a teacher, gave a strong boost to this immature and largely undeveloped field in American forestry. Some of his early students recall his great capacity to sense a student's difficulty with some subject and to develop a new approach that would clear up the matter.

His analytical development of solutions to mensuration problems was proven in field practice and the classroom and served as the foundation for his text, *Forest Mensuration*, co-authored with F. X. Schumacher and published in 1935.

On February 28, 1924, Don Bruce submitted his resignation to the Regents because of family matters requiring his presence in the East. He finished the spring semester of 1924.

Bruce rejoined the U.S. Forest Service in Washington, D.C., where he headed up their program in forest mensuration.

In 1925 Bruce joined the consulting forestry partnership of Mason and Stevens in Portland, Oregon. The firm continues to this day under the name of Mason, Bruce and Girard.

David T. Mason

Born: Newark, New Jersey, March 11, 1883.

BS, Rutgers Coll., 1905; MF, Yale Univ., 1907; MS, Rutgers Coll., 1908.

Professor of Forestry, 1915-21.

David Mason began his professional career as forest assistant on the Montezuma National Forest in Colorado in 1907. Between then and 1914, he filled a series of positions of increasing responsibility with the Service, including work in the timber sales section of the Washington office, assistant chief of silviculture for District 1, supervisor of the Deerlodge National Forest, and finally assistant district forester at Missoula.

In the latter position, Mason directed preparation of the *Manual for Timber Reconnaissance* and was in charge of an economic survey of timber resources and the lumber industry in the Inland Empire. Among his assistants on these projects were Donald Bruce, Emanuel Fritz, and Joseph Kittredge. He also found time to teach some forestry short courses at the



David T. Mason

University of Montana in 1911 and 1912, and in 1913 taught a course in National Forest administration at Yale.

When Mason joined the faculty as professor of forestry in August 1915, his first teaching assignment was at the Quincy camp (the first and only fall semester camp). When camp ended in October he spent the rest of the semester teaching economics and administration and industrial forestry at Berkeley. During 1916 he devoted most of his time to completing the timber resource and lumber industry studies he had begun for the Forest Service and he returned to teaching in the spring of 1917.

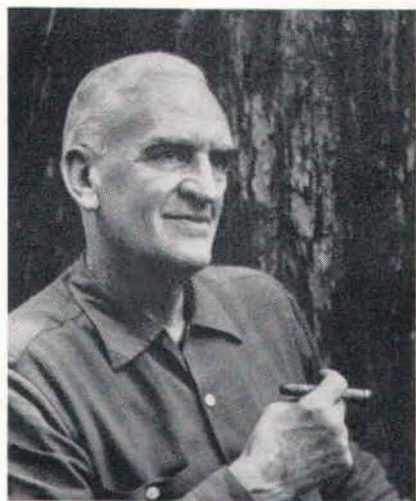
During the latter part of that semester he was actively engaged in the campus provisional military company and in July, 1917, was commissioned captain and assigned to the 10th Engineers. He remained on active duty until December, 1918, with a year of active service in France.

On his return to Berkeley in early 1919 Mason was ill with influenza. Almost immediately thereafter he went on leave to the Bureau of Internal Revenue to organize its timber valuation section. He returned to Berkeley in time to resume his teaching of economics, policy, and administration, protection, management, and industrial forestry in the spring of 1921.

But his brief experiences at Berkeley had not aroused his enthusiasm for academic life, and at the end of the spring semester in 1921, Mason resigned. His subsequent distinguished career in public service and in private consulting practice is detailed in his diaries.²

Mason returned to the School for a week in December, 1957, as Winton lecturer in Forestry. The public lecture which he delivered at that time entitled, "The Development of Industrial Forestry in the United States," has been published by the School.

²*Forests for the Future*, edited by Rodney C. Loehr. The Forest History Foundation, 1952.



Emanuel Fritz

Emanuel Fritz

Born: Baltimore, Maryland, October 29, 1886.

ME, Cornell Univ., 1908; MF, Yale Univ., 1914.

Assistant Professor of Forestry, 1919-22; Associate Professor of Forestry, 1922-50; Professor of Forestry, 1950-54; Professor of Forestry, Emeritus, 1954-present.

Emanuel Fritz began his teaching career as instructor in engineering at Baltimore Polytechnic Institute, after graduating from Cornell in mechanical engineering. But by 1912 he had determined on forestry as a profession, and so spent the next two years as a graduate student at Yale.

His professional experience in forestry began with the state forester of New Hampshire, making management plans and lookout station panoramic maps. Fritz joined the U.S. Forest Service in Region 1 (Northern Rocky Mountains) in 1915 as an assistant to David T. Mason who was making a lumber industry study. In 1916 he moved to Arizona with the Forest Service Fort Valley Forest Experiment Station. There followed two years of service with the U.S. Army Air Corps in France as commanding officer of the 639th Aero Squadron (airplane mechanics). At the time of discharge he held the rank of captain.

Fritz joined the Forestry School faculty following the end of the war. He taught the courses in lumbering and wood technology. Being a mechanical engineer as well as a forester, he was able to contribute greatly in his teaching to the development of wood technology and became a recognized authority in the field. At the same time he began to devote much time and energy to California redwood. The more than 40 years of close study, which Fritz has given to the ecology and silviculture of the species and to the

practice and economics of the redwood industry, earned for him the popular title of "Mr. Redwood."

Such background added important dimensions to his teaching. His students could learn valuable lessons in business economics and personnel relations along with their lumbering, and were exposed to shrewd ecological observations while studying wood anatomy and properties. Fritz's practical viewpoint on forestry problems was an invaluable element in giving generations of forestry students a well-balanced professional perspective.

Fritz deserves a tremendous amount of credit for the facilities and character of summer camp at Meadow Valley. His guided observation trips around the Meadow Valley Basin served to emphasize to several generations of students the importance of being keen observers in the woods. On a visit to a sawmill, while the students watched a log being opened up and broken down into lumber on the headsaw, Fritz would point out the probable woods conditions under which the tree, of which the log was a part, had grown. This caused one of his students to say later: "Fritz had the ability to teach silviculture in a sawmill." Fritz also contributed not only valuable ideas but considerable physical labor. In 1926, he and Percy D. Hanson '25 did much of the initial construction on the study hall, the original cookhouse and dining porch, and the construction and plumbing of the first bathhouse.

Fritz's contribution to alumni affairs included for many years the editorship of the *California Forester*, and for several years he was the unofficial alumni secretary.

Numerous public and professional services which he performed complemented his teaching career. The terms of his University appointment permitted consulting work, and his practice has been an active one. As forester for the California Redwood Association he was largely instrumental in the widespread adoption by the redwood industry of selective cutting practices and tractor yarding methods.

He was consultant to the California Legislative Interim Committee in 1943-1945 and wrote the Committee's report, "The Forest Situation in California." This report sparked more forestry legislation than any earlier legislature had passed. This, and his contributions to redwood forestry, may properly be regarded as among his prime achievements. But they represent only two of many avenues through which his consulting work had practical effect. In recognition of those efforts Fritz has received numerous honorary awards from professional and industry groups.

As a member of the Society of American Foresters, Fritz served on its national Council from 1934 to 1936, was associate editor of its *Journal of Forestry* from 1928 to 1930 and editor-in-chief from 1930 to 1933. Fritz was elected a Fellow in the Society of American Foresters in 1951. In 1946 the same Society gave him an award for the best article for the year in the *Journal of Forestry*. In 1955 he received the Western Forestry and Conservation Association award for distinguished achievement in forestry.

Fritz was the founder of the Redwood Region Logging Conference, served for 22 years as its manager, and is now its honorary vice-president.

He is a member of the Commonwealth Club of San Francisco and was for three years chairman of its Forest and Recreation Section, for three years on its Board of Governors, and is now on its Research Committee.

He has served as councillor of the Save-the-Redwoods League since 1932, and is a member of numerous scientific, professional and conservation associations, including the American Society of Mechanical Engineers, the Forest Products Research Society, and the Sierra Club. Fritz maintains an avid interest in forest history and is currently a director of the Forest History Society and has been instrumental in procuring important lumber industry archives for the Bancroft library.

Fritz is the author of numerous articles on forestry, lumbering, wood technology, and forest policy which have appeared in the *Journal of Forestry* and other professional and scientific publications, and in several trade journals related to the wood-conversion industries. His 267-page book, an annotated bibliography on Coast redwood, is widely used by writers.

Fifty-six years after he taught his first class in Baltimore, Fritz was busily engaged in organizing a trip to appraise the effects of the 1964 flood on his beloved redwood region. Little wonder that it has been difficult to keep within the space limits that bind us here when we write of a man of such remarkable energy and such passionate interest in practical forestry.



Francis X. Schumacher

Francis X. Schumacher

Born: Dayton, Ohio, March 14, 1892.

BSF, Univ. of Michigan, 1921; Doctor of Science (honorary), North Carolina State Coll., 1959.

Assistant in Forestry, Associate in Forestry and, Instructor in Forestry, 1921-26; Assistant Professor of Forestry, 1926-30

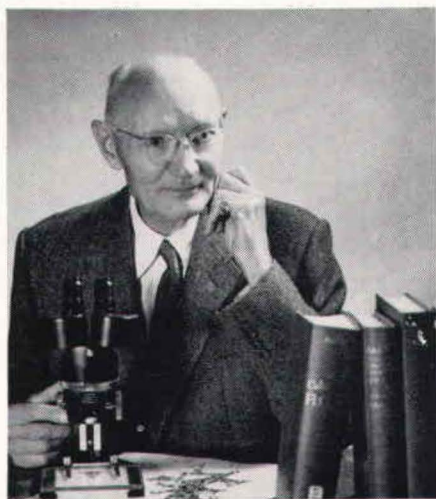
Francis Schumacher saw military service in the Medical Corps of the Ohio National Guard from August, 1916, to September, 1917, most of it along the Mexican border. In 1917, he became a second lieutenant of infantry in the U.S. Army, serving in France from June, 1918, to January, 1919. He participated in several engagements and was wounded in action near Huerne, Belgium on November 2, 1918. He received the Distinguished Service Cross and the Belgian Croix de Guerre.

"Schu" began his work at the University of California in 1921 immediately after completing his degree at the University of Michigan. At Berkeley he was stimulated for work in forest measurements and statistics through his association with Don Bruce. "Schu" continued the development of a rigorous statistical approach to mensuration when Bruce resigned in 1924.

"Schu's" outstanding work in the statistical aspects of forestry caused him to be called by the U.S. Forest Service as silviculturist, for work in this field in 1930. He became senior silviculturist in 1935, and served until 1937, when he resigned to become professor of forestry at Duke University.

In addition to a number of professional papers in the *Journal of Forestry* and other scientific journals, Schumacher co-authored two books: *Forest Mensuration* with Donald Bruce in 1935, and *Sampling Methods in Forestry and Range Management* with Roy A. Chapman in 1948. Both of these books have gone through several editions.

Schumacher was made a Fellow of the Society of American Foresters in 1959. He served on the staff at Duke until his retirement in May, 1961. On that occasion the Duke forestry alumni created the F. X. Schumacher biometrics library.



Arthur W. Sampson

Arthur W. Sampson

Born: Oakland, Bert County, Nebraska, March 27, 1884.

BS 1906 and MS 1907, Univ. of Nebraska; PhD (Plant Ecology and Climatology), George Washington Univ., 1917.

Lecturer, 1922–23; Associate Professor of Forestry, 1923–36; Professor of Forestry, 1936–51; Professor of Forestry, Emeritus, 1951–present.

Arthur Sampson's professional career began as assistant plant ecologist with the U.S. Forest Service in 1907. From then until 1911 he spent most of his time in Oregon (with shorter tours of duty in Arizona and California) studying conditions resulting from overgrazing. In 1911 to 1913 he studied reseeding of mountain ranges as associate plant ecologist with the U.S. Forest Service in Utah. When the Great Basin Forest and Range Experiment Station was established in 1913, Sampson became its first director and served as such until 1922. However, much of the time from 1914 to 1917 was spent on graduate work, first at John Hopkins University and later at George Washington University.

During these years Sampson gave short courses in range management at the universities of Nebraska, Syracuse, and Cornell. With his appointment at Berkeley in 1922 Sampson became the first person to teach a regular and continuing course in range management in the United States. Through the students whom he directed in both undergraduate and graduate work, through his research and prolific research publications, and through the textbooks he has authored, he has had a far-reaching influence on the management of wildlands for forage production.

Sampson is the author of the following books:

Range and Pasture Management, 1923; 421 pages.

Native American Forage Plants, 1924; 435 pages.

Livestock Husbandry on Range and Pasture, 1928; 411 pages.

Range Management—Principles and Practices, 1952; 570 pages.

All four books were published by John Wiley and Sons.

One of Sampson's early contributions to the School was his service in organizing and strengthening the program of graduate study in forestry. He directed the work of the graduate students both as advisor and as professor in charge of the first graduate conference or pro-seminar course. He also participated in granting the first PhD to a forester, Edward C. McCarty. In 1926 Sampson served for a year as head of the Division of Forestry while Professor Mulford was on a sabbatical in Europe.

Sampson's work at the University of California was directed toward three broad projects:

- Revegetation and management of California foothill range lands.
- The biology, ecology, and utilization of California browse plants.
- Bio-economic considerations of California brush burning.

Results were published by the Agricultural Experiment Station in five bulletins, of which Sampson was co-author on four and sole author on one.

He also co-authored one bulletin published by the California Division of Forestry. As a further outgrowth of these studies, he has published a number of scientific papers in *Hilgardia* and *Plant Physiology* and several shorter ones in various journals and periodicals. His latest research contribution was published as *California Range, Brushlands and Browse Plants* in 1962, exactly 50 years after the appearance of the first item in his bibliography. Few men can match this record of a full half century of productive research.

Sampson served on the Board of Directors of the American Society of Range Management for the years 1949-51. His contributions to forestry were recognized by his election as Fellow in the Society of American Foresters.

Sammy's life-long devotion to research and teaching was nicely balanced with his enthusiasm for sports. We suspect that secretly he may have admired some of the work of the Giants and the Cornhuskers as much as that of Weaver and Clements. And there is no secret about his effectiveness with a horseshoe at 40 feet. The recent paving of the old Freshman Field area has pretty well eliminated opportunities for him to edify students with his skill at this sport, even though it has provided a tidier place for him to park the only Cadillac in the School.



Harry E. Malmsten

Harry E. Malmsten

Born: Latah, Washington, June 29, 1890.

BS, Univ. of Idaho, 1917.

Assistant Professor of Forestry, 1924-35.

Harry Malmsten obtained his initial professional experience during the summers of 1912, 1913, 1916, and 1917 in both timber and grazing reconnaissance. The period 1917-18 was spent in the U. S. Army. From 1919 to 1921, Malmsten was employed on grazing reconnaissance by Region 4 of the U. S. Forest Service. From 1921 to September 30, 1924, he served as grazing examiner and associate range examiner on the staff of the Great Basin Experiment Station, except for five months as research associate in forestry at the University of California.

At Berkeley, although his experience and specialty was range management, Malmsten also taught courses in general forestry and forest protection. His direction of the field projects of graduate students in range management was particularly effective. He was co-author with Sampson of two bulletins pertaining to forage production, reporting results of their research.

Malmsten resigned from the University of 1935 to accept a position with the Office of Land Use Division of the Resettlement Administration. His subsequent professional career included assignments with the Bureau of Agricultural Economics in Washington and the Soil Conservation Service in the Great Plains area. Since his retirement he has lived at Spokane, Washington.



Myron E. Krueger

Myron E. Krueger

Born: Glenville, New York, June 15, 1890.

BS, Union Coll.; BSA., Cornell Univ., 1914; MS., U.C., 1917; DSc (honorary) Union Coll., 1952.

Associate Professor of Forestry, 1925-39; Professor of Forestry, 1939-55; Professor of Forestry, Emeritus, 1955-present.

Myron Krueger worked in the woods during his college career as a "log-maker" in the Adirondack Mountains of New York, and in a variety of woods and sawmill jobs on the California (now Mendocino) National Forest, the Klamath Indian Reservation, and at Port Angeles, Washington. Following his graduate work in 1916, Krueger worked for six months for Professor Bruce on the field and office aspects of time studies in logging in both the pine and redwood regions.

During the spring, summer and early fall of 1917, Krueger was employed by the U.S. Forest Service in a variety of assistant ranger jobs. A stint with the 20th Engineers, U.S. Army, covered the period October, 1917, to June, 1919. Most of this period was spent in the Landes Region of France, cruising timber and helping to produce forest products needed by the Army.

After the War, he spent a short period with the U.S. Forest Service on the Modoc National Forest. Then came six years as a logging engineer in the redwood region for the Pacific Lumber Co at Scotia and the Northern Redwood Lumber Co of Korbel.

"Krueg" began his nearly 30 years of service with the University in 1925. His special subjects were logging and forest engineering. He briefly taught forest management and forest mensuration, pending recruitment of faculty members for these fields.

Krueger followed Fritz in the administration of summer camp to which he contributed his own inimitable flavor. His exacting demands in control and railroad location surveys are still reflected in the rigorous field engineering assignments. It is not likely that the horrendous sound of his "Daylight in the Swamps" will ever be forgotten by any student who was ever exposed to Krueg's eardrum-piercing morning call.

Professor Mulford and the forestry faculty insisted that the work at camp should never bear the earmarks of a "summer vacation." Krueger found that an occasional water fight served to ease the student irritability which arduous days in the field and much "burning of the midnight oil" on calculations and preparation of reports tended to induce. He became skilled in detecting the right moment to introduce such "therapy" into the camp routine, and truly diabolical in the stratagems he devised to precipitate the treatment. Illustrative of the depths of his cunning was the occasion on which he had the students pose in front of the cookhouse, presumably for a photograph, and then turned the water hoses on them. Needless to say, before order was restored, students, faculty, and teaching assistants had all been soaked with complete impartiality. On other occasions, when Krueger saw that the students had a good grasp of the subject matter, he would let the men study but made up a phony exam of absurd questions.

Krueger saw clearly the importance to the School of having faculty members broadly involved in the affairs of the Berkeley campus. For many years he gave extensive service to the University as a whole in such activities as chairman, Berkeley Senate Committee on University Welfare, member of the Committee on Privilege and Tenure, and member of the Committee on Building and Campus Development. He was widely known and respected on all parts of the campus. Moreover, he was at pains to help younger staff members broaden their contacts in similar quarters. His daily treks up the hill to the Faculty Club for lunch, always with one or two younger faculty

members in tow and always enlivened with a few stories liberally laced with Krueger's own brand of "corn," served admirably to keep all hands in good physical shape and to develop important cross-campus ties for the younger men.

Krueger is the author or co-author of a number of bulletins and articles on forest production. His early studies of the costs of truck and tractor logging were influential in encouraging use of these techniques in the Sierra.

From 1946 to 1955, Krueger was a member of the Accrediting Committee of the Society of American Foresters, and its chairman after 1948. In this capacity, he helped clarify a number of aspects of the concept of professional forestry, and thus strengthened the entire structure of professional education. At the same time, his thinking gave impetus to the importance of timber management in the curriculum of the School.

Other important outside assignments include service as senior lumber code examiner under the NRA in 1934, and three months as special consultant to the Secretary of Agriculture on forestry matters. In addition to several *Journal of Forestry* articles, he was co-author, with S. T. Dana, in 1958 of the American Forestry Association study, *California Lands: Ownership and Management*.

In 1951, Krueger was elected a Fellow of the Society of American Foresters. From 1938 to 1941, he served on the Council of the Society. At the 40th anniversary of the graduation of his class at Union College in 1952, he was awarded the honorary degree, Doctor of Science.

Since his retirement in 1955, Krueger has served on a number of committees for the Society of American Foresters and also in several civic activities in Berkeley and Sebastopol. He was chairman of the Berkeley Community Chest during 1954-1956.

Joseph Kittredge

Born: Marblehead, Massachusetts, November 26, 1890.

AB 1912 and MF 1913, Harvard Univ.; PhD (Ecology), Univ. of Minnesota, 1931.

Professor of Forestry, 1932-54; Professor of Forestry, Emeritus, 1954-present.

Joseph Kittredge's professional career began during the summer of 1910, when he served as an assistant with the Gray Herbarium of Harvard University on a botanical expedition to Newfoundland. It continued with the U. S. Forest Service in Montana, as forest assistant and forest examiner from 1913 to 1917. His professional work was interrupted by service in the 20th Engineers, U.S. Army, in France. At the time of discharge he held the rank of captain.

Upon his return from Army service, Kittredge was made chief of the Office of Forest Experiment Stations in Washington, D.C. This terminated in 1923 when he was made silviculturist and later senior silviculturist at the Lake States Forest Experiment Station of the U. S. Forest Service, at St. Paul, Minnesota. This assignment, continuing until 1931, involved statistical methods in forestry, research in forest planting, growth and



Joseph Kittredge

natural succession of aspen-birch in the lake states, and correlation of soils, growth, and plant indicators.

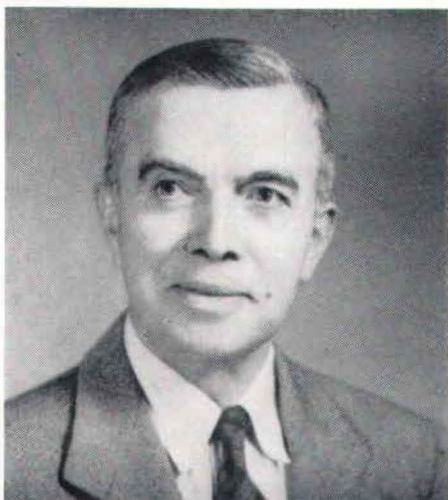
Kittredge was appointed professor of forestry in the University of California in 1932. His teaching specialty was forest influences. He offered the first (and for many years, the only) University course in this field in the United States. His research at Berkeley was particularly concerned with the correlation between forest cover and precipitation and run-off. Kittredge taught a special course in forest recreation (also among the first of its kind) to a number of students who were developing an interest in this new field. After his appointment as advisor to the graduate students, he instilled unrivaled standards of scholarship into several generations of graduate students. Building on Sampson's start, he saw to it that the School's graduate programs achieved the highest possible quality. The high rank, which the School holds among institutions offering graduate study in forestry, is due in no small measure to the standards which Kittredge instilled into it.

Kittredge is a member of the Society of American Foresters, the Ecological Society, the Geophysical Union, and the Soil Science Society.

He is the author of *Forest Influences*, McGraw-Hill, 1948, and he also wrote many bulletins, articles, and abstracts in his field of interest.

From childhood, Kittredge has pursued an active interest in birds. One of his colleagues in forestry stated that this interest, while amateur, had accomplishments that would do credit to a professional ornithologist. He has also been an ardent tennis player. Many a staff member has been victimized by Kittredge's chop stroke, diabolically innocent in appearance but devastating in effectiveness.

Since his retirement in 1954 Kittredge has lived in Sebastopol and now in Santa Barbara, where he conducts an active bird trapping and banding program and makes Braille books.



Percy M. Barr

Percy M. Barr

Born: Watertown, Connecticut, July 22, 1897.

Died: Berkeley, California, August 27, 1960.

BASc, Univ. of British Columbia, 1924; MF 1925 and PhD (Forestry) 1929, Yale Univ.; ScD (honorary), Univ. of British Columbia, 1945.

Assistant Professor of Forestry, 1932-35; Associate Professor of Forestry, 1935-47; Professor of Forestry, 1947-60.

Percy Barr leaned toward the law profession during his high school education in British Columbia, but World War I intervened before he got to college. He served in the Canadian infantry from 1915 to the beginning of 1918, seeing action in France and Belgium. He then transferred to the Royal Air Force, becoming a pilot and second lieutenant. Upon his return to civilian life in 1919, summer work with the British Columbia Forest Service showed him the true direction of his interests.

From 1925 to 1932, he was engaged in research on the ecology of the spruce forests of British Columbia. His publications on natural regeneration and the role of soil moisture in spruce silviculture continue to be widely consulted today. In 1932 he was placed in charge of the Research Division of the British Columbia Forest Service.

At this time, his acceptance of a lectureship at the University of California marked a turning point in his career and research interests. His talents as a teacher were quickly recognized, and he was offered a continuing appointment at Berkeley in the fall of 1932.

During his academic career his interests broadened increasingly from forest biology to include the economic and business aspects of forestry. Perhaps his greatest contributions to this latter area were in his teaching,

including his published outlines of forest mensuration and forest management which are the distilled essence of these central topics in forestry. A demanding instructor, he communicated his passion for organization and his insistence on precision and accuracy to even the more reluctant of his students.

Early in his association with the University, Percy Barr assumed responsibility for the management and development of Blodgett Forest Research Station, the principal field experiment station of the School of Forestry. The time and interest which he devoted to this project over a 20-year period provided the School with an increasingly valuable facility for research and teaching. The long-term experimental work which he initiated there will serve as a continuing monument both to the man and to his concern for professional practice thoroughly grounded in research.

World War II was more an opportunity for service than an interruption in his career. Foreseeing the inevitable involvement of the United States, he went on active duty as a captain in the U.S. Army Air Forces in August, 1941. Assigned to intelligence duty, he served in Washington, North Africa, and Italy. By 1944, he had risen to the rank of colonel and became assistant chief of staff, intelligence, of the 15th Air Force. For the service he rendered, he was awarded the Legion of Merit and the Bronze Star by the United States, the Croix de Guerre with Palm by France, and the Order of the British Empire.

Upon his return to the University, his organizational abilities and the wide respect which he commanded among the faculty were recognized in a series of special assignments, beginning with appointment as associate to vice-president and provost in 1947. These duties culminated in 1950 with service as chairman of the Committee on Courses and Instruction, chairman of the Committee on Schedule, member of the Committee on Privilege and Tenure, chairman of the Committee on Building and Campus Development, and chairman or member of three additional committees within the College of Agriculture. Simultaneously he served as chairman of the Berkeley Chapter and vice-chairman of the Pacific Area Regional Advisory Council of the American Red Cross.

The slowly developing symptoms of Parkinson's Disease forced his gradual retirement from this remarkable array of University and community services. Undaunted and unyielding, Percy Barr concentrated his efforts on his teaching and his studies of the business aspects of forestry. In 1953 he inaugurated the first course in industrial forestry to be given in the United States.

With his wide knowledge of forestry operations in the United States and Canada, combined with his ability to perceive the important, he came to occupy a special role in the School of Forestry. The twinkle in his eyes, the quick bite of his humour, and his deep interest in the development of his profession never deserted him. During these days, his cheerful accommodation to the irksome problems of declining physical ability must have challenged and inspired the spirit of his students as effectively as his seminars challenged their intellects.

Following one of his usual full days of work at his office, he died quietly in his sleep early in the morning of August 27, 1960.

To his associates and to his students, he contributed much in understanding of forestry, in approaches to organizing tasks, and in encouragement in the development of individual abilities.



Robert A. Cockrell

Robert A. Cockrell

Born: Yonkers, New York, August 11, 1909.

BS (cum laude) 1930 and MS 1931, New York State Coll. of Forestry at Syracuse; PhD (Wood Anatomy), Univ. of Michigan, 1934.

Assistant Professor of Forestry, 1936-44; Associate Professor of Forestry, 1944-50; Professor of Forestry, 1950-present; Associate Dean of the Graduate Division, 1956-present.

Robert Cockrell worked as a junior forester for the U.S. Forest Service in New Mexico and Texas in the summers of 1933 and 1934. In the fall of 1934, he joined the forestry staff at Clemson College, South Carolina, as associate professor. He resigned in 1936 to accept the appointment at Berkeley.

Cockrell taught the course in dendrology and worked closely with Mulford on instruction in Forestry 100, the introduction to professional forestry, and Forestry 1, the orientation course for non-majors. For many years he also handled the work in forest utilization at summer camp. His teaching has been marked by meticulous attention to significant detail and the same rigorous approach which marks his research in wood anatomy and

physics. In 1947, he organized PhD programs for two students in biophysics which became the prototypes for the expanded program of graduate work in wood science which was to develop a few years later.

From 1942 to 1945 Cockrell served as a wood technologist at the U.S. Forest Products Laboratory in Madison, Wisconsin, in support of the war effort. While at Madison, he started planning for the U.C. Forest Products Laboratory, and upon his return to Berkeley in 1945, continued with this until the laboratory was completed in 1954. In 1947 he became the southwestern regional representative on the Executive Board of the newly organized Forest Products Research Society. In 1950 he went to Japan for six months with the U.S. Army as a forestry research specialist in forest products.

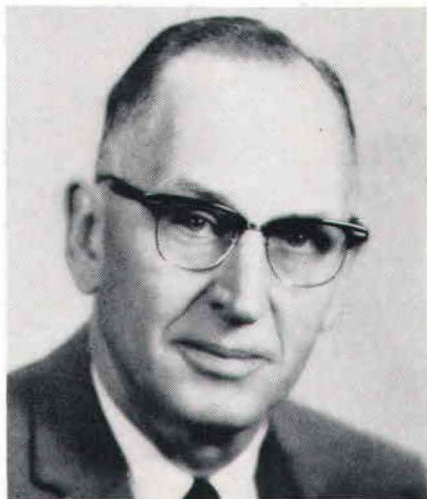
Following Kittredge's retirement in 1954, Cockrell became graduate student advisor for the School. The great expansion in student enrollment following World War II and accompanying growth problems, brought a wide variety of committee appointments. Cockrell was secretary of the steering committee for the eleventh All-University Faculty Conference. Among his other assignments were Undergraduate Scholarship Committee (four years as chairman); Building and Campus Development Committee; Chancellor's Advisory Committee on Joint Activities of Faculty and Alumni (four years as chairman); Counseling Center Advisory Committee; Student Affairs Committee; Committee on Coordination with State Colleges; Committee on Courses; Committee on Privilege and Tenure; and two years as chairman of the campus drive for the United Crusade. He was elected to several terms on the Representative Assembly of the Northern Section of the Academic Senate and in 1962 was elected to a two-year term on the Committee on Committees of the Berkeley Division of the Academic Senate.

Cockrell's broad service to the Berkeley campus is perhaps the most striking example of the forestry faculty's contribution to the University at large. Its administration is a very complex matter, requiring for its success a heavy investment of faculty time. Over the years, the School of Forestry has contributed much more than its proportionate share to these vital but little recognized efforts. And no one in the School has done more than Cockrell—in itself a recognition of his discernment, patience, and scholarly judgment.

Cockrell's campus-wide services and abilities were recognized in November, 1956, with his appointment as associate dean of the Graduate Division for the Berkeley campus. In 1961, he was taken into the senior men's honorary Order of the Golden Bear and was elected to the Board of Directors of the Faculty Club in 1963.

In 1961, Cockrell took a half-year sabbatical as an O.E.E.C. Senior Visiting Fellow in Science at Munich and Zurich.

Bob's extra-curricular activities are as diversified as his academic contributions. The Cockrell home is largely a tribute to his skills as a builder (and a plaque in his office commemorates a summer camp incident where even his woodsman's talents were insufficient to avert disaster). Each year his fine singing voice swells the Monks' Chorus at the Faculty Club Christmas Party and, paired with Woody's, makes "Good King Wenceslas" a traditional feature of the Mulford Hall Christmas Sing



Horace R. Josephson

Horace R. Josephson

Born: Loleta, Pennsylvania, December 20, 1908.

BS, Pennsylvania State Coll., MS 1933 and PhD (Agricultural Economics) 1939, U.C.

Assistant Professor of Forestry, 1940-45.

H. R. Josephson joined the U.S. Forest Service in 1934 as an associate forester in the California Forest and Range Experiment Station. The close association of the Station and the School made it possible for him to continue his work toward the PhD. While at the Station, he worked on an intensive land use study of the Sierra foothills under the direction of Wieslander.

About this time, Mulford was scouting the country for a professor of forest economics. As department heads will do, Mulford asked for suggestions and the views of his counterpart at other universities. Samuel T. Dana, then chairman of the forestry department at the University of Michigan, delights in telling his response to Mulford's request about a forest economist: "There is no problem of *which* forest economist, since there is only one man so trained in the United States—H. R. Josephson."

Mulford hired Josephson as assistant professor in 1940. Thus, on Dana's evidence, "Joe" offered at Berkeley the first courses taught by a trained forest economist. He taught two years before taking a leave of absence in 1942 to serve under Major Percy Barr as an air intelligence specialist with the U.S. Air Corps in Washington, D.C.

At summer camp, Joe engineered and supervised the construction of "beautiful Lake Josephson" in the upper part of Schneider Creek Meadow.

Unfortunately the design was inadequate to deal with the high water of the following spring, and all that remains of this contribution to our recreational resources is a rather unsightly pile of dirt at the head of the meadow which students now point out as a remnant of the gold diggings of the 1850's. *Sic transit gloria mundi!*

In 1945, Josephson resigned his appointment with the University and rejoined the U.S. Forest Service as assistant chief of the Division of Forest Economics Research in Washington, D.C. In 1953, he became chief of the division and continues to serve in that position in 1965. He is the principal author of the 1964 national timber resource inventory of the U.S. Forest Service.



R. Keith Arnold

R. Keith Arnold

Born: Long Beach, California, November 17, 1913.

BS (highest honors) U.C., 1937; MF, Yale Univ., 1938; PhD (Economics), Univ. of Michigan, 1950.

Associate in Forestry, 1939-1942 and 1946-1949; Assistant Professor of Forestry 1950-1955.

The second U.C. forester to be honored with election to Phi Beta Kappa honor society, Keith brought a lively enthusiasm to his teaching assistant activities in the classroom in Berkeley and at summer camp. Following his World War II service in the U.S. Navy, he rejoined the school staff as senior assistant. During this period of the most rapid growth in the School's history, he served as director of summer camp, including the frantic summer of 1948

when camp was changed from a post-junior camp to a post-sophomore camp and both had to be squeezed into a single summer. Perhaps it was to rest up from this that the next winter Keith completed his year of residence at Ann Arbor to get his PhD.

Returning again to Berkeley, he taught the forest fire course and conducted research in fire behavior and ignition techniques. Much of the research work was done in collaboration with the California Forest and Range Experiment Station. When Project Firestop, a multi-agency "crash" testing program for forest fire suppression ideas, was organized in 1954, Keith was made co-director (with Charles C. Buck '30, division chief for fire research in the California Forest and Range Experiment Station). After the successful completion of Firestop in early 1955, Keith resigned from the University to replace Buck, who had transferred to Washington, D.C.

Three years later, in 1958, when George M. Jemison, director of the Station, moved to Washington, Keith was promoted to succeed him.

In August, 1963, Keith was again promoted, this time to chief of protection research in the Washington office, the position he holds today.

Keith served the California Alumni Foresters as president during the 50th anniversary year—1964.



Robert N. Colwell

Robert N. Colwell

Born: Star, Idaho, February 4, 1918.

BS 1938, PhD (Plant Physiology) 1942, U.C.

Assistant Professor of Forestry, 1947-51; Associate Professor of Forestry, 1951-57; Professor of Forestry, 1957-present.

When Bob Colwell joined the faculty in 1947, he quickly converted to professional use the skills and concepts which he had acquired during World War II as a military photo-interpreter. His course in forest photogrammetry was one of the first to be offered in what was then a highly significant new field. Colwell's unrivaled experience in the field, his boundless enthusiasm for the possibilities of photo-interpretation, and his ability as a classroom teacher have combined to give his courses notable reputations among the students and throughout the country. His research has been directed at broadening the practical usefulness of aerial photography and has resulted in numerous ingenious and valuable contributions to the field. He has often served as director of summer camp, and several generations of students who have tried to follow him up Spanish Peak will testify to the energy which Bob put into his work there.

The saga of Bob's trek to summer camp as an undergraduate is typical of his energetic approach to problems. He struck out for camp on his well-loaded bicycle and arrived at Oroville to find the Buck's Lake Road closed by snow and the Feather River Canyon Highway still under construction. The only route from Oroville that was open and going his way was the Western Pacific Railroad. He learned from a hobo that Keddie, his destination, was "22 tunnels up the line." He loaded his bike aboard the first freight and kept tally of the tunnels in the darkness by placing a knot in his pack rope at each tunnel. After the 22nd tunnel, the train stopped briefly and Bob, bike and pack got off. In the pitch black night, he found a bedroll spot out from between the tracks and awoke the next morning to find he had slept on the brink of a cliff.

The remaining few miles to camp were uneventful. A few hours later, however, Bob developed the mumps and was taken immediately by auto to Berkeley (for more on this, see the Mumps Camp story in Chapter 6). Bob's comment: "At least my bike is at camp!"

The return from camp at the end of summer was made bicycling down the by-then-nearly-completed canyon route. After negotiating the new highway tunnels, Bob was flying down the last few miles when he met the governor's entourage making the ribbon-cutting inaugural trip up the road. One can imagine their surprise at the sight of a school boy on a bicycle careening down what they thought was an as yet untravelled road!

International recognition came in 1952 when Colwell was made the first president of Commission VII (photo interpretation) of the International Society of Photogrammetry. From the American Society of Photogrammetry he has received the Abrams Award (1954), the Fairchild Award (1956), the Brock Award (1957), and the Photo Interpretation Award (1964), the only individual ever to receive all of these awards. In 1954-55 he served as a vice-president of the Society and in 1963 was made an honorary life member.

Under Colwell's direction as editor-in-chief, the American Society of Photogrammetry published the 900-page *Manual of Photographic Interpretation* in 1960. His other publications include a number of major research reports and about 100 scientific and popular articles. In 1963-64 he was the national lecturer to the mid-Atlantic states for the Society of Sigma Xi. For several years, Bob has participated in the visiting-scientist program of the

Society of American Foresters-National Science Foundation. In this program, he has travelled to numerous forestry schools over the country and given them the benefit of his excellent presentations coupled with his exciting illustrative material.

Bob is a respected, world-wide authority on remote environmental sensing, using media both inside and outside the visible spectrum. Some of his current work includes measurement of the surface of the moon—a remote environment, indeed!

He continues his Naval Reserve activities as captain.

In addition to his undergraduate forestry course in photogrammetry and the general forestry seminar, Bob teaches a photo interpretation course in the geography department at Berkeley.



Harold H. Biswell

Harold H. Biswell

Born: Fayette, Missouri, November 8, 1905.

AB, Central Coll., 1930; MS 1932 and PhD (Ecology) 1934, Univ. of Nebraska.

Associate Professor of Forestry 1947-1949; Professor of Forestry (Range Management) 1949-present.

Biswell first joined the U.S. Forest Service as a junior range examiner. During the next 13 years, he was with the California Forest and Range Experiment Station stationed at the San Joaquin Range, and the Southeastern Forest and Range Experiment Station, where he advanced to the position of principal ecologist. Biswell's work in the Southeast played an important part

in clarifying the role of fire in the ecology of southern pine stands and was instrumental in the development of improved prescribed burning practices in that area.

Biswell brought to the School his wide experience in California range management and the control of vegetation with fire that he learned in the southeastern region. He taught a course in advanced range management and, when Sampson retired in 1951, assumed responsibility for the long established introduction to range management. About this time he and Harold Heady collaborated with faculty members from Davis in organizing the undergraduate curriculum in range management and he has remained a member of the committee responsible for administration of that curriculum since its inception. Beginning in 1962, he and Heady offered their range courses at Davis as well as at Berkeley.

For many years, Biswell led a research project on the improvement of game ranges, sponsored by the California Department of Fish and Game. His work emphasized the use of fire as a tool in brush range improvement. Experience with these practices led him into studies of the use of fire as a means for hazard reduction in ponderosa pine stands. The work at Hoberg's and Teaford Forest which he initiated has stimulated enlarged interest over the role of fire in California forest management.

Biswell was the first editor of the *Journal of Range Management* (1948–50) and has been associate editor of *Journal of Forestry* six years; *Ecology*, three years; *Ecological Monographs*, three years. He is the author and co-author of ten major articles and bulletins and more than 100 professional articles. In 1961–62, he taught a course in range management at Aristotelian University in Thessaloniki, Greece, under a Fulbright award. In this he was assisted by Leonidas Liacos, who had been a visiting scholar in Berkeley for some time before. Biswell and Liacos are co-authors of *Levathoponeke*, meaning “economy of range management,” textbook in Greek published in 1962.

For two months before and two months after his assignment in Greece he held a Guggenheim fellowship and studied the historical role of fire in Mediterranean vegetation in southern France and other portions of the northwestern Mediterranean area.

In 1964, Biswell received the Order of Golden Fleece award of the California Woolgrowers Association for his services to the grazing industry.

John A. Zivnuska

Born: San Diego, California, July 10, 1916.

BS (honors) 1938 and MS 1940, U.C.; PhD (Agricultural Economics) Univ. of Minnesota, 1947.

Instructor in Forestry, 1948–1949; Assistant Professor of Forestry, 1949–1955; Associate Professor of Forestry, 1955–1959; Professor of Forestry (Forest Management), 1959–present; Acting Dean, 1961–1962.



John A. Zivnuska

In 1940, Zivnuska served in the U.S. Border Patrol in Texas for a year before returning to Berkeley in August, 1941, for an additional year of graduate work. He joined the U.S. Naval Reserve as an ensign in May, 1942, and rose to the rank of lieutenant in December, 1945, while serving as a gunnery officer on cargo ships and destroyers in the Pacific. With two more years of graduate work at St. Paul he completed his PhD and became a member of the Berkeley faculty.

Zivnuska's keen and incisive mind has led him to an international reputation as a timber resources projection analyst. His research and principal publications attest to this. Examples are: *Business Cycles, Building Cycles and Commercial Forestry* (1952), a study of the significance of building and general business cycles on the practice of commercial forestry in the U.S.; *Timber Today—and Tomorrow* (1956), a critique of the U.S. Forest Service's *Timber Resource Review*; *Private Forestry in Norway—A Case Study in Small Woodland Management and Policy* (1959), a monograph which resulted from his sabbatical year in Norway in 1954–55; and *Economic Development Prospects for the Commercial Forest Resources and Forest Products Industries of California* (1964), a report for the California State Office of Planning (co-authors: Paul Cox, Adon Poli, and David Pesonen).

John has a solid quality as a teacher, and his ability—in seminar, conference or general meeting—to perceive, organize and summarize any problem under discussion is a marvel to anyone who ever witnessed it. As a constructive critic, he has no peer in his field.

His abilities to analyze and organize information were put to use in consultations with Stanford Research Institute, the Economic Commission of the United Nations for Asia and the Far East, the Forest Industries Council, the Navajo Tribal Council, and numerous private forest industrial firms.

Outside the University, Zivnuska served on the Council of the Society of American Foresters in 1962–1963 and in 1963 was elected a Fellow. He is an elected corresponding member of the Finnish Forestry Society and was the organizer of the Forestry Section of the Tenth Pacific Science Congress in 1961. In 1964, John was appointed by the Secretary of Agriculture to the Department of Agriculture Forestry Research Advisory Committee.

Zivnuska's leadership and abilities have led to many important campus-wide assignments, particularly the Building and Campus Development Committee and the Graduate Council. On November 20, 1964, the Regents appointed him to be the School of Forestry's fourth dean, to take office on July 1, 1965.



Edward C. Stone

Edward C. Stone

Born: Cairo, Illinois, November 28, 1917.

BS (highest honors) 1940 and PhD (Plant Physiology) 1948, U.C.

Instructor, 1949–51; Assistant Professor of Forestry, 1951–58; Associate Professor of Forestry, 1958–63; Professor of Forestry (Forest Management), 1963–present.

Ed Stone received his Bachelor's degree just before World War II and served as a captain in the U.S. Army military police. After finishing his doctorate he joined the faculty and has been in continuous service, except for his recall to the Army in 1951–53 during the Korean crisis.

An aggressive and demanding student (Stone was the third U.C. for-

ester to be elected to Phi Beta Kappa), he has carried the mental challenges of his discipline to the teacher's end of the classroom. His thorough grounding in the fundamentals of ecology and organization provide an enlightened insight into the subject for his students. Ed's rigorous approach to research demands that the full spotlight of statistical proof be brought to bear on his physiological experiments. His bibliographical review always digs deep.

Stone's vigor and enthusiasm in pursuit of answers to physiological problems of why trees behave the way they do has led to a wide variety of complicated research projects, some extraordinary laboratory equipment, and large groups of devoted graduate students and assistants. His aptitude in the acquisition and adaptation of war surplus equipment to University research activities is legendary.

On his sabbatical in 1959, he received a Fulbright Research Scholarship to New Zealand and was awarded a Guggenheim Fellowship for study in Australia and South Africa as he completed his trip around the world.



Arthur B. Anderson

Arthur B. Anderson

Born: North Fond du Lac, Wisconsin, February 17, 1907.

AB 1929 and PhD (Chemistry) 1933, Univ. of Wisconsin.

Lecturer in Wood Chemistry, 1950-present. Acting Director—U.C. Forest Products Laboratory, July, 1962-January, 1963.

Arthur Anderson came to Berkeley as the first regular employee of the University's Forest Products Laboratory from the position of director, re-

search and development for the Oregon Lumber Co in Portland, Oregon. Previously he had served as a chemist and in technical sales with the Quaker Oats Co in the Midwest from 1934 to 1941. He then devoted eight years as a research chemist with the Western Pine Association.

Art came to Berkeley with a strong background in wood chemistry. He had already made important research progress in the utilization of wood wastes and the prevention of knot "bleeding" through paint. In the Forest Products Laboratory he has continued his investigations in wood and bark extractives, the solvent seasoning of wood. He has contributed substantially to the knowledge of Pinitol, a pharmaceutical chemical derivative of sugar pine, and the understanding of redwood extractives and staining mechanisms.

Anderson has taught a graduate seminar in wood chemistry since 1958. He is also associated with the University's Chemistry Department where he works with and counsels students interested in forest chemistry.

On his sabbatical in 1956-57 Anderson secured a Fulbright Scholarship to Norway. His next sabbatical, 1963-64, he spent on an appointment with the UN-FAO at the Forest Products Research Institute of the University of the Philippines.

During the last half of 1962, Art served as acting director of the laboratory during F. E. Dickinson's absence.

Harold F. Heady

Born: Buhl, Idaho, March 29, 1916.

BS, Univ. of Idaho, 1938; MS, New York State Coll. of Forestry, 1940;

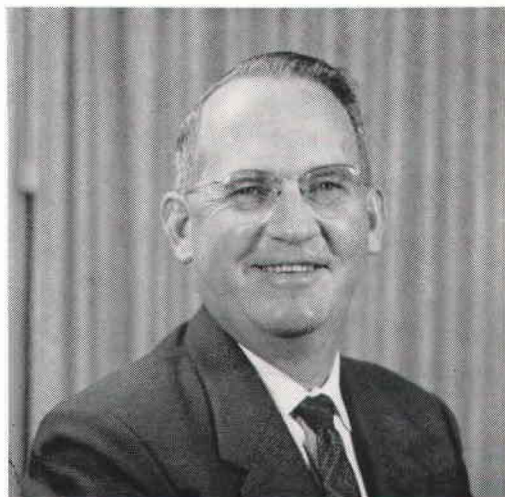
PhD (Botany), Univ. of Nebraska, 1949.

Assistant Professor of Forestry, 1951-56; Associate Professor of Forestry, 1956-62; Professor of Forestry (Range Management), 1962-present.

Heady did some additional plant ecology pre-doctoral work at the University of Minnesota and, before coming to Berkeley, had been acting assistant professor at Syracuse, assistant professor at Montana State College, and associate professor at A & M College of Texas.

Arriving just after Sampson's retirement, Harold completed the complement of two on the range management staff in the School. His wide background was immediately applied to numerous projects in the fields of plant and animal ecology. His research and publications attest his considerable contribution to California range ecology. In his 13 years in California he has published more than 25 papers related to California's grasslands. Harold's work has covered the fields of sampling techniques, vegetational characteristics and changes, grazing systems, palatability, and forage preference studies on animals with esophageal fistulas.

Harold teaches both undergraduate and graduate range courses and, since 1963, has offered regular range management courses on the Davis campus of the University. He serves as graduate advisor to the range management students.



Harold F. Heady

In March, 1946, while on the Montana State College staff he was attending an Inter-Agency Range Management Conference in Moscow, Idaho. Harold served as leader of a panel on the subject "The Need of a Range Management Organization." This was not the first time this had been discussed but it was the occasion that brought action. Harold became co-chairman of the investigating and organizing committee and was the first elected secretary and treasurer of the American Society of Range Management in 1948. He later (1951-53) served on the editorial board of that society's journal.

On his sabbatical in 1958-59, Heady conducted a grassland study in Kenya, Africa, under a Senior Research Fulbright Scholarship and a Guggenheim Fellowship. This work, in turn, led to a UN-FAO assignment in the fall in 1962, to study the grasslands of Saudi Arabia.

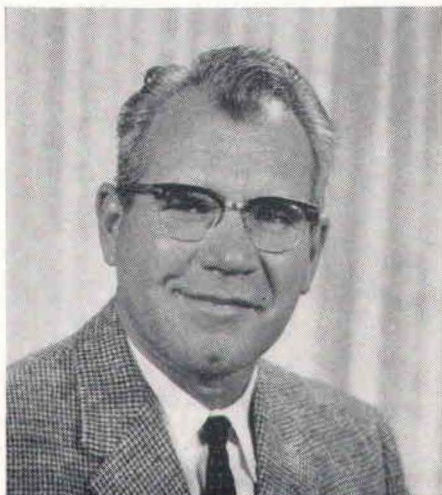
Rudolf F. Grah

Born: San Diego, California, August 21, 1915.

BS. Oregon State Coll., 1939; MS, U.C., 1941; PhD (Forestry), Univ. of Michigan, 1957.

Lecturer in Forestry, 1954-61; Professor of Forestry (Forest Management), 1961-present.

Rudy Grah actually began his duties with the School while a Master's student in 1939. Upon completion of his MS he became a field assistant in the School for two years. In 1943, he joined the Rubber Development Corp in Brazil to search for and develop rubber sources to replace those denied the Allies during World War II.



Rudolf F. Grah

After returning to Berkeley in 1946, Grah joined the Agricultural Extension Service as assistant extension forester and worked very closely with Woody Metcalf. He remained in this position until 1953 when he went to Ann Arbor for his year of residence toward his PhD. When he again returned to Berkeley, he began his regular teaching duties, first in engineering and production management and later in Forestry 1 and forest management.

Rudy's research work has delved into such subjects as firing techniques for controlled burning, log grade recovery studies, and wood quality in young-growth forest stands, and the economics of their management. Much of his current forest management research is being conducted at the School's Blodgett Forest.

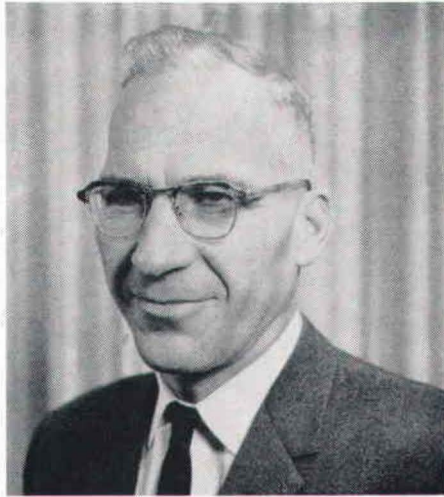
On the campus, Rudy serves as chairman of the faculty of the School of Forestry, graduate advisor and as chairman of the University's Berkeley and State-wide Committee on Undergraduate Scholarships. He supervises the spring recess field trip for the junior class winners of the Forest Industry Award.

His cheerful personality and wide association in California forestry and extension circles are valuable assets to the School.

Fred E. Dickinson

Born: Buena Vista, Beltrami County, Minnesota, December 29, 1912. BS, Univ. of Minnesota, 1938; MS, Michigan State Univ., 1941; PhD (Forest Products Economics), Yale Univ., 1951.

Professor of Forestry (Wood Technology) and Director of the Forest Products Laboratory, 1955-present.



Fred E. Dickinson

Dickinson's early work, after his BS degree, was with the Civilian Conservation Corps and the U.S. Forest Service in Minnesota. After receiving his MS degree, he taught for a year as director of the forestry department of Lassen Junior College at Susanville, California. Beginning in 1942, he served for three years at the U.S. Forest Service Forest Products Laboratory at Madison, Wisconsin. Following World War II, he joined the faculty at the Yale School of Forestry and, while serving as assistant professor of lumbering, completed his PhD. He joined the University of Michigan faculty in 1952.

During Dean Baker's administration, a nation-wide search was made to find the best possible man to direct the Forest Products Laboratory. Dickinson, then chairman of the Department of Wood Technology at the University of Michigan, was chosen and the great progress of the laboratory during the more than nine years since his arrival is a tribute to his selection.

Pressed with all the problems of developing a new organization, Dickinson has gathered a strong and diversified staff, directed to conclusion and publication many important research projects, and developed short courses and other extension-type activities that have brought widespread attention and support to the laboratory. He has been active in teaching the lumbering course in the School and has had campus-wide service as a Faculty Fellow in one of the University dormitories.

He is a member of a number of forestry and wood technology societies and served as president of the Forest Products Research Society in 1963-64. In 1964 he became a member of the Committee on Forestry Research of the Agricultural Board, National Academy of Sciences—National Research Council.



Paul Casamajor

Paul Casamajor

Born: Los Angeles, California, March 1, 1919.

BS 1941 and MF 1958, U.C.

Lecturer in Forestry (Forest Management), 1956, 1958–present.

Paul Casamajor graduated from the School just in time to enter World War II service as a photographic interpretation officer with the Navy. He was mustered out in 1945 with the rank of lieutenant and soon joined Fairchild Aerial Surveys, Inc. in Los Angeles in the production department. Later he served as the company's Pacific Northwest sales representative. In 1950 he accepted a position with Shasta Forests Co in Redding, California, as an inventory and mapping specialist and land manager. While with Shasta he conducted log grade recovery and timber growth studies. In 1954–55 he worked on contract photo interpretation projects for the U.S. Air Force in Washington, D.C.

Casamajor joined the School staff in 1956 to teach the undergraduate forest fire course following Keith Arnold's departure from the staff. Although his initial assignment was temporary, he was able to handle such a diversity of assignments that he soon became a fixture. He participated in the School's land ownership studies which resulted in two bulletins of which he is a co-author, and found time to complete his MF degree by 1958. But Casamajor's principal assignment has been in the teaching field. He has taught the course in forest fire control since 1958 and has added to it a graduate course which forms a big part of special Master's programs for specialists in fire problems.

Casamajor has been much in demand to organize and present in-service short courses on fire behavior and control for the Forest Service, Depart-

ment of Interior, and other land management agencies. In the course of his teaching program he has developed a number of training aids; for example, a fire simulator which he uses effectively in Forestry 128.

Over the years, Paul has taken on a variety of semi-administrative assignments of great importance to the School. Each year he organizes job placement information and assists a hundred or so students with temporary or permanent jobs needed to gain practical forestry experience. He has handled an increasing amount of career counseling for prospective students and is currently engaged in broadening this very important program. And for the past two years, as a part time and extra-curricular activity, he has been the ramrod on this history. As a result, Paul now has more inside scoop on the School (and on its faculty and graduates) than anyone else, with the possible exception of Birdie.



Dietrich W. Muelder

Dietrich W. Muelder

Born: Hildesheim, Germany, September 25, 1906.

Doctor of Forestry, Univ. of Göttingen (Germany), 1947.

Visiting Professor of Forestry, 1956-57; Professor of Forestry, 1958-1965.

Dietrich Muelder first visited Berkeley during the spring of 1956 as a Fulbright Fellow. Any small difficulty he may have had with the English language at first was more than offset by his great talents in the "language" of silviculture. He was invited to come to the School to teach silviculture in

the fall of 1956, the first year since 1925 that the course had not been taught by F. S. Baker who had just retired.

Dietrich's solid background in fundamental silviculture permitted him to adjust to California ecological conditions in a well ordered rush. Indeed, his lack of experience with California may have sharpened his observation since everything he saw was new to him.

His spirited and concentrated lectures coupled with weekend trips to the Sierra and to the coastal redwoods provided lively motivation and a full measure of silviculture for his students.

Concluding that one of the major forestry problems was California's long dry season, Dietrich concentrated his major research energies on the problems of regeneration and seedling survival. Much of his work was initiated at the Blodgett Forest Research Station and in various locations in the north coast area.

During his eight active years on the staff, Muelder published 18 articles and monographs on California silviculture. Among these is his articulate criticism of the system called "Unit Area Control."

Since he was already on leave of absence from his position with the Lower Saxony State Forest Service during his stay in Berkeley, it was necessary for him to take leave from Berkeley in February, 1964. This leave expired early in 1965 and Muelder continues his work in Germany.



Marshall N. Palley

Marshall N. Palley

Born: Pittsburgh, Pennsylvania, October 24, 1919.

AB, Princeton Univ., 1940; BSF and MF, Univ. of Michigan, 1942;

PhD (Forest Economics) Michigan State Univ., 1956.

Lecturer in Forestry (Forest Management), 1956-63.

Fresh from his doctorate work at Michigan State and with several years background in forest inventory in Canada, Marshall Palley joined the faculty as a specialist in mensuration. His teaching in this field contained some particular emphasis in the use of electronic computational machinery. In his second year he initiated an undergraduate group study course in recreation which, by popular demand, was repeated every year he was on the staff.

Marsh's concern has been basic research in point versus fixed area sampling theories with respect to heterogeneous forest stands and applied research in yield prediction. In this area he co-authored (with James L. Lindquist) in 1963 the major bulletin *Empirical Yield Tables for Young-Growth Redwood*.

His excellent work led, in 1959, to a citation for outstanding contributions by the California Agricultural Experiment Station.

Late in 1963, Marsh resigned from the University to serve as a northern California representative to college students for the American Friends Service Committee.



Paul J. Zinke

Paul J. Zinke

Born: Los Angeles, California, November 10, 1920.

BS 1942, MS 1952, and PhD (Soil Science) 1956, U.C.

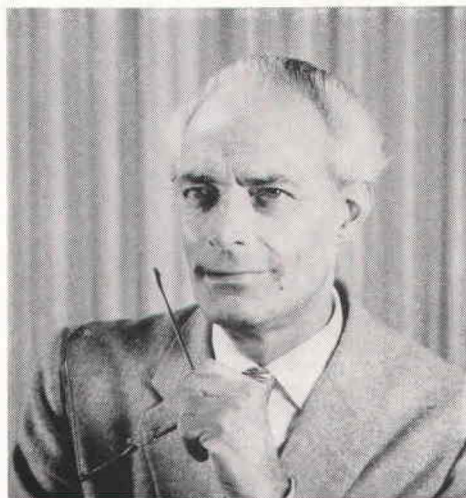
Assistant Professor of Forestry, 1956-62; Associate Professor of Forestry (Forest Management), 1962-present.

Paul Zinke joined the staff in 1956 after a brief employment in watershed management research at San Dimas with the California Forest and Range Experiment Station. His position as replacement in the discipline of forest influences, left vacant by Kittredge's retirement, has been strong and

fruitful. Among the courses Paul taught in his first years on the staff was dendrology. His flair for fascinating trivia added considerable spice to the course. Recognition of his abilities came soon. At the 1959 graduation ceremony, he was awarded one of the four citations given to the Berkeley faculty for distinguished teaching.

Long before his doctorate work, he was associated with the California Soil-Vegetation Survey. An inquisitive naturalist in the John Muir tradition, Paul has probably seen nearly as much of California from a trail as any other living person. He continues to serve as an advisor to the Survey.

Zinke's sabbatical trip in 1963-64 was taken to Italy. Most of the time was spent conducting a soil survey in the northern part of the country—the same area he had fought with the Mountain Troops during World War II.



Joseph E. Marian

Joseph E. Marian

Born: Pressburg, Austria-Hungary, January 25, 1901.

MS, 1925 and D. Tech. Sc. (Chemical Engineering) 1929, Technische Hochschule (Vienna, Austria).

Lecturer in Forestry (Wood Technology), 1956-present.

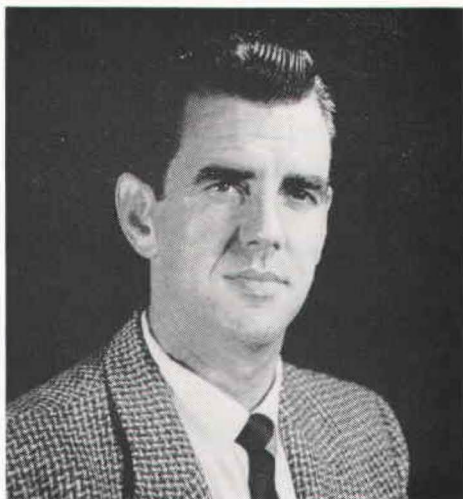
A world leader in the specialized field of adhesives and glues, Joseph Marian joined the U.C. Forest Products Laboratory as its specialist in that field. His previous work, in Austria, Germany, Czechoslovakia, and the Netherlands, had been in rubber chemistry. In 1937 he moved to Finland for ten years, then to Sweden. In 1962, he headed the adhesives and finishing

division of the Swedish Forest Products Research Laboratory at Stockholm. He has received the Marshal of Finland Mannerheim Medal of Honor for industrial war services in 1939-40 and Finland's Cross of Liberty II Class, 1943.

Marian's teaching is entirely to graduate students in his field.

In 1959-60 Marian took a leave of absence to serve as an advisor to the government of India, National Council of Applied Economic Research, at New Delhi.

He is the author of a book (in Swedish) on Glues and Gluing.



Eric L. Ellwood

Eric L. Ellwood

Born: Melbourne, Australia, September 8, 1922.

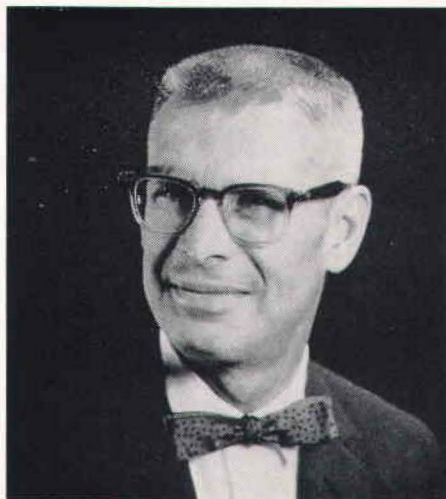
BSc (Forestry) 1945 and MSc (Forestry) 1950, Univ. of Melbourne;
PhD (Timber Seasoning), Yale Univ., 1953.

Lecturer in Forestry (Wood Technology), 1957-61.

A wood technology specialist in the problems of wood drying, Ellwood joined the U.C. Forest Products Laboratory staff from his position as senior research officer with the Australian Commonwealth Scientific and Industrial Research Organization in Melbourne.

Although Eric's major effort was devoted to research, he did counsel graduate students and, in the spring of 1961, he teamed up with Arno Schniewind to teach an undergraduate group study course in wood quality.

In mid-1961, Ellwood resigned to become the director of the Forest Products Laboratory at North Carolina State College.



David L. Brink

David L. Brink

Born: St. Paul, Minnesota, July 7, 1917.

BS (with high distinction) 1939 and PhD (Agricultural Biochemistry-Forestry) 1954, University of Minnesota.

Lecturer in Wood Chemistry, 1957-present.

Brink came to the School's Forest Products Laboratory with eight years of industrial wood chemistry experience with the Mead Corp in Ohio and with the Weyerhaeuser Co in Washington. Although his primary effort has been research work, he has assisted Dickinson with teaching the undergraduate lumber manufacturing course and guiding student research work.

One of Brink's most exciting research efforts concerns the possibility of pulping wood with nitric acid instead of sulphuric acid. This process offers the potential, in a water-scarce region, that pulping waste products can be made valuable and useful as fertilizer instead of being an unwanted effluent.

As the School's second 50 years begins, Brink has taken a regular class in the chemical processing of wood in the School's expanded wood technology program.

Arno P. Schniewind

Born: Cologne, Germany, June 1, 1929.

BS, Syracuse Univ., 1953; MWT 1955 and PhD (Wood Technology), 1959, Univ. of Michigan.

Lecturer in Forestry (Wood Technology), 1959-present; Lecturer in Civil Engineering, 1963.



Arno P. Schniewind

Schniewind joined the Forest Products Laboratory as a senior laboratory technician early in 1956 and received his academic title upon completion of his doctorate in 1959.

His main activity is research in the physical properties of wood and its basic components. Most of Arno's teaching has been with graduate students, although in 1961 he worked with E. L. Ellwood on an undergraduate group study course in wood quality. His course in the College of Engineering in 1963 was entitled "Mechanical Behavior of Wood and Wood Composites." He has a major role in teaching the wood mechanics portion of the expanded wood technology curriculum.

Submitting an adaptation of his dissertation to the national professional paper competition of the Forest Products Research Society in 1959, Schniewind won that Society's coveted Wood Award.

Herbert C. Sampert

Born: Bruderheim, Alberta, Canada, August 6, 1915.

BSF, Oregon State Coll., 1939; MSF, New York State Coll. of Forestry, 1941.

Lecturer in Forestry (Forest Management) 1960-present.

Sampert joined the staff after 19 years of industrial forestry experience. For many years he was with the Collins family timber interests and for 14 years, before coming to Berkeley, was production and plant manager for the Elk Lumber Co in Medford, Oregon.

In Berkeley, Herb has taught the regular engineering and the forest industry production methods courses. His long experience and practical approach to problems caused a number of students to ask him to give a



Herbert C. Sampert

directed group study course in industrial management problems in 1963 and 1964.

In the summer of 1960, Sampert was appointed forest manager for the School's forest properties. He therefore resides near Blodgett Forest Research Station in El Dorado County from June to February, the period he is not teaching in Berkeley. With the expanded research activity at Blodgett Forest, all the problems of creating an independent and isolated community have been met by Sampert's experience and capable leadership. Under his direction (and largely by his own hands) a number of housing and office structures have been added at Blodgett. With an added summer work force at Blodgett Forest (in the central Sierra) engineering teaching duties at summer camp (in the northern Sierra) and research activity at Whitaker Forest (in the southern Sierra), Sampert manages to keep pretty busy during California's long field season.

Herb's easy manner and warm friendly good humor serve him well in work with students both in the classroom and on the annual Forestry Club "University's Christmas Tree" expedition. On the tree trip he gives the student group a practical lesson in rigging on how to lower a 50-foot tree gently onto a truck.

William J. Libby

Born: Oak Park, Illinois, September 10, 1932.

BS, Univ. of Michigan, 1954; MS 1959 and PhD (Genetics) 1961, U.C. Lecturer, 1961; Acting Assistant Professor of Forestry, 1961; Assistant Professor of Forestry (Forest Management) 1962-present.

Bill Libby came to Berkeley in 1956 following an Army tour of duty in



William J. Libby

France and immediately embarked on his studies in genetics. Maintaining his close ties with forestry through Xi Sigma Pi and the graduate student group, Bill also served as a teaching assistant at summer camp in 1958.

When Bill received his doctorate and his faculty appointment, he managed to accomplish the neat trick of taking a leave of absence before starting to work. This was made possible by a National Science Foundation Post-Doctoral Fellowship to the Department of Genetics at North Carolina State College in 1961-62.

Libby has taught the undergraduate course in dendrology since 1962, and forestry students now need to know the difference between a genotype and a phenotype as well as the difference between genera and species. His solid approach to his special discipline has been recognized by his selection in January, 1965, as graduate advisor for the genetics group.

In forestry, with its notably long time between generations of trees, the conduct of genetics research poses special problems to the research worker. Bill has initiated, in his short time on the faculty, a large number of projects concerned with genetics of California tree species—from the majestic, “tallest” coastal redwoods to the wide-ranging and variable Monterey pine. He has followed one variety of the latter to an obscure, isolated stand on Guadalupe Island off the Mexican coast.

Helmuth Resch

Born: Vienna, Austria, May 22, 1933.

Diplom Ingenieur, Hochschule für Bodenkultur, Vienna (Austria), 1956; MS, Utah State Univ., 1958; Doctor (Agric.), Hochschule für Bodenkultur, 1960.

Lecturer in Forestry (Wood Technology) 1962-present.



Helmuth Resch

Following his doctorate, Helmuth Resch became assistant professor at Utah State University for two years before joining the staff of the U.C. Forest Products Laboratory.

In his special field of wood seasoning, he fills the position vacated when E. L. Ellwood resigned. His teaching in the School began in the fall of 1964, when he taught the first portion of physical properties of wood course in the expanded wood technology curriculum.

Resch's proficiency in fencing earned him a berth on the Austrian Olympic team for the 1956 Olympics.



Dennis E. Teeguarden

Dennis E. Teeguarden

Born: Gary, Indiana, August 21, 1931.

BS, Michigan Coll. of Mining and Technology, 1953; MF 1958 and PhD (Agricultural Economics) 1964, U.C.

Acting Assistant Professor, 1963; Assistant Professor of Forestry (Forest Management), 1964-present.

Before entering his graduate work, Teeguarden served four years as a gunnery officer on an aircraft carrier in the Pacific. Since 1957, he has been in the School as a student, research assistant, and teacher.

His research activity is in the area of marketing and forest management. He is the co-author of two major bulletins on small ownership timber marketing in two California areas. Dennis assists with the instruction of a portion of elements of forestry and forest management and conducts a graduate seminar in forest economics. In addition, he is collecting background material for a future integrated forest enterprise course.



Eugene Zavarin

Eugene Zavarin

Born: Sombor, Yugoslavia, February 21, 1924.

Graduate, Univ. of Göttingen (Germany), 1949; PhD (Organic Chemistry), U.C., 1954.

Lecturer in Wood Chemistry, 1964-present.

Zavarin's service with the University began in 1954 when he joined the staff of the Forest Products Laboratory as a research assistant. He was the second scientist employed by the laboratory and joined that group before the buildings were completed.

His staff efforts have been devoted to research in the field of wood chemistry and to graduate student counseling.

TEMPORARY STAFF MEMBERS WITH TEACHING RESPONSIBILITIES

<i>Name</i>	<i>Period</i>	<i>Courses</i>	<i>Substitute for</i>	<i>Regular Employment</i>
Charles H. Shattuck	Fall '17—Fall '18	Protection Forest Finance & Organization Forest Administration & Policy	Mason on leave	Univ. of Idaho, Professor of Forestry and Dean of L & S
Ernest V. Jotter	Spring '20	Protection Forest Finance & Organization Forest Administration & Policy The Lumber Industry	Mason on leave	USFS—Supervisor Trinity Nat'l Forest
William C. Hodge	Fall '23	Silviculture Dendrology Protection	Metcalf on sabbatical	Consulting forester
William G. Edwards*	Spring '25	Logging Forest Engineering	Between Bruce & Krueger	Professor at Pennsylvania State Univ. & MS graduate student
Arthur B. Recknagel	Fall '29	Utilization Wood Technology	Exchanged courses with Fritz	Professor at Cornell Univ.
Ernest W. Wohletz*	Fall '35—Spring '36	General Forestry and several other courses	Assisted Mulford, Sampson and Fritz with instruction	Graduate student
Donald M. Matthews	Spring '36	General Forestry Protection	Barr on leave and after Malmsten	Professor at Univ. of Michigan
Philip A. Briegleb	Spring '42	Forest Management	Barr on leave	PNW For. & Range Exp. Sta.
Herbert A. Jensen*	Spring '51	Forest Photogrammetry	Colwell on leave	Consulting forester

<i>Name</i>	<i>Period</i>	<i>Courses</i>	<i>Substitute for</i>	<i>Regular Employment</i>
John F. Pelton	Fall '51	Ecology	Stone on leave	Lecturer in Botany—UCLA
Gilbert H. Schubert*	Spring '52	Forest Planting	Colwell on leave	Calif. For. & Range Exp. Sta.
James R. Sweeney	Fall '52	Ecology Dendrology	Stone on leave	PhD candidate in Botany
Craig C. Chandler*	Spring '55 & Spring '57	Protection	Between Arnold and Casamajor	Calif. For. & Range Exp. Sta.
E. M. "Bill" Hornibrook	Spring '55	Mensuration	Zivnуска on sabbatical	Calif. For. & Range Exp. Sta.
Carl C. Wilson* } Clinton B. Phillips* }	Fall '57	Protection	Between Arnold and Casamajor	Calif. For. & Range Exp. Sta.
Kenneth M. McDonald	Spring '59	Forest Engineering	Between Grah and Sampert	Between jobs
Arnold M. Schultz	Spring '59 Fall '59 Fall '61	Range Management Ecology Range Management	Heady on sabbatical Stone on sabbatical Biswell on sabbatical	Univ. Agric. Exp. Sta.
Nicholas Muhlenberg	Fall '61 Spring '62	Forest Economics Forestry 1	Zivnуска (acting dean) Grah	Between jobs
Franklin C. Raney	Fall '63	Forest Influences	Zinke on sabbatical	Prof. at U.C., Davis
William L. M. McKillop	Spring '64—Fall '64	Mensuration	After Palley	PhD candidate in Agric. Econ.
John A. Helms	Fall '64	Silviculture	Muelder on leave	Research Assoc. at Univ. of Washington

* Have received a degree in forestry from U.C.

ADMINISTRATIVE ASSISTANTS

Any report of the School must also mention the ladies who have handled the myriad of details associated with its people and paper administration.

Although the administrative assistant position was not established until 1943, the first lady-helper on the staff was Miss Lillian M. Holden. She had served as Mulford's secretary at Cornell and he had persuaded her to come to California with him and continue as his secretary. How long Miss Holden stayed with Forestry is not known. Nor is there any record of how many girls served as secretary between Miss Holden and the arrival of Miss E. P. Dill in 1925. Miss Dill had worked as a chief clerk with the U. S. Forest Service and for commercial organizations and stayed with the School (then still a Division) until July 1, 1929, when she resigned to go with the Pickering Lumber Co. At that time, there were a total of four girls in the office.

The new secretary was Miss Reid Venable, a 1912 U.C. graduate in history. She joined the University in 1915, first in Extension, then in the Division of Irrigation and Practices, the Men's Physical Education Department and finally in Forestry, where she served from 1929 to 1955.

Miss Venable continuously demonstrated her great devotion and loyalty to the faculty and students. She directed the office staff and managed that tricky "balancing act" of successfully dealing with the large and varied number of problems presented to her by the faculty. She carried her interest in students and their problems and welfare far past their graduation. From her work at the administrative nerve center of the School she kept in close touch with students and alumni. Her diligence in her unofficial capacity as alumni correspondent is, in a large measure, the reason the California Alumni Foresters is such a close-knit organization today. The alumni group recognized this service by making her their first honorary life member in 1943.

During the same year Miss Venable also was made the first administrative assistant for the School of Forestry to process the increasing amount of papers and to act for the dean on routine matters.

When the School moved into Mulford Hall in 1948, all internal communication was by "squawk box" intercom. The "central" of this system was next to Miss Venable's desk. One of the best stories to come from this arrangement concerns Henry Vaux, not long before he was appointed dean. Henry's son, who had broken his leg, had persuaded his father to take his newspaper route for a few days. One afternoon, when Henry had an important visitor in his office, Miss Venable, in a spirit of helpfulness, announced over his intercom: "Henry, it's time for your paper route." The explanation to the visitor is unrecorded.

Miss Venable served through Dean Baker's term and retired in July, 1955. She obtained a real estate broker's license and has been active in the Berkeley community.

Replacing Miss Venable as Administrative Assistant in July, 1955, was Miss Birdie E. Weisbrod, a U.C. '23 graduate in Letters and Science, with a major in Spanish. She had joined the University staff in 1929 as a secretary-typist in the School of Education and in 1936 transferred to Forestry. Thus began one of the most delightful associations in the School's history.



Reid Venable



Birdie E. Weisbrod

Birdie applied her cheerful helpfulness as secretary-stenographer for 19 years before she stepped up to the administrative assistant position at the beginning of Henry Vaux's term as dean.

Birdie's gift for remembering faces and names is legendary. She always seems to have "instant recognition" for old grads who stop in to see her. She knows who does what around the University and, as F. S. Baker has observed: "... how to get around this or that without stepping on important toes. ..." The forestry student annual, *Timber*, in 1959 dedicated the issue to her and summed up the student feeling with, "Thank you for your good advice, for bringing order out of chaos, and for your never-failing warmth and understanding." This warmth and understanding are given a special perspective with this story about one of the students who came to her for answers to his problems. One day, as he left, he remarked, "I always like to sit down and talk with you this way. You remind me of my grandmother."

During World War II, Birdie took a leave of absence and joined the Women's Army Corps. After a training period at Harvard University, she was assigned to Egypt and the Near East.

The Alumni Foresters recognized Birdie's devotion and interest by electing her to honorary life membership in 1961.

As the School ended its first 50 years, Birdie announced that she would retire at the end of January, 1965. The alumni, at their business meeting on December 4, 1964, voted unanimously to elect her to the office of honorary assistant secretary of the California Alumni Foresters. The alumni hope to keep in touch with her for many years to come.

On January 15, 1965, Miss Toni Siebke became the School's third administrative assistant.



The first camp—Quincy, 1915. (L. to r.—Aylward, Warren, Hansen, Hall, Dunning and Professor Bruce)

CHAPTER 6

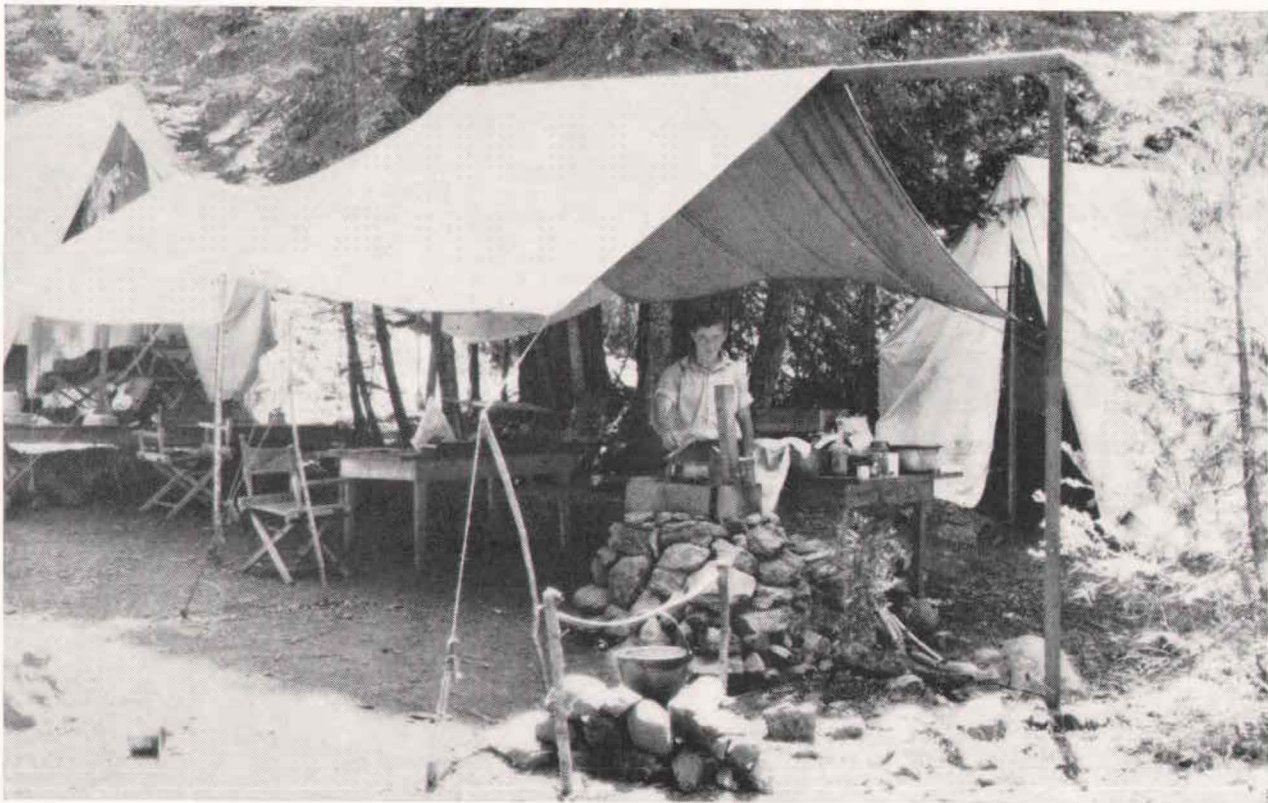
SUMMER CAMP

THE idea of a summer instructional camp in the woods was undoubtedly in the mind of Walter Mulford when he was first planning the forestry curriculum. He was well acquainted with the best of forestry training in the United States, and he appreciated the need for a place where students could actually get into the woods. Mulford wanted an area that was typical of average forestry possibilities and chose the Plumas National Forest as a site for summer camp.

The story of summer camp opens with a notation in Woody Metcalf's diary for June 11, 1915. Metcalf and Pratt were on an orientation trip through California's north coast when they met Mulford at Castella on the Sacramento River. Metcalf's diary says, "Professor Mulford met us here and discussed plans for setting up an instructional camp he had decided upon to be located near Quincy. I was detailed to do this." Metcalf and Pratt continued their tour in the McCloud-Shasta area for another nine days. Metcalf then took the train to Quincy where he, Supervisor Dave Rogers of the Plumas National Forest, and Ansel Hall, a student, "checked on locations for the instructional camp near Quincy and selected a spot on the edge of town where [the] owner gave us the use of the land if we would leave the tent platforms when camp was over." Woody hired a local carpenter and worked out a bill of materials for the tent platforms.

The first camp

The next diary entry tells the rest of the story: "June 22 to 30—setting up the first summer camp. Got lumber from a mixed pile at Quincy Lumber Co for \$10 per M. Hall and I brushed out the site and Williams and the two of us put up the platforms—large study tents (Mulford Hall), sleeping tents and toilets, and got an electrician to string the wires and put a light in each tent (cost \$2.50 per month for 10 lights). Pratt arrived on the 23rd to conduct classes in sawmill study at Portola and Clio. Mrs. Metcalf helped with clean-up around camp. On the 26th, Dunning arrived from Berkeley and helped with table construction. The tents and equipment, mattresses, etc.



The second camp. The first at Meadow Valley, 1917. George Gowan in the cook tent

came and we got all ship-shape by July 3rd and fire signs up."

At this point, Woody and Mrs. Metcalf went on a 10-day camping trip to nearby Mt. Hough. By the time they returned to Quincy, Don Bruce had arrived and was ready for his first assignment with the University, as director of the first summer camp.

The students at summer camp that first year were Joel Conklin, Duncan Dunning, Alec Muzzall, Ansel F. Hall, Murrell C. Warren, Fred Aylward, and one student in Letters and Sciences, Harvey L. Hansen. Don Bruce was in charge of instruction for the summer, after which he, Hall, Warren, Aylward and Hansen returned to Berkeley for the fall semester. The direction of camp for the fall period was taken over by Professor Mason. He and students Dunning, Conklin, and Muzzall were joined by Myron E. Krueger and they remained in camp until October, 1915.

Thus, all graduates of the first five years of professional forestry instruction at the University of California attended the first camp.

Meadow Valley

The second camp, held in 1917, was moved about eight miles southwest of Quincy, up Spanish Creek into the broad open meadow known as Meadow Valley. The camp site, still in use today, is the tract legally described as the NWNW, Section 26, Township 24 North, Range 8 East, Mount Diablo Meridian. It is operated under a special use permit, and located on a 40-acre tract of United States Forest Service land along Schneider Creek on the south side of Meadow Valley.

The story of the early settlement of Meadow Valley is told in the book *Historic Spots in California*¹: "A quarter of a mile north of the Oroville-Quincy Highway and about six miles west of Quincy, two Mexicans, in July, 1850, set up the first camp in that part of Meadow Valley. From this circumstance the name of the camp, of the creek on the banks of which it was located, and of a neighboring mountain peak, each was prefixed with the adjective 'Spanish'. Miners customarily left their horses and pack mules in the care of these Mexicans, who also engaged in cattle raising and slaughtering, selling the meat at one dollar a pound.

"Spanish Ranch soon became a distributing center for surrounding camps. The first hotel, blacksmith shop, and store were erected there in 1852 by Lloyd and Snodgrass. These buildings are all still standing. A postoffice was established in the store in 1858, and a Wells Fargo Express office in 1868. Millions of dollars in gold dust and nuggets have passed through its doors. As late as 1881 the year's output in coin and bullion amounted to \$114,076.65. Directly above the village towers Spanish Peak (7,047 feet), pierced by the tunnel of the Monte Cristo Mine at an altitude of 6,288 feet, or within 759 feet of the summit.

"At the Meadow Valley Camp, two miles south of Spanish Ranch, the express office, the Phelps house, and the Dean barn, all used by W. S. Dean from 1852 to 1855, still stand. The Meadow Valley store and hotel on the old stage road from Oroville to Quincy was burned some years ago. About two and a quarter miles west of Meadow Valley is the site of Toll Gate, where

¹Rensch and Hoover, Stanford Univ. Press, 1933.

tolls were collected on one of the first turnpikes in Plumas County. The buildings here, too, have all been burned."

Memorable years

This was the history of the area where Metcalf set up camp in 1917. His diary for July 5 says, "Arrived at Meadow Valley and found Don Bruce and the four boys (Blair, Geary, Gowen, and Byrne), all incapacitated because of sunburned feet which they got fishing from a raft at Silver Lake." Metcalf took over the charge of summer camp from Bruce July 9 to August 14. During this time two of the men, Gowan and Byrne, left to join the Army but the other two, Blair and Geary, finished the course. Metcalf reported "a fine fishing trip with Blair and Geary to the Middle Fork of the Feather River before closing camp and departing for Berkeley."

Because of the war, there was no camp after 1917 until the summer of 1920. This camp consisted of ten men and a cook, in addition to the staff, and included George Byrne, who continued where he had left off in 1917 to join the Army. Improvements of the camp site were an important order of business; this group started the first dam on Schneider Creek.

In 1921, the number of students at summer camp increased slightly; they improved the Schneider Creek campsite and completed the first permanent structure, California Cabin, later called Study Hall.

1922 brought the beginning of the formal written record of camp. Here is the story of the rest of the camps with a major assist from Dean Baker² and the camp journals. Each year seems to carry some interesting tale. Numerous events of note, such as great strings of fish, collections of rattlesnakes that escape, wild animals that die, and chopped fingers and toes, tend to repeat every few years. But some years appear to carry a special character, and 1922 is the first of these.

The year 1922 carries the doubtful honor of being the snowiest camp. In that period the University ran on an odd calendar, and camp opened about the middle of May. In 1922, Woody, Schumacher, and Leonard Kellogg arrived on May 15 to find "snow in drifts from two to three feet deep along the camp road from Meadow Valley Creek to and around the camp." As camp went on, the journal notations become more usual, such as "Sunday, July 2, Camp repaired swimming pool. So this was the SNOWY YEAR.

The next year—1923—should be called the CLASSY YEAR, perhaps. Only seven men attended, but what a seven! Lesley B. Graham, the camp manager, was later with the lumber industry in the redwood region. Robert M. Rutherford became an administrator in the U.S. Fish and Wildlife Service. Percy D. "Pete" Hanson served as regional forester in Missoula, Montana, and in Alaska from 1955 until he retired in 1964. Amihud "Abe" Y. Grasovsky made the doctorate at Yale, went to Israel, changed his name to Goor, became chief of forestry in Israel, has been a leader of forestry in the Middle East, and has had many international assignments with FAO. Hubert I. Bower became the timber manager of the Holmes-Eureka Lumber Co. Robert D. Maclay worked for the West Coast Lumberman's Association before he engaged in farming near Eugene, Oregon. Suren R. Gevorkiantz

²For Baker's full description of Meadow Valley, see the last section of this chapter.

went into the Forest Service, became an outstanding research man in the lake states, and has written a rich mass of silvicultural and mensurational material. Right good for one little camp of seven men!

The 1926 camp saw some major capital improvements, including several new board-sided tent frames similar to those still in use today, a new cook-house with attached canvas-on-frame mess hall and, perhaps the most noteworthy, a new bath house. An important milestone was reached on May 22, 1926, when P. D. Hanson '25, who assisted Fritz with the construction, took the first hot shower at camp.

Now, 1927 was what one might call the NAKED CAMP, for somehow or other it became the fashion to go about with the minimum of clothing, the minimum being heavy socks and shoes, shorts, and a belt for carrying compasses and other tools. The local timber-jacks considered the dress plainly idiotic, the Forest Service men thought it of doubtful taste, and the Quincy police forbade it on the streets of town. This camp included a little group which regularly rushed off for Reno at the close of work on Friday afternoon, returning usually about 3 a.m. Monday morning. According to tradition, this gang should have gone to perdition, but actually, they have done very well, indeed, in their forestry and range profession.

An unfortunate tragedy occurred during this camp when William Teague dove into the pool on Schneider Creek before it had been cleaned out for safe use, and broke his neck. He died 41 days later in Berkeley.

Tales to remember

In 1931 the institution of teaching assistants was begun with Ernest "Smokey Joe" Wohletz '30 as the first T.A. That Ernie survived this camp and the 1932, 1933 and 1936 camps, in which he also served as T.A., and went on to become dean of the Forestry School at Idaho, is strong evidence of his ability as an educator.

The 1931 camp of 26 men was the largest up to then. This was also the year of the first "pseudo-examination" by Krueger who, with Wohletz, believed the boys had worked pretty hard and decided to have the group bone up for the exam but let them out as soon as they saw through the phoniness of the questions.

The first questions sounded reasonable on the surface but had no basis of fact. It was quite amusing to watch the expressions on the faces of the group as they tried to make some sense out of the questions. The culminating question was: "If hay sells for \$15 a ton, how far would a cranberry have to drop to put a hole in a tin roof?" Finally, Wohletz told them that any man not out of camp in ten minutes (it was the mid-summer break) would be flunked. The quick get-away created quite a cloud of dust.

Krueg also recalls that "among the students in that camp were Arieah Lahav from Israel and Boris Spassky from one of the small Balkan countries. I would estimate that Boris did not speak more than 24 words of English all summer. I became quite worried as to whether he was getting any of the instruction, what with a considerable amount of slang, both curricularly and extra-curricularly. However, one day, when Boris was acting as transit-man on a survey crew, Lahav gave forth with a considerable amount of



Wohletz' tormentors. (L. to r., not including the reptiles—Russell Miller, Fred Hector, Sam Johnson, Ken Taber, Garth Flint, Jack Berry, Mel Barron, Paul Stathem)

instruction as to how Boris should do it. Finally, Boris, in exasperation, said to Lahav: 'Go soak ass.' At this point Krueg said, "I quit worrying."

Paul Bunyan had his Babe the Blue Ox, but the 1933 summer camp had the Tale of the Snakes. A snapshot sent in by Mel Barron '34 shows eight men holding 15 snakes at arms' length. The snakes were captured by the students during the lunch period on the Snake Lake trip on July 7, 1933. As the story goes, these snakes and many more were placed in and about the cab of Wohletz's truck. With all this reptile companionship in his truck, it is little wonder that no one volunteered to ride with him back to camp. Some of the snakes showed themselves on the floor and behind the seat, and one even peeked out of the windshield wiper control hole above the windshield. Wohletz cleaned the truck of all the snakes, or so he thought. Upon returning to camp, Fritz asked Wohletz to go into Quincy for supplies. What with the narrow winding road down Spanish Creek from Meadow Valley to Quincy and snakes continually appearing within the cab of his truck, it is remarkable that he ever got to town.

As Ernie tells the rest of the story: "On the way to Quincy, I was astounded to find a snake crawling over my right shoulder. I can assure you there was a little tussle with the car, snake, and myself, for a few minutes. I finally got it out of the car, however. Then, near Quincy, one crawled across my foot. With one kick I got that one out of the cab. Since we had searched the cab rather thoroughly originally, I wondered where all the snakes were coming from. I finally decided they were behind the seat of the cab. I therefore pulled up to a fireplug on the main street of Quincy, turned on the water, and flushed out seven snakes. I can assure you this created quite an uproar. Except for the fact that I was fairly well known in Quincy, I probably would have been thrown in jail. Whatever happened to those seven snakes, I do not know because things got so hot I thought I had better get out of town."

Camp ballads

The next camp of note was the SOCIAL CAMP of 1936. It was a big camp of 35 fellows, including Chuck Fairbank, Don Levy, Herman Meyer, Mel Pomponio, and John Callaghan, with Jim Mace as camp manager and Keith Arnold as assistant manager. That group could not get together without having good campfire evenings with skits and music, tall tales, and all sorts of stunts. The camp newspaper *Bull of the Woods* was established and has continued to live on and off ever since. That year, it was a lively affair, and reported a good deal of the lighter side of camp. This was, perhaps, the only camp for which two elaborate ballads were written. The first of these, entitled "The Blundering Berkeley Loggers of 1936," consisted of 12 stanzas and was initially rendered to the tune of the Texas Rangers, at the farewell campfire for Professor Fritz, who had completed the first half of camp, on June 28, 1936. It was written by Donald M. Levy and went like this:

Come all you Califoresters, wherever you may be.
I'll sing you of some fellers, the best you ever see!
They never get down hearted—nought can their spirits damp,
For they're the Berkeley Loggers of Califorest Camp!

"THE BLUNDERING BERKELEY LOGGERS OF 1936"

(As rendered - i.e. torn apart - at the farewell campfire for professor Fritz, - June 28, 1936)

Air: Texas Rangers' Song



Professor Fritz, our leader, has served us extra fine,
A-pointing out the wonders of cedar, fir, and pine.
A tear shed for Joe Wohletz—he's gone from bad to worse,
A-tryin to check the angles on the Meadow Valley traverse.

Jim Mace is our manager—you all know what that means!
With Stacey he conspires to feed us beans, beans, BEANS!
But manager Keith Arnold is one we'd like to shelve,
He makes life so durn miserable for poor old Detail 12.

And here's to Mother Geibel—he never will grow weak,
He keeps in fit condition by swimmin' Meadow Valley Creek!
And here's to Herman Meyer—the crick don't bother him—
He goes our Gus one better by takin' a midnite swim.

Pitman and John Douglas, they did their best to fix
The midnite elevations on Section twenty-six,
And here's to Barber Fyock, advancing to the kill,
If his barber's shears don't get you, his deadly humour will!

Mahoney, Joy, and Fairbank—these boys are shorely hot;
The-way-they-get the local maidens, we wonder what they got!
But Gilman, Hampel, Felthouse, they are a quiet three—
Some day they may surprise us by goin' on a spree.

Worthington and Williams as plumbers are supreme
To supervise the redwoods is Davy German's dream.
The editor-of-the-Bull, 'though he's just a little squirt
Can wield a wicked pencil as he gathers in the dirt.

And here's to Walter Hansen, the old Missouri-Mule,
 And "Unfair Shop" Pomponio won't be nobody's fool!
 And Bills a rovin' cowboy; Don Dimock runs the show;
 Herb Thomas with his bugle caused us no end of woe!

Hugo, Blanchard, Sloat, and Gordon, and Bentley, Quincy's pride,
 Along with Jailbird Emmert in Schneider Heights reside.
 Paul, Mac, Ray, and Grover are just above the slums,
 While Jim, -Jack, -Red, -and-Birdnest live down there with the bums.

We've burrowed in the brush-fields; we've cruised among the pines;
 Across the peaks and mountains, we've run our compass lines.
 Tonight around the campfire—around the cheering blaze,
 Renew again the mem'ries of Califest days.

To Mr. Fritz and Joe we will bid a fond farewell.
 We hate to have 'em leave us; we think they've both been swell!
 We know they'll not forget us; in their hearts a warm spot fix
 For the BLUNDERING BERKELEY LOGGERS OF 1936!

And now my song is ended; I guess I've said enough.
 The life of a Forester I'm sure is very tough;
 But our life in California has made us all agree
 We're bound to go a-rangin' in the forest pure and free.

Stanza 4 notes that Herman Meyer took midnight swims in the creek; one might expect that these were involuntary. Herm, it seems, was the butt of considerable light-hearted hazing during the camp, and was the principal character of an incident that occurred later and that was immortalized in another ballad by Levy.

First, let's hear Herm's side of the story. "On August 3rd we went on an overnight to the Swayne Lumber Co operations near the Big Bar Lookout, and as a campout we set out on a nicely rounded, grassy hill. The fellows sat around chewing the fat that evening, and one by one they wandered off to their sleeping bags, which were lined up in a long row. Finally I hit the sack, and in five minutes I was snoring. About that time, some of the late-hour boys hatched a little plot. They tied a rope securely to one of the lower corners of my sleeping bag. Then five or six good runners took the other end of the rope and started down the mountain at a fast clip. The ground was a bit uneven and I found, rather shortly, that whatever was going on didn't help my sleep any, so I unsnapped the fasteners on the bag and rolled out. Every sleeper was awake by the time my sleeping bag and I got back up the hill, and in about two hours, the last of the laughing subsided and everyone was snoring. Three or four days later, the Camp Editor and bard came up with a little ditty called: 'The Epic Flight of Herman Pliny Meyer'."

This ballad also was immortalized in the final issue of the *Bull of the Woods*. Here are the five stanzas of that ballad, which is set to the tune of the Cowboy's Dance Song.

"THE EPIC FLIGHT OF HERMAN PLINY MEYER"

(The Meyer Story to End all Meyer Stories!)

Lively Tune: COWBOY'S DANCE SONG

1. O, they sing of Charley Lindbergh, of Gatty, Post and Byrd, the
transatlantic heroes, but Brothers, have you heard of the
flyin' Berkeley Logger, 'tis a story to inspire, O, I'll sing you of the
epic flight of Herman Pliny Meyer! We was campin' up on
Brush Crick, below Big Bar Lookout, and feelin' kinda live-ly—I know
this beyond a doubt, For we'd whiled away the ev'nin' blanket
tossin', Buck the Bear, and we all felt somethin' brewin' in the cool mountain air!

"THE EPIC FLIGHT OF HERMAN PLINY MEYER"

(The Meyer Story to End all Meyer Stories!)

O, they sing of Charley Lindbergh, of Gatty, Post and Byrd,
The transatlantic heroes, but Brothers, have you heard
Of the flyin Berkeley Logger,—'tis a story to inspire,
O, I'll sing you of the epic flight of Herman Pliny Meyer!
We was campin up on Brush Crick, below Big Bar Lookout,
And feelin kinda lively—I know this beyond a doubt,
For we'd whiled away the ev'nin blanket tossin, Buck the Bear,
And we all felt somethin brewin in the cool mountain air!

We had turned into our blankets, and the night was calm and still,
And the moon shone down so brightly from beyond the distant hill,
When a scream of Bloody Murder and a terrifyin cry
Goes ringin o'er the meadow as it echoes to the sky.
We sit up in our blankets, and quickly look about
To see whence come those curses and that agonizin shout;
And all our hearts stop beating as we try to comprehend
A horrifin spectacle that stood each hair on end.

Half a dozen Califoresters go flyin down the field,
And not fifty yards behind them, with his upper self revealed,
In a flyin roll of blankets, which he piloted with skill,
Sits Herman Pliny Meyer, speedin forward to the kill!
He's bouncin down the meadow, his rear end a fiery red
Like the principal adornment of a turkey gobbler's head.
He's a hangin on for dear life, and the wild look in his eyes
Notifies all Califorest of a genuine surprise.

O, he flew by "Pappy" Grover, and when the dust had cleared,
 We saw Herman Pliny Meyer holdin *hawf* of Pappy's beard;
 With Gibson for a hi-lead and with Bentley for a tree,
 He's a driftin into heaven on a God-forsaken spree.
 He barrells into Em'ry, let's out an awful yell,
 And sails along the meadow like a bat out of Hell!
 When there comes a flock a cussin, as his power hits a snag,
 And down drops Herman Pliny in his battered sleepin bag.

O, our camp is nearly over, and we'll come from near and far,
 Payin tribute to our teacher, and good friend Doctor Barr,
 Who has taught us yield tables, diameters and heights,
 And the art of layin railroads and of takin abney sights.
 And now to timber cruising we'll bid a fond farewell,
 But there is one thing further, as I've oft heard Herman tell:
 That the joys of Mensuration ain't a cussed circumstance—
 To a Sleigh-Ride in the Moonlight with the Grass beneath your pants!!!

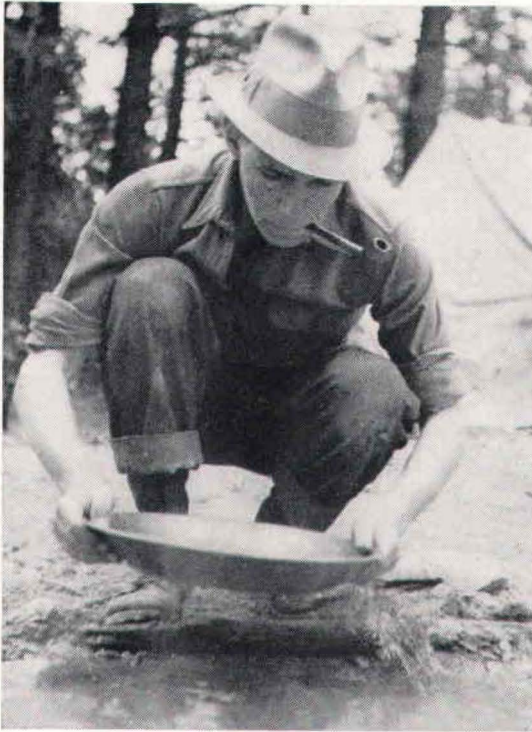
It seems a small wonder that this was Ernie Wohletz' last camp as teaching assistant!

Mumps Camp

The next camp, in 1937, has also earned a place in this history. It was the MUMPS CAMP. Right at the very start, the day of the Spanish Peak hike, Bob Colwell came down with well-marked mumps. Keith Arnold took him off to Berkeley and all seemed well, but two days later Delmon Gish and Earl Alcorn also got the mumps. Baker went down to Quincy for medical advice, and it immediately became clear that fast action was needed before the county would quarantine all 124 for three weeks or more. At noon, Baker announced a three-week vacation from forestry camp, and by evening, 75 percent of the fellows were gone. Next morning there were still 24 for breakfast, but they soon disappeared and Baker phoned Dean Mulford that camp was 'evaporated.' Keith Arnold came down with the mumps in Berkeley, and Baker, Cockrell, and teaching assistant Lee Cox '36 were left alone in the camp.

Lee Cox, in the camp diary, spun the story of the following three weeks about a lot of people with time on their hands: "Following the disbanding of camp, the remainder of the faculty surveyed the proposed course along Schneider Creek, to be followed by the eight-inch inlet pipe for the new hydraulic ram. Baker got out the transit and proceeded to take some sun shots. Everything ran nicely until he attempted to remove the transit from the tripod. In spite of all attempts (pipe wrench included), the darn thing wouldn't budge. The darn thing must have had the mumps. Baker even tried hot and cold compresses and still no results. Finally Cox got the bright idea of tying two sticks together at an angle with his belt to make a wrench; and finally, with much grunting and several halts to pull up Cox's pants, the transit was successfully removed.

"In the meantime Jack Duffield, the property man, had decided to add to the present botanical collection which, up 'til the present writing, has been increased by about 100 plants, plus or minus.



Zivnуска panning for gold during the mumps recess, 1937

"Cockrell and Cox next spent several days locating section lines and corners. Before they were through they had found that every other tree in Township 24N, Range 8E had been blazed at least once in the last 20 year; consequently, they were able to pick out some very good section lines, most of which ended in the middle of the next section. Finally, it was found that they had set off the wrong declination on the compass, which, combined with the numerous blazes, had led them astray. Cockrell found that all the type lines in Section 27 were well defined by game trails; apparently the game in this part of the country is very sensitive to such ecological conditions.

"Three of the boys had found employment in the vicinity. Bob Darmsted and 'Pete' Peterson worked with the County road crew, opening up the Oroville road beyond Buck's Ranch. Bob Johnson had a good job at the Spanish Ranch Mill, off-bearing edgings from the edger.

"Pete Dechant, John Zivnуска, Dick Gaiser, and John Lockhart worked for a week panning gold in Ranch Hollow—final result \$.35 when weighed out at the Quincy drug store. Giving up in disgust, they spent the rest of the time roaming around the country side in Gaiser's Erskine.

"During the last week of the mumps recess, Dechant's gang, together with Peterson and Darmsted, were allowed to stay in camp and eat at the cook's shack.

"To break the monotony, Gaiser and Zivnуска fashioned a three-wheeled, non-steerable, brakeless coaster out of planks and rounds cut from



The present camp site as established in 1939

a Douglas-fir log. Five successful but very rough trips were made down the steep road leading to the Bear Creek Ranger Station. In the meantime, Cox had gotten out the stretcher in case of accident. The sixth trial was too much for the contraption, which came to pieces all at once like the old one-horse shay. Gaiser, who was riding, lost the seat of his pants, along with a generous amount of rear anatomy on a projecting nail. Fortunately, first aid and iodine were handy and were applied with much glee by Cox and Duffield.

"Camp opened with a bang Sunday when two old snags were felled and everyone returned."

The new site

The ever-increasing summer camp enrollment in the late 30's necessitated moving the location of camp from the bank of Schneider Creek eastward about 200 feet to the topographic bench which lies just above the creek bed. This was accomplished in 1939 under the guidance of Professor Krueger, who was general director of camp matters. A number of buildings were left on the original site, such as the study hall built in 1921 and enlarged in 1922, and the office building built in 1935. All tents, student and faculty, were set up on the new site. New structures included a large cook-house, student bath house, faculty workroom building, and the woodshed. Many of the better tent frames were moved by brute force to the new site.

A new spring was developed, and an entirely new water and drainage system was installed.

The electric line brought in to Meadow Valley was extended to camp, and the first electric lights were turned on May 19, 1939. The 69 students in camp this summer made much progress at developing the new camp site.

Perhaps the most noteworthy event of the 1940 camp was Professor Cockrell's felling a 16-inch fir tree smack in the middle of his own tent. This was the second year of the upper camp, and there was still a great deal of pruning, thinning, and stand opening to be done. Cockrell quietly set about felling this tree and had cut nearly through the stem when Keith Arnold came along and noted that the tree was threatening the electric wires servicing the area. A rope was attached and leverage applied, but when the tree came loose, it caught on another tree close by, which steered it directly into the tent. Needless to say, the students gathered from far and near and a merry razzing was taken by Cockrell. Several diagonal sections were cut from the stem and a plaque was prepared from one of them and presented to Cockrell at the Forestry Club banquet the next winter. This plaque still occupies a conspicuous place in his office.

1942 saw the last camp before World War II, and camp was not resumed until 1946. This 1946 camp was the first of the camps to start about mid-June, as contrasted with the early-May beginning of previous camps.

In 1948 the switch from a junior camp to a sophomore camp was made, necessitating jamming the whole summer schedule into a half period for each of the two groups. A total of 72 junior students crowded the summer camp schedule during the six weeks from June 16 to July 31. The six-week sophomore camp began two days later and had an enrollment of 105 students. The record of this camp notes that "92 men passed the course, 12 failed, and one man changed his major after the trip to Spanish Peak." The sophomore camp has been continued since that time.

The 1951 camp came, somehow, to be known as CAMP CAREFREE. Professor Krueger's portion of this camp, which occupied most of the month of July, was concluded with the last of his pseudo-examinations. The camp diary notes the following: "Krueg's exam featured eight thought-provoking questions such as 'What is the difference between a bull pine and a cow slip?' A prolonged stunned silence was broken by Krueg's 'Daylight in the Swamp' call. The net result was the biggest and best damn water fight that has hit camp in ten years. In the evening there was a campfire program. Willis Wagener gave an interesting talk on forest pathology. Several skits followed, ending with Krueger on trial for numerous breaches of the peace. Krueg proved to be a master of the quick quip and was acquitted despite obvious and glaring guilt."

The 1953 camp was marked by the presence of the first girl forester to take summer camp. Ann Shideler (DeBano) '55 was not U.C.'s first lady forester, which distinction goes to Alice Craig (Hiatt) '28, but she was the first girl forester with sufficient persuasiveness to be permitted to attend the regular camp. She was provided quarters near the maintenance man and his family at the lower camp and served to break the ice for girls attending camp; there have been two others, Gerry Larson in 1960 and Kirsten Salstrom (MacGregor) in 1963.

Teaching plan

Before the war, it was the practice for two staff members, with the necessary assistance, to teach the entire camp, after which they would not return to camp for approximately three years. Immediately after World War II, the camp director plan was begun and for a number of years Keith Arnold held this position, drawing on other staff members to assist with the teaching. This practice has been continued to the present time, except that the position of camp director is now rotated among the staff members. Nearly all staff members, for a period of one to two weeks, teach subjects of their specialty at camp each year.

Lest the reader (who may not have attended camp) think that camp was all "fun and games," he may be assured that the curriculum provides a rigorous, if brief, exposure of the students to all aspects of wildland multiple-use management. Many come to summer camp directly from Junior College and thus receive there their first direct exposure, both to professional forestry education and to the University level training. The brief ten-week curriculum seeks to give this diverse group of students a common background of experience with field conditions and a common introduction to the several academic aspects of professional forestry. This serves as a unified foundation for the courses subsequently encountered at Berkeley.

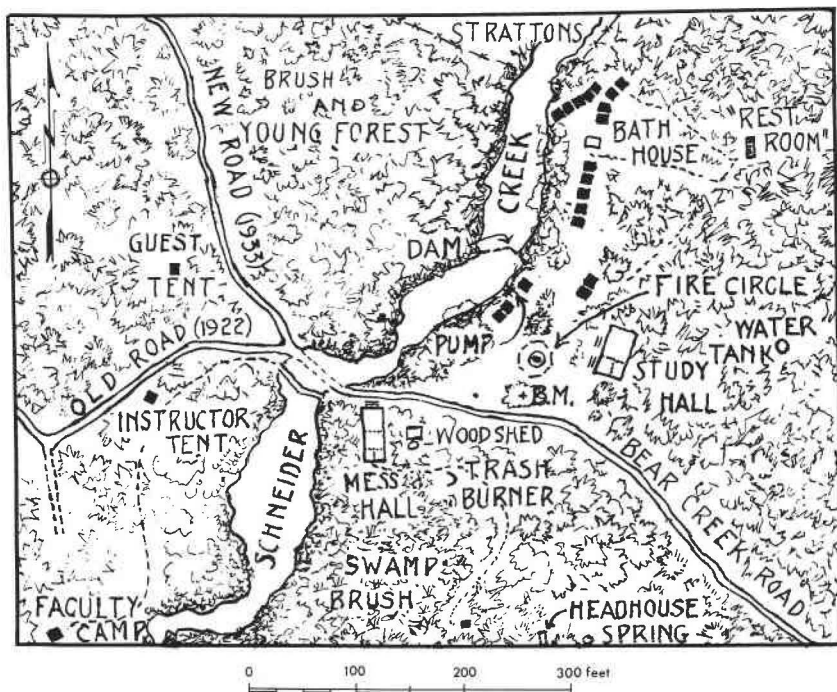
The University provides the facility and the instruction. The students manage their own mess and do about one hour each day of work toward the operation and development of the camp. When Dean of Men Arleigh Williams visited camp in 1963, he remarked: "This camp is a developer of men." His parting comment to the students was: "Now I know why the Forestry Club is the best organized group in the Berkeley campus."

MEADOW VALLEY—AS "BAKE" SAW IT

No one, perhaps, loved the Meadow Valley area more than Dean Baker. Even after retirement he spent much time there, relaxing, observing, and recollecting. In this mood of recollecting he wrote his contribution to this anniversary book. The following are excerpts from Bake's writings:

Remember how you take the highway westward out of Quincy and follow the road up Spanish Creek and come to the region where they washed the very hills away in search of gold in the early 1890's and left a local wilderness. Then you go round a quirk in the road and there stands a little red steel bridge across a narrow stretch of Spanish Creek. Beyond the bridge the canyon opens out wide to a broad flat with Spanish Peak towering beyond it. You know better than to cross the red bridge but keep straight ahead along the edge of the broad grassy flat edged with pine timbered little hills and presently come to the well-known store and Post Office. Up ahead are the little white school-house and the scattered houses of the village. Now watch out for Stratton's chaotic place and be ready to turn off to the left on a stony lane, hoping next to find that there is actually a bridge across Meadow Valley Creek. Up over the hill you go to Schneider Creek and there you are in Summer Camp.

First of all, there is Schneider Creek all dammed up to make a good cold "swimming pool," in which every year some fellows were sure to be thrown.



Map of the Schneider Creek Camp, Meadow Valley.
(Cartographer—F. S. Baker)

"And not just students," says Krueg. This alleged swimming pool, so shallow and cold, is no longer maintained. The dams got so elaborate and high that water flooded over the west bank, developing too much of a swamp and drowning some of the trees. So now there is just a good clean basin from which water can be pumped for keeping down our good red dust and for protecting us from fire. Notice that the map shows that Schneider Creek is crossed by a ford and a footbridge. But you may remember something quite different, for the creek rips down through there every spring to change everything we build, though "Krueger's Bridge" did last for several years.

The "footbridge"—more or less safe for the feet—takes one over to the west side of Schneider Creek where the Faculty Camp and Instructors Tent were located. The faculty center was set up by Woody Metcalf way back in the earliest days of camp. Curiously enough, a couple of white firs are still marked with a stout two-by-six that Woody set up to hang a swing upon for his little daughter Beatrice. When the forest was logged and a road was built along Schneider Creek, the site was nearly in the road, and the camp is hardly visible now except for Woody's swing support.

The old Instructors' Tent place has disappeared too, for there have been so many "improvements" in the past few years for camping quarters for our more numerous teaching assistants that it is hard indeed to make out the

ancient tent location where Lee Cox and Keith Arnold used to rig up practical jokes on each other.

But let us go back across the creek to the main summer camp site. First of all, there on our right was the Kitchen Building which started out as a tent; in 1926 a board and batten kitchen and cook's quarters were built, together with the framework of the mess hall, the roof of which was a big old tent canvas laid over the two-by-fours. Remember what a chilly breakfast nook it was and how readily at dinner time the yellow-jackets invaded the place! Good and airy anyway. Back in 1923 student Robert Maclay, helping to close camp, undertook to eliminate the yellow-jackets for the next year and proceeded to burn out their nests. He succeeded in starting a quiet little subterranean fire that came to vigorous life in the mid-afternoon when nobody was there, almost taking the cook house, but it was thoroughly drowned with Schneider Creek water after some hours of work. This was the camp's first recorded fire. Next year the yellow-jackets were fine!

Remember the spring up on the side-hill south of the cook-shack? It still functions excellently, furnishing clear, cold water for all the needs of the lower camp these days.

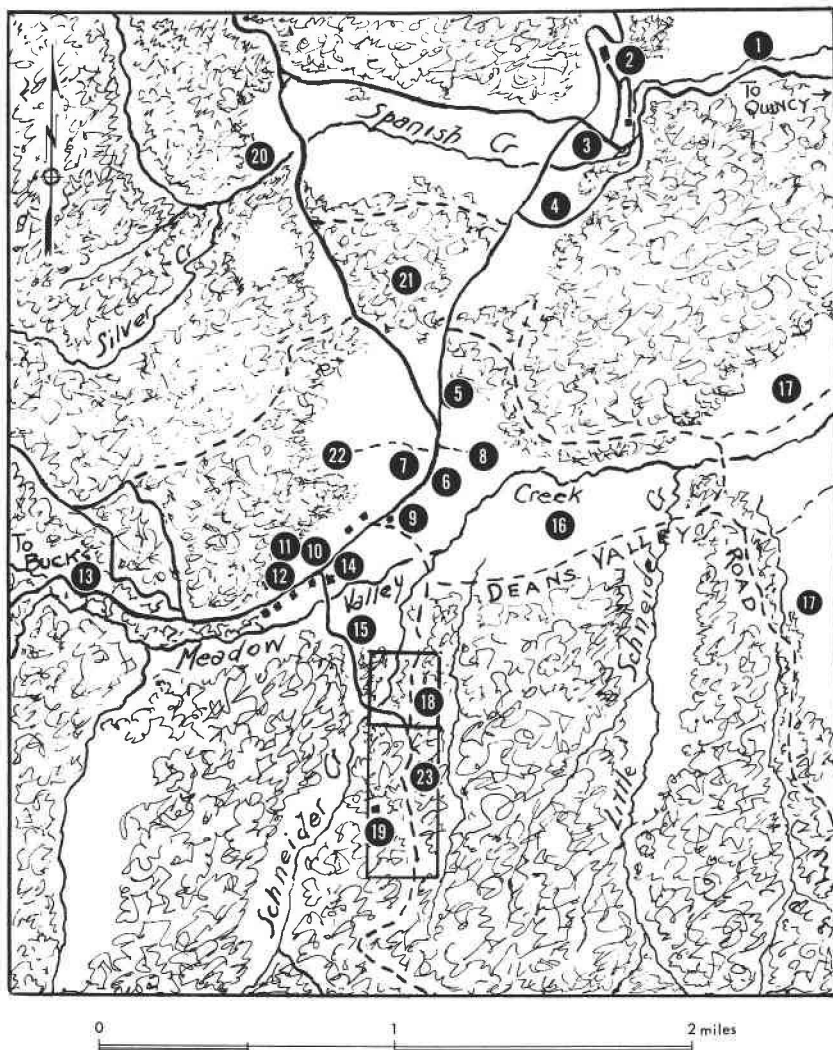
Then over on the north side of the road there still stands the "Study Hall" that was built in 1921. It is the place where everybody was told what they were to do every day, where reports were written, tests were taken, and all the other academic fol-de-rol was dished out. Of course, there have been dances and parties there too; and back in 1928, there was even a mock wedding of Ted Osborne and his girl friend that became a real affair some months later. On the educational side, there was the year when that major mensurationist F. X. Schumacher was burning up with newly introduced statistical attacks he had just invented, and the students strove to master the mathematics 'til even past midnight in this Hall of Learning, with "Schu" right there to advise and accept final answers; whereupon the student moved over a table or two and sat down once more with "Schu" and other "finished" students to enter the game of poker that was said to run as late as 2 a.m.

This old "Hall" has had additions, changes in the interior, new roofing, new sills when the white fir timbers rotted out; but just the same, it still looks familiar to all us old timers.

And then too, the map shows where the tents were lined up, the number varying, of course, from year to year, the campfire circle, the incense cedar with the sacred B.M. (bench mark) chopped into its base that proclaims that the elevation there was 3857.113 feet above sea level in 1922. It is undoubtedly the same some 40 years later but the old blaze is healing over and the cedar is about to die anyway. Then, too, there is the bath house that Fritz got built and running well with hot water in 1926—but that has retired from its original use and has become boat house, plumbing shop, storage place for junk and all, while bath houses of higher class now exist up on top of the ridge.

And that is about all we note upon the map. But perhaps we should include the "Rest Room," one of the best we ever visited with its sky blue ceiling, perfect walls looking exactly like fine branchy white fir trees and excellent ventilation.

We need to remember Meadow Valley itself. Of course there is the



Map of the Meadow Valley area. (Cartographer—F. S. Baker)

NUMBERED PLACES ON THE MEADOW VALLEY MAP.

- | | |
|----------------------------|----------------------------------|
| 1—Bare old placered ground | 13—Serpentine outcropping |
| 2—Sawmill | 14—Stratton's Place |
| 3—Old sawmill office | 15—Schneider's House |
| 4—Lincoln Highway sign | 16—Stratton's Meadow |
| 5—Store and Post Office | 17—Serpentine area |
| 6—School House | 18—Camp Calforest "40" |
| 7—Philomathean Hall | 19—Old Engle Cabin |
| 8—Cemetery | 20—Chinatown Site |
| 9—Dean's Barn | 21—Gold Mining Area |
| 10—Old Meadow Valley Inn | 22—Jack's Place |
| 11—Mrs. McLennan's Inn | 23—F. S. Baker Forest (80 acres) |
| 12—Chester Hard's House | |

mill (2)³ up on the north edge of the Valley with the pond and the old office down on the road (3), built in part, the story goes, way back in 1849 as headquarters for the "Spanish Ranch" where they raised cattle to keep the gold seekers on the job. Then there is the store-post office (5) that has changed remarkably little in the last half century.

Just a bit down the road from the store is the Meadow Valley Schoolhouse (6) where at times the camp boys have gone to help graduation exercises. Of course, it may sound odd that these boys would go to help the kids graduate from a plain little grammar school—but remember, there has to be a teacher involved, too.

Behind the Schoolhouse is a small, fenced area shaded by tall pines around the edge, covered with well-watered rich, green grass within, and dotted over with gravestones of early settlers, gold seekers, farmers and loggers. Usually old gold treasure spots like Meadow Valley have cemeteries that have run down to picturesque ruins, but in Meadow Valley the place has been maintained beautifully through the years.

Long ago, the rather dilapidated and unpainted Philomathean Hall (7) was right across the street where the lane runs up to Jack's Place (22), as we called the ranch of the old-time Jack's family, which competed with the Stratton's just down the highway a little further for damnation of Meadow Valley. This Philomathean Hall was used for local dances once in a great while in the early days of our camp, but it soon became so weak in the seams that dancing was stopped as being too dangerous and the place was dismantled.

Then, past this corner and a string of houses on the right in the very oldest days of our camp was the Meadow Valley Inn (10), which was an important stopping place in the old days of this highway, for the traveller had to be ready to tackle the long, poor road running up to Bucks and on to the lonely lava-capped ridge, to descend on the other side to Merrimac and finally on to Bidwell Bar—and coming the other way, there had to be a place where one might stop for a good meal and a place to rest, for now the traveller was down in the Pleasant Valley country. Travel patterns soon changed. About 1926 the old inn burned down and was never rebuilt, and the Stratton's abandoned the business of caring for the traveller.

Right next to the tansy and weedy filled plot of ground, marking the place today where the Inn once stood, a lane takes off westward, skirting an old apple-orchard and running back a couple of hundred yards to what was called the Meadow Valley Inn after the original one burned down. This Inn (11), nestled under a group of big incense cedars, and well-watered by the ditch that carried the Meadow Valley Creek water over the imperceptible ridge to Jack's Ranch, was more of a "summer resort" than a roadside "Inn" like the old one that burned. It was run in the period we are talking about by Mrs. McLennan, the pleasant and delightful widow of a mining engineer who was convinced that gold lay under Spanish Peak. This pleasant inn, which served excellent meals, was quite popular with faculty, especially in the period when camp was being set up early in the spring. Later, students

³Numbers refer to locations on Meadow Valley map. The sawmill was abandoned and partially dismantled in 1964. It was totally destroyed by fire late at night on June 25, 1965.

and faculty would wander down on weekend evenings and join in charades and old-time entertainments put on by guests around the camp fire under the cedars. And when the foresters put on a dance up in their Study Hall, Mrs. McLennan was sure to be invited as one of the chaperones for the affair.

The older alumni will remember that next to the lane into the Inn, there was a little old house all covered with vines—mostly hops—that was known as Hard's Place (12). Chester Hard was the fellow who kept an eye on our camp when we were not there and who shoveled the snow off our roofs when it got so deep that he was afraid the roofs might cave in. The parlor of the Hards' house was Meadow Valley "Central," and old Mrs. Hard was the operator. For some years we had no telephone at camp, and when you just had to call outside, you would go down there and tell Mrs. Hard to whom you wanted to talk, and she ground away on the crank and got "outside" via Reno in the course of time, while you sat there and talked Meadow Valley happenings with the Hard family. The place is now gone, as fire accounted for it some years ago.

Across from the Hards lived a youngster who was interested in those fellows who studied forestry every summer at the camp up the nearby side road. He decided that when he was old enough, he would become one of those forestry boys. He did, and Clint Hallstead graduated in 1939. Almost in front of his Meadow Valley residence there still stands the giant Sequoia that the budding foresters took a good look at every year in the course of their dendrology training.

Next notable place, of course, is our rough lane taking off the main highway. Right at the start it is flanked by good sized ponderosa pines, one of which was clearly marked for many years by the wound inflicted (in 1933) by our truck that came off the highway a bit fast and collided with the pine. Of course, Theodore "Dust Devil" Daniel '34 still remembers that vicious encounter with a pine tree when he was a student assistant and was rushing about to help get things all set for the camp dance that night.

Next to our camp lane is Stratton's place (14) with its remarkable collection of antique agricultural machinery about the barn. Then, a bit farther northward in the ancient days we are talking about, was a queer looking primitive barn that was built of logs and posts and seemed about to fall in. This was Dean's Barn (9), built mighty close to 1849, and properly ready to fall to bits even before we foresters showed up in Meadow Valley. Of course the "Dean's Valley Road" starts right here.

A tiny remnant of the place known as Chinatown (20) still existed when summer camp first began, and there was even a "Joss House" there, we have been told; but fire took that and some of the Chinese cabins, the very last being that of the Fong's. The head of the family ran the trimmer saw in the mill for many years, but now the Fong's serve you oriental foods in Quincy.

Down the road toward the store a quarter of a mile or so there was a red-white-and-blue sign hanging on the wire fence proclaiming that this was the Lincoln Highway (4). And so it actually was, for back in those early days of automobiles the surest way across the Sierra if you were headed for San Francisco was right through Meadow Valley and up over the toll road to Bucks and beyond.

CHAPTER 7

The Forestry Club After 1914

WITH the establishment of formal forestry instruction in the spring of 1914, the need for political activity by the Forestry Club no longer existed.

The common interest of the Forestry Club members was the out-of-doors and they turned their attention in this direction. Hikes and picnics were held frequently. The club members were eager to learn about soils, botany and ecology, and their new instructors, Pratt, Mulford and Metcalf, were able to turn their hikes into informal classrooms. One popular destination for these hikes was Mt. Tamalpais, across the Bay in Marin County. In these early days before the bridges (which were completed in 1937), a hike to Marin from Berkeley took considerable planning. The club had to take a train-and-ferryboat combination to San Francisco, change to another boat for Sausalito, then take another train to Mill Valley at the foot of Mt. Tamalpais. The hike and round trip transportation made a full day's trip.

Another favorite hiking trip was to the top of Mt. Diablo, about 20 miles east of Berkeley. The club took a train ride from Oakland on the Sacramento Short Line through Moraga and Walnut Creek to Minert Station. The 20-mile round-trip hike to the top of the nearly 4,000-foot mountain took most of a long day.

Publications

Another outlet for the energies of the Forestry Club members was found in writing and publishing. Their earliest known effort at periodic publication was the forestry number of the *Journal of Agriculture*¹ in November, 1916. Over the years the Forestry Club members managed "annual" numbers in 1924, 1925 and 1927 through 1930.

Encouraged by the success of their first forestry number in the *Journal*,

¹The *Journal of Agriculture* was published by the students in the College of Agriculture beginning in 1913. The publication retained this name until May, 1921, when it was changed to *California Countryman*. Final publication was in 1930.

the club members published their own monthly magazine, *California Forestry*. A trial issue came out in January, 1917, with K. A. Ryerson, editor, and A. F. Hall, manager. Vol. 1, No. 1 appeared in May, 1917, and the group was able to publish seven issues by November, 1917. With the entire staff and student body rapidly becoming involved in the war effort, it was an unlikely time for such a venture.

In January, 1933, a new Forestry Club publication appeared in the form of a mimeographed newspaper called *Axe Chips*. Published about every three weeks during the academic sessions, it continued until May, 1946, keeping the club members informed of intramural sports results and of forthcoming meetings, dances, picnics, and other events. It was a splendid outlet for latent talent of cartoonists and caricaturists amongst the club members.

The class of 1940 published a *Forestry Club Annual*, and the class of 1941 put out a similar effort entitled the *Califorester*. This was the last of the annuals until 1957 when *Timber* began publication which continues to this day. *Timber* is published in the late spring each year and consists of 50 to 70 pages of articles of current forestry interest and pictures and stories about the classes, faculty, and activities. The publication is supported by advertisements and sale of copies. *Timber* began originally as an independent effort of a few students, but within a few years became a regular activity of the Forestry Club.

Tree projects

In the fall of 1921, the idea of developing a fireplace and forester's circle in the Eucalyptus Grove on Strawberry Creek near West Gate was



The Foresters' Circle in the Eucalyptus Grove, Berkeley

suggested by Walter Mulford. The Union Lumber Co at Ft. Bragg, California, donated a number of large redwood logs which were delivered to the dockside in Oakland. Getting the logs to Berkeley was a problem for the club members. Fritz helped to engineer the project and the club members assessed themselves to cover the costs of accomplishing it. Every club member was a member of the fireplace committee. Marc Edmonds, the club member most skilled with an adz, was made chairman of the committee. Slightly more than a quarter-segment was cut out of the length of each log to form a seat. The logs were then placed to form a circle. The Forester's Circle was dedicated on November 24, 1922. Except for the sapwood on the outside of the logs, which has long since sloughed away, the log-circle remains today (more than 42 years later) in much the same condition as when it was dedicated.

Early in 1923, Woody Metcalf introduced the idea of Forestry Club members participating in the annual Arbor Day by planting trees. The first such effort consisted of trees planted along the trail to the "Big C" on the hill east of the campus. A more elaborate effort was made the following spring when more than 1,000 young redwood trees were planted on the slope on the south side of Strawberry Canyon. One of these groves was named in honor of Regent Bowles, who had worked for and contributed to their creation. Several groves were planted in the mid-twenties.

Intramural sports

The club has always taken part in the campus intramural athletics program and with considerable success. The high point was achieved in 1939-40 when the club teams won the All-University Victory Trophy given for total points in all sports. In individual sports they achieved University championships for these sports and years: Baseball—1935, 1939, 1940; Basketball—1935, 1936, 1938; Bowling—1936; Football—1940; Horseshoes—1939, 1940, 1941. In addition they won their league championships for these sports and years: Baseball—1936, 1937, 1961, 1962; Basketball—1937; Crew—1936; Football—1937; Golf—1937; Horseshoes—1949; Swimming—1941; Track—1964; Volleyball—1949. They won the Engineer's League Trophy for five consecutive years—1936 through 1940—and retained possession of it.

In the early 1950's the club, in connection with California Conservation Week in early March, began a program of visiting local primary and secondary schools to give illustrated talks on forestry and conservation. This provides an annual contact with more than 500 youngsters.

Another seasonal club activity is its Christmas tree program. Early in the fall semester the Big Tree Committee and the Little Trees Committee are formed. The "big" tree becomes the official University Christmas tree and must be at least 40 feet tall. This tree is scouted during the fall semester and, on a weekend near the first of December, the committee gets the tree. Because of the limited equipment available for this once-a-year operation, the selected tree is usually close to a road so that it can be lowered gently and undamaged to the bed of the truck that delivers it to Berkeley. The tree is purchased by the Associated Students and the revenue provides an important source of income for the club.



Forestry Club intramural sports trophies, 1936

The Little Trees Committee seeks a friendly alumnus who has home- and table-sized trees and is located within a weekend operating range of Berkeley. Usually about 100 trees are cut. Approximately one-half of these are donated, with the compliments of the club, to offices, libraries and important campus individuals as a gesture of goodwill. The other half are sold to fraternities, sororities and individuals to help raise funds for other club activities.

Social activities

The club's social activities begin in the fall with a bean feed. By the second month all of the slides taken during summer camp have been collected and organized into a show that provides hilarious entertainment for all who attend. And it is on this occasion that the Broken Axe Handle Award is made. This award is given to the person, student or faculty member, who, after appropriate nominations, is voted to have pulled the "bone head" stunt of the year. The winners of this award since it was begun in 1952 and the things they did to earn it are:

BROKEN AXE HANDLE AWARD

1952—Jim B. Nile

For neglecting to untie a tool rope that went from his truck to the top of an anemometer mast before driving off, thereby taking the top of the mast with him.



The University's Christmas
tree



1953—Edward C. Stone

For locking himself into the walk-in ice box at camp. Since Ed was in charge of camp facilities, a fire axe was thereafter kept in the box and the latch was fixed so it could be opened from the inside.

1954—Mark Foster

For falling asleep during the Spanish Peak orientation lecture and having his picture taken. (The picture was later used in a School announcement with Mark touched out.)

1955—Robert A. Cockrell

For leaving two men on a logging operation field trip a long way from camp. It had been an upsetting day. In the morning on the way out, Cockrell was driving the "Silver Streak" and came to a steep grade. He put the gears in reverse instead of compound low and nearly put the works into the canyon.

1956—The entire junior class

For "effective" fire drills at camp. The award was accepted by Larry Rodick and Kurt Korthals, who played such an active role in camp boo-boos and managed to get lost from each other while hunting for section corners with the aid of aerial photographs.

1957—Dietrich W. Muelder

For hanging his glasses on the limb of a tree and forgetting them. The successful search for them took 45 minutes and involved every man in camp.

1958—Darrall T. Imhoff

For insisting on felling a tree against the lean and the advice of his campmates, thus blocking the road and cutting the telephone lines in the process.

1959—Robert S. Dutra and Paul D. Merrill

For permitting a little dampness to shut down their side camp. With the only night rain of the summer coming on the first night of side camp, they packed six miles back to camp and said, "What do we do now?" Bob Colwell suggested they get some dry socks and hike back to work.

1960—James E. Maloney

For running to attack a flare-up on a fire and, leaping through a patch of reproduction, found himself in midair above a road cut. Gravity took over and Jim slid to a halt on his face. Another portion of the crew was on hand to witness the event.

1961—Charles J. Spinnetta

For being in on, and perhaps the catalyst for, practically every mischievous event to occur during camp. Awarded by his campmates for his "entertainment leadership."

1962—William S. Berry

For attempting to pole vault with his Jacob staff onto the bed of the crew truck. His feet made it before the staff broke and Bill wound up on the back of his neck under the truck.

1963—William A. Baker

For attempting to get one last firewood cross-section from a log above the road near Schneider Creek Falls and sending the entire tree into the road. It took most of the camp personnel the better part of a night to remove it.

1964—Ken Meyer

For attempting, under instructions from Wes Melo, to fell a tree. The tree fell away from the undercut, scattering witnesses in several directions. (Mystery: Why didn't Melo get the award?)

1965—Craig A. Sinclair²

For having the ill-luck to be surprised by the Camp Director and the Plumas County Deputy Sheriff while retrieving his six-pack of beer from Schneider Creek.

After the bean feed, a couple of picnics and a dance usually complete the fall social calendar.

The spring social events are highlighted by the annual Clam Dig (at Bolinas Bay, just north of San Francisco), which is a fine excuse for a picnic. A couple of weeks later the clam stew makes another nice party. The final dance, held in May and called the Gyppo Ball completes the social calendar on the Berkeley campus.

The final club event of the school year is the party given at Silver Lake at the end of the orientation hike held on Saturday of the first week of summer camp. Usually, a small but hardy group of seniors or "just" graduates who can make the trip, bring in the ingredients for a party and greetings for the new students, many of whom are just beginning their association with the School and the University. This occasion fosters fellowship and a group spirit that carries the club members throughout their active years at the University and on into the alumni group.

Forestry Club officers are tabulated in Appendix E.

²Son of Robert C. Sinclair, '40.



The Forestry Club spring clam-dig and picnic, Bolinas Bay, 1963

CHAPTER 8

The California Alumni Foresters

ORGANIZATION

THE seed for the Alumni Foresters was planted at the Forestry Club meeting on October 5, 1921. "Professor Bruce gave some news on the graduates. Mr. (John T.) McGinn suggested a reunion of graduates. A discussion on the subject of an alumni association followed."¹

A year later, on November 1, 1922, a letter outlining the proposed movement for an alumni association was sent to Murrell C. Warren. The first meeting date was set and Warren passed the word about the meeting. On the appointed date, ten recent graduates joined three seniors about to graduate and one graduate student, to discuss the formation of the association. Considering that there were only 23 graduates at this time, the group represented nearly 50 percent of the total alumni.

The minutes tell the story of that organizational meeting:

MINUTES OF FIRST ANNUAL MEETING

U. C. Foresters

November 24, 1922

Meeting called to order Friday, November 24, 1922 at 2:30 P.M. by Chairman Warren in Room 110, Hilgard Hall.

Present—Dunning, Hall, Byrne, Oliver, Hiscox, Pemberton, Leidig, Riley, H. P. Miller, Stanford, Crowell, Edwards and Wagener [Warren].

Prof. Mulford spoke a few words of welcome and pledged the cooperation and support of the Forestry Division and its members in anything the meeting might see fit to set on foot.

Chairman Warren opened the question as to the advisability of

¹Forestry Club minutes.

forming a forestry alumni organization. It was the sense of the meeting that such an organization should be formed.

Moved, seconded and carried that the officers of the organization be the U.C. Foresters.

As a result of an election for officers, M. C. Warren was elected President and W. W. Wagener Secretary-Treasurer by acclamation.

After a discussion, it was decided that all former U.C. students and ex-members of the Forestry faculty engaged in or interested in forestry should be eligible for membership.

Moved, seconded and carried that a meeting of the organization be held annually, the tentative date being two days preceding the Big Game, the meeting to consist of a business meeting in the afternoon and a dinner in the evening.

A motion was also carried that a newsletter be issued quarterly by the Secretary.

Moved, seconded and carried that annual dues of 50 cents be assessed each member.

An invitation was extended to the members present to be his (Walter Mulford) guests for dinner at the Faculty Club that evening. Meeting adjourned.

Willis W. Wagener
Secretary

Wagener's letter of December 2, 1922 to all alumni tells the story of the rest of this big day:

At 6 P.M. the bunch were the guests of Professor Mulford at dinner at the Faculty Club. One or two of those on hand at the afternoon meeting were unable to be present for the dinner but Bob Downs showed up to fill one of the vacancies. All of the Forestry faculty were on hand as well, including Bruce, Metcalf, Fritz, Sampson and Schumacher. During the course of the very excellent meal Professor Mulford read extracts from a number of the letters received by him from fellows who were unable to be on hand and then told us of a few things he had been thinking about with relation to the future of the school. They were big things, very big indeed. Then each one present told what he had been doing during the past year or so and the gathering adjourned to the Forestry Club dedication meeting in the eucalyptus grove.

The latter was a fitting climax to the day. Besides the forestry faculty, grads and forestry club members, a good-sized delegation from the California Section of the Society of American Foresters and a group of prominent lumbermen were on hand for the dedication of the circle of eight four-foot redwood logs donated to the club by the Union Lumber Company and placed and hewed into seats through much hard labor on the part of the club members. Marc Edmonds, president of the club, presided and called on several of those present. Murrell Warren was the first one called on and outlined briefly the nature of the organization formed at the afternoon meeting, conclud-

ing with a few remarks on the general topic of the evening, the forester's life working plan. Dr. Sampson, who has come to the school as the head of the grazing section, gave us some idea of the interrelations of grazing and forestry with a bear story intermingled. The unveiling of a bronze tablet bedded into one of the logs of the circle came next, accompanied by a few appropriate remarks by President Edmonds. A telegram bringing greetings for the occasion from Knowles Ryerson in Los Angeles was also read. The inscription on the tablet reads:

Foresters Circle

May the ideals fostered around this campfire play a worthy part in the conservation of the beauty and usefulness of our forests.

Gift of the Union Lumber Company.

The remainder of the program was made up of a very good talk on the foresters' life working plan from a Forest Service viewpoint by Mr. Hutchison of the District 5 office, and some interesting remarks by Mr. Trabert of the Coos Bay Lumber Company on the first large scale continuous production project attempted on the coast, if not in the United States. Some of the old original members of the club may remember Mr. Trabert who took quite an interest in it when it was in its first years and talked before it on several occasions. Songs and refreshments concluded a memorable evening. The redwood circle will fill a long felt want for the club in furnishing a convenient meeting place with the right kind of surroundings.

The alumni gathering and the foresters circle dedication were held on the day before the Big Game between University of California and Stanford University, a natural gathering time for "Old Blues." These were the days of Andy Smith's Wonder Teams and it was the last Big Game for the famous "Brick" Muller. Cal won this one 28-0, making it a big weekend at the University of California!

The U.C. Foresters Association furthered a number of objectives. Perhaps the most important of these was the desire to maintain the close spirit generated by their associations at summer camp and through Forestry Club activities. This willingness and interest to participate in an alumni association is most certainly the only reason that the more important activities of the Walter Mulford Loan Fund and later, the Walter Mulford Scholarship Fund and the Alumni Advisory Council, were able to develop.

THE "CALIFORNIA FORESTER"

The "glue" that binds an alumni group together is the spirit of fellowship and the periodic publication of a newsletter. The organization meeting called for newsletters to be issued quarterly by the secretary. No one seems to have thought of the effort necessary for such a publication, but in the first paragraph of volume I, number 1 in January, 1923, secretary-editor Willis W. Wagener stated: "It had been hoped to have it out about January 1st, but unforeseen delays in getting out the first circular letter and press of

personal and regular work recently have caused its postponement until this time."

Three other issues were published that first year (1923), the only year other than 1931 when the quarterly newsletter was achieved. Three newsletters were published in 1926, 1928, and 1929; and two each in 1925, 1927 and 1935. There was a single issue in all other years except 1938 and 1964 when publication was suspended for the year. By 1963 a total of 55 issues had been published.²

All issues through February, 1940 were reproduced by mimeograph. A mimeographed cover drawing of a bear in the woods by Kenneth McLeod, Jr. '24 first appeared in May, 1925. This cover was used for 11 issues until it was replaced by a printed cover. The new cover, a large bear's head in a block "C" under the words "The University of California Forester," was drawn by R. A. Ogan, an East Bay landscape architect and former forestry student at Iowa State College, and a friend of E. B. Stephens '28, who donated the cut to the alumni group. This cover was used for 15 issues until February, 1940. The *U.C. Foresters' News-Letter* took the name of its new cover, beginning with the January, 1931 issue. The December, 1931, issue was called *California Forester*, which heading has been used to the present time. In March, 1941, the *California Forester* switched from mimeograph to letter press, which made possible the use of photographs and increased the quality as well as the cost of the publication. (See Appendix F-3 for editors of the *California Forester*.)

Like most such organizations, the alumni group had a difficult time in its first few years. The real pillar of the association during the first two years was Willis W. Wagener. Almost single-handedly he collected the dues, coaxed the alumni to "join with the gang," wrote and published the first four newsletters. He served as chairman of the second annual meeting on November 23, 1923, in the absence of president M. C. Warren, and was elected president at that meeting.

By the third annual meeting in 1924 the group had lagged to the point that only seven members showed up. No official meeting was called and the group informally discussed ways and means to keep the association alive. This was resolved by the group asking president Wagener to prepare a "circular letter to the fellows, setting forth the problems needing solution."

The Division of Forestry, and particularly Professor Fritz, who became editor, supported the newsletter with its May, 1925 issue. The lead item of this 24-page issue was Wagener's letter: "U. C. Foresters—Sink or Swim." His eloquent plea called for individual participation and the creation of an alumni advisory committee, the earliest published notice of this important group, which continues to serve the School today. The newsletter now had considerable news of the Division, staff and activities as well as news of the "old grads."

The U. C. Foresters had passed an organizational crisis; it had achieved good communications and a purpose.

²A complete, bound set of *California Forester* and *News-Letter* is kept in the School of Forestry library.

THE WALTER MULFORD LOAN AND SCHOLARSHIP FUNDS

By annual meeting time, November 20, 1925, a new alumni activity had been initiated, but because of its secret nature there is no written record of its origin. The announcement was made by Dean Hunt, who was a very close friend of Professor Mulford.

"If you were asked what is the most precious asset of the University," Hunt said, "what would be your answer? I would say that the most precious asset is the love of the alumni for their Alma Mater and their appreciation of their teachers."

He then announced creation of the loan fund and continued:

"Obviously this loan fund should have a name, and it is quite obvious what that name should be. The man for whom this fund is to be named is known everywhere and by everybody, not alone for his great ability and his contributions to his chosen calling, but for his high sense of honor and human sympathy. It is quite a happy augury which is more than a coincidence that this fund should be known as 'The Walter Mulford Forestry Loan Fund'."

The initial contribution to the Board of Regents for the Walter Mulford Loan Fund was \$376.00 and three men availed themselves of loans to help them over the summer of 1926. By 1927, the spirit of the Loan Fund had caught on and the members, at the annual meeting, voted the entire balance in the treasury (\$86.00) to the Fund as well as subscribing pledges for an additional \$122.00.

The Loan Fund reached the \$1,000 level by 1932 and was just under \$1,900 by December, 1941. Following World War II, the Fund received new impetus and by mid-1953 had reached approximately \$4,700.

About this time it was realized that the Loan Fund had reached its approximate level of need. At the annual meeting on December 4, 1953, a resolution was passed to create the Walter Mulford Scholarship in Forestry Fund. This scholarship is for undergraduate students in the School of Forestry. Attempts to transfer excess money from the Loan Fund to the Scholarship Fund failed because of legal difficulties. Loan funds and scholarship funds have different objectives and, to protect the donors' purpose, the only basis for transferring funds is to obtain signed statements from the donors of their intent to make a change. Because of the many small contributions to the Loan Fund, it was decided that this would be too difficult to accomplish. The obvious next step was to ask that all future contributions be made to the Scholarship Fund.

The first \$500 for the Walter Mulford Scholarship Fund was deposited to the Regents on December 13, 1954, and a \$300 grant to cover the first scholarship award was made the following day. It was accepted by them on May 2, 1955.

(See Appendix B for List of Walter Mulford Scholarship recipients.)

THE ALUMNI ADVISORY COUNCIL

The first constitution of the California Alumni Foresters, a one-page document, adopted in 1928, provided for the organization and appointment of an Advisory Council.

The first Alumni Advisory Council was appointed on November 20, 1931, to serve during 1932. It consisted of Selwyn J. Sharp '20, Lawrence C. Merriam, Sr. '21 and Burnett Sanford x'17, in addition to the president (Thomas K. Oliver '21) and the secretary-treasurer (John R. Freeman '27).

There was no succession of appointees in the early advisory councils. New appointments were made each year. The record shows that councils were appointed for the years 1933, 1934 and 1938. In 1942 a motion was passed to study the need for a permanent alumni advisory committee. This resulted in a plan for continuation of the three-man advisory group plus the officers ex-officio with the advisory appointees serving staggered terms of two years each. This provided the important attribute of continuity to the council. Under this system, councils were appointed for 1944, 1946, 1947 and 1948. Using staggered terms of two years proved cumbersome with a three-man council, and in 1950 a plan was initiated whereby each member served three years, with one new member appointed each year. This plan was further modified in 1956 when the membership of the Advisory Council was increased from three to six, with each member serving three years and two new members appointed each year. This is the council organization at the present time. (See Appendix F-2 for members of the Alumni Advisory Council.)

OFFICERS

Even the officers of the California Alumni Foresters and their election and succession has varied over the years. Initially, and for the first seven years, the only officers were the president and secretary-treasurer. No succession was provided for. Willis W. Wagener MS '28 was secretary-treasurer for 1923 (the first to hold the office) and was elected president for 1924. Because sufficient members were not present at the meeting time in 1924, the officers were held over for 1925. It was Wagener's strong leadership and devotion to these offices that held the group together during the formative years.

In 1929, the office of vice-president was established. The problems of administration continuity brought about the office of "permanent" secretary-treasurer in 1937. Thomas H. Harris '27 became the first "permanent" secretary-treasurer and held the office for ten years. Charles C. Buck '30 succeeded Harris and served from 1947 through 1954. With Buck's resignation (because he was transferred to the Washington, D.C., office of the U.S. Forest Service) the secretary-treasurer's office became appointive, and has never been held for more than two years by any appointee.

The election procedure was partially simplified in 1940 when all candidates were voted for in order of preference. The two leading candidates became president and vice-president in order. Election was further simplified in 1944 when a motion was passed to provide the automatic succession of vice-president to president the following year. This improved the continuity of administration and reduced the ballot to a single office, that of vice-president. This practice is continued today. (See Appendix F-1 for list of officers.)

THE MEMORIAL READING ROOM

After World War II, in 1948, the alumni felt the need for a suitable memorial to those members who had lost their lives in the service of their country. A committee was appointed with Jack Freeman '27 as chairman and John Zivnaska '38, Donald Gordon '39, Tom Harris '27, Russell McRorey '36, Clarence Stevens '46, as members. The committee reported at the annual meeting in 1949 the establishment of a Foresters Memorial Reading Room adjacent to the Forestry library in the southeast corner of the new Forestry Building. A fund was started with a deadline of June 30, 1950 to raise money to furnish and prepare suitable dedication for the room.

A total of \$1,100 was received and given to the Regents for the purchase of furniture and a bronze plaque which reads:

Foresters Memorial Reading Room
Dedicated to those students and alumni of
the School of Forestry who gave their lives
in World War II
California Alumni Foresters

The dedication ceremony took place on December 7, 1951, the tenth anniversary of Pearl Harbor. Dean Baker delivered the following words to those assembled for the occasion:

"We meet here this afternoon to mark the completion of a highly successful project of the alumni of this School of Forestry, to which you have contributed aid of many kinds, so that we are marking a very real addition to the School. A special reading room is an excellent thing, but this memorial reading room is far more than that, for it is no mere spot for relaxation but a spot of deep significance and remembrance for us all.

"We are all foresters, and as such we have a sort of foresters' philosophy and picture of life that grows out of our ways of thinking of trees and forest stands. Each year here at this School, in June, a new crop of seedlings of California foresters enters the profession. These even-aged new stands consist of small numbers of tree-men, capable of many years of development. They become saplings, poles and soon mature trees capable of real usefulness and to be the real saw timber of the profession—and the democracy of America. Forestry is so new that these forests of each year and season mingle in a lasting manner. And since human-trees have a pair of legs and move about, we have variable all-aged stands like this one right here and now with some hardly past the young seedling stage to others like our own Professor Mulford in the fine mature stage of life. We have our dominants all right, too, our intermediates and suppressed ones—but just as in the forest of wooden trees such ones develop only in the long life.

"But—this room! Just ten years ago a great storm or insect attack or other blight—I don't quite know what it was, struck us, this forest of democracy rather than foresters. And clearly enough good, sound, young trees, vigorous, with clean boles, of good growth and form were needed to cope with the enemy of the great forest of American free-men. And democracy found many among the fine stands of young forester-trees. Many of you were there and came safely back, but well do you know that it was a storm of high danger to even the stoutest young trees of the nation, and they disappeared from our human forest without ever growing up into old-growth saw timber. So here we are to dedicate a room to their memory—forever.

"The lesson of their lives needs to be brought home to the young saplings here. The human-forest takes in many forest types and becomes a true democracy. The young forestry seedlings are only a part of the forest. They have grave citizen-tree duties that may go far that their very lives may be given to maintain this real American forest. And foresters of this earlier stand did just that and did it devotedly.

"This room will also encourage the young foresters to forget the technicalities of learning about wooden trees for a time and help them to learn that they rub against one another and life of one affects the life philosophy of another. These past lives we honor today are not to be forgotten, and these gone strong human-saplings will pass on some of themselves to the new stand. They will tell them softly but deeply of the past, of the great human forest war and of how they served with life itself.

"Let us remember them indeed!

"Let me pass their names on to you; those who graduated in 1937 to 1953 will recollect them well. Most of them I remember well, and I wish I could give you a clear-cut picture of each—but I really cannot. But what they did—lives with us old trees and new trees too very clearly and well.

Lieutenant Fritz Barkan, U.S. Army Air Corps, Class of '39

Lieutenant Charles F. Bishop, U.S. Army Air Corps, x'45

Lieutenant Robert J. Buel, U.S. Army Air Corps, Class of '40

Captain W. Barton Coombs, U.S. Army Air Corps, x'27

Lieutenant Milton T. Cunha, U.S. Marine Corps, Class of '42

Captain Louis J. Drnovich, U.S. Army Engineers, Class of '38

Lieutenant Walter Flood, U.S. Army Air Corps, x'44

Lieutenant Robert T. Hanson, U.S. Army Air Corps, Class of '38

Lieutenant Harvey A. Hunewill, U.S. Army Air Corps, Class of '41

Lieutenant Jean Kampschmidt, U.S. Army Air Corps, x'44

Major Donald McAuley, U.S. Army Air Corps, Class of '39

Lieutenant Colonel Grant Mahony, U.S. Army Air Corps, Class of '39

Lieutenant Robert Praun, U.S. Army Air Corps, Class of '42

Corporal Daryl Price, U.S. Army, x'46

Captain Leon A. Ruben, U.S. Army (Infantry), x'35 MS

T/Sgt. Thomas T. Sagamori, U.S. Army (442nd Infantry),
Class of '41

Lieutenant Richard C. Santee, U.S. Naval Reserve, Class of '40

Captain Justino Segueria, Philippine Scouts, x'40 MS

Aviation Cadet Kenneth Shearer, U.S. Naval Reserve, x'43

Ensign Edwin E. Sindel, Jr., U.S. Naval Reserve, x'41

Lieutenant Maurice S. Smith, U.S. Naval Reserve, Class of '38

Ensign Glenn J. Taylor, U.S. Naval Reserve, Class of '37

Lieutenant James Thanos, U.S. Naval Reserve, x'38

"Let this room forever be a memorial to these men and may their bravery, fortitude and fine character live on forever here where their spirit can touch the fine young growth which is becoming a part of a good profession of forestry. Remember, too, that these young men are a real part of the great human-forest of American democracy.

"Here's to the endless dedication of this place and the dedication of our lives as good foresters to the philosophy of real Americanism."

The first memorial gift of books to this reading room came from Mr. and Mrs. Elliott Navon, parents of David R. Navon '49, who gave his life fighting the Mann Gulch Fire in Montana on August 5, 1949. Mr. and Mrs. Navon have continued their gift annually and it has provided many important additions to the development of the room. Numerous other gifts of books and money for books have been added over the years to this living memorial.

ALUMNI CHAPTERS

At the annual meeting on December 5, 1947, Paul Stathem '34 pointed out the desirability of having organized local alumni groups. A committee was appointed to "effectuate the formation of local organizations." The members were Don Cosens '45, Preston McCanlies '39, Leon Snyder '42, Paul Stathem '34, and Myron Krueger '17, chairman.

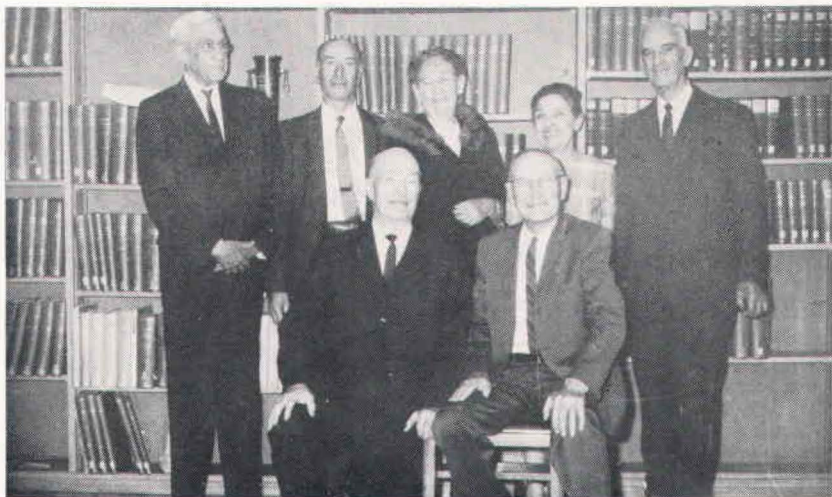
The first local organization, the Pacific Northwest Chapter of California Alumni Foresters met on February 9, 1948, with Ted B. Plair '31 as chairman and Richard C. Wilson '34 as secretary.

The organizing committee reported to the officers of the California Alumni Foresters in March, 1948, that the areas suitable for the development of local chapters were the San Joaquin Valley and the redwood region. The action by the alumni in the Pacific Northwest was considered to be a "sort of spontaneity as highly desirable" but, "in no case should pressure be brought on local groups for the formation of chapters."³

The Chapter officers for 1949 were:

<i>Chapter</i>	<i>Chairman</i>	<i>Secretary</i>
Pacific Northwest	Travis M. Tyrrell '28	W. E. Bullard '35
San Joaquin	Warren Wood '37	Jake Jacobson '35
Redwood	Hugh Bower '25	Gray Evans '33

³Report of Committee of Formation of Local Chapters, p. 10. *California Forester*, April, 1949.



Honorary Life Members, California Alumni Foresters, December, 1963. (L. to r.—standing, F. S. Baker, T. H. Harris, R. Venable, B. E. Weisbrod, E. Fritz; seated, M. E. Krueger, W. W. Wagener)

The formation of chapters necessitated a constitution amendment, and a new article on chapters was added.

Chapter meetings were held at irregular intervals and usually tied to some other meeting that brought alumni together. These included national, section and chapter meetings of the Society of American Foresters, meetings of the Forest Products Research Society, Western Forestry and Conservation Association, and logging congresses. Less formal occasions in the Pacific Northwest included luncheons before football games with Cal playing one of the local teams. Faculty member visits to a local area were often the occasion for hasty gatherings of local alumni for a luncheon or dinner.

Most chapter meetings were attended by 10 to 25 alumni. The largest group was the 32 who attended the Pacific Northwest Chapter meeting held in Seattle in October, 1949, in connection with the national Society of American Foresters meeting. The poorest meeting attendance occurred with the Redwood Chapter in early 1949 when, "because of 'crossed wires' the (2) officers ended up having dinner with themselves."

In 1950 the Pacific Northwest Chapter held three meetings—one in connection with the Forest Products Research Society and two in connection with football games, one "successful meeting was held in the University of Washington Stadium in Seattle." The Redwood and San Joaquin chapters were inactive except for one meeting in Fresno in January, 1950.

The principal business of the chapters has been the relating of school news to the local alumni although the Pacific Northwest Chapter in 1948 passed resolutions to "the University for action on filling the deanship of the Forest School" and, through the California Alumni Foresters, "requesting early action on the Forest Products Laboratory by the University."

In recent years practically all alumni gatherings, other than the annual meeting in Berkeley, have been of an informal nature and held in connection with national Society of American Foresters or Western Forestry and Conservation Association meetings.

HONORARY LIFE MEMBERSHIP

Honorary Life Membership in the California Alumni Foresters was first conferred on Miss Reid Venable, administrative assistant in the Department of Forestry, by resolution at the annual meeting on December 18, 1943.

In 1946, the constitution of the California Alumni Foresters was amended to provide for honorary life membership. This class of membership is awarded to "any person who has made an outstanding contribution to the well-being of the body of California Alumni Foresters or who has furthered the objectives of the organization by exceptional service."

Those elected to honorary life membership after Reid Venable were:

1946—Walter Mulford
1949—Emanuel Fritz
1956—Myron E. Krueger
1958—Frederick S. Baker
1959—Thomas H. Harris
1961—Birdie E. Weisbrod
1963—Willis W. Wagener
1964—F. Paul Keen
Woodbridge Metcalf
Arthur W. Sampson
A. Everett Wieslander

DEANS' PORTRAITS

In 1950, following an expression of interest and support by the students and alumni, Mrs. Walter Mulford arranged for a portrait to be painted of her husband. The portrait, by the eminent American painter Alfred Jonniaux and a gift of the Mulford family, was accepted "with appreciation" by the Regents on March 5, 1951. The formal acceptance ceremony took place in the Forestry Building auditorium on June 3, 1951, and Miss Dorothy Eakin, Mulford's granddaughter, unveiled the portrait. The portrait, which is 30" x 36" in size, hangs in the east entrance lobby of Mulford Hall, and is the frontispiece of this book.

Following Dean Baker's retirement, the alumni expressed the wish to continue the sequence of dean's portraits. In 1961 they created a fund for this purpose and Robert Rishell of Oakland was commissioned to paint Baker's portrait. It was completed in 1962 and unveiled on the occasion of the annual meeting on November 30, 1962. Mrs. Baker performed the unveiling. The Baker portrait hangs in the second floor corridor just outside the Forestry Library entrance. A photo of this portrait with Dean Baker demonstrating his favorite hat at the unveiling is shown in his biography on page 99.



The 50th Anniversary theme plaque made of California Black Walnut

CHAPTER 9

The Fiftieth Anniversary Celebration

THE formal observance of the first 50 years of forestry education at the University of California was held on the Berkeley campus on December 4–5, 1964. The program was developed around a theme of *Forestry in Science and Society*, with two colloquium sessions, one held during the morning of each day.

On Friday, December 4th, with over 400 people in attendance at the Pauley Ballroom of the Student Union, the first session began with Dean Vaux presiding. Edward W. Strong, chancellor of the Berkeley campus, welcomed the conference and informally and warmly told of his early days in Oregon and his work in the forests and associations with forest industry.

Daniel G. Aldrich, chancellor of the Irvine campus and former state-wide dean of agriculture, delivered the conference keynote address, *The Role of Scientific Research in Planning for Resource Development and Use*.¹

Dean Vaux then introduced Professor John W. Duffield who delivered the principal address of the forest genetics symposium entitled, *Some Influences of Genetics on Foresters' Thinking*. This was followed by a three-man panel of forest geneticists—Nicholas T. Mirov, William B. Critchfield and William J. Libby—moderated by Robert Z. Callaham.

The 50th-anniversary luncheon followed the morning program and was held in the other half of the Pauley Ballroom. Over 330 people attended. They were entertained by the Cal Straw Hat Band, which marched around the room and played a medley of Cal tunes familiar to most of those in attendance. Harry W. Camp served as toastmaster for the brief program before he introduced Professor Colwell, the luncheon speaker, who presented a lively talk illustrated by over 50 slides on the subject, *Remote Sensing of Man's Environment*.

Following the luncheon, the California Alumni Foresters held their annual business meeting. The remainder of the afternoon was available for

¹This address together with all other addresses and abstracts of the six panelist presentations has been published as a proceedings of the conference by the University of California. Copies may be obtained from the School of Forestry, Berkeley, California 94720.

1) tours of Mulford Hall where open house was held and numerous exhibits of the teaching and research techniques in forest physiology, wood science, photogrammetry, economics and management, fire control, range management and soils, as well as library and Forestry Club exhibits, were on display; 2) tour by bus to the School's Forest Products Laboratory in Richmond and 3) guided campus tours by bus and on foot. The forestry students served as guides for these activities.

During the early evening hours of Friday the Alumni Foresters served as hosts at a reception in Alumni House to honor the faculty, President Clark Kerr and other University administrative officers. Nearly 400 people attended.

On Saturday morning Keith Arnold, president of the California Alumni Foresters, presided over the second colloquium session which began with the address by Philip A. Briegleb,² president of the Society of American Foresters who spoke on, *The Forester in a Science-Oriented Society*.

Arnold then introduced Professor Zivnуска who delivered the theme talk of the symposium on *The Social Approach to Forestry*. This was followed by a panel discussion by H. R. Josephson, Carl H. Stoltenberg and Eugene V. Zumwalt moderated by Ernest W. Wohletz.

Final addresses of the second colloquium sessions were, *The Forest Industry and Social Needs* by Ralph D. Hodges, Jr. and *The New Forestry* by V. Lester Harper.

Following an open lunch period, the Northern California Section of the Society of American Foresters, which was meeting jointly with the California Alumni Foresters on this occasion, held its annual meeting.

Late in the afternoon the Chancellor's Reception was held at University House. Chancellor and Mrs. Edward W. Strong were hosts and generously gave time from their busy schedule to greet all alumni and their friends.

Immediately after the reception the group reassembled in the Pauley Ballroom for the banquet, the final event of the celebration, attended by a total of 447 alumni, friends and their wives. Myron E. Krueger, professor emeritus, served as toastmaster. The program included songs by the Senior Men's Octet, the introduction of "old timers" and distinguished guests and a number of forester's favorite songs led by Woody Metcalf. A group of alumni in Hawaii sent a large number of beautiful leis which were bestowed on the members of the head table. The climax of the evening and the entire celebration was Dean Vaux's address, *The Professional Forester in Science and Society*.

The first specific planning for the 50th-anniversary observance began in early 1961, when Dean Vaux and Horace Jones, then president of the California Alumni Foresters, formed a committee consisting of George Craig, Keith Arnold, Myron Krueger, Paul Casamajor and Edward Stone, chairman, to plan the nature and scope of an appropriate celebration. After establishment of a theme and setting approximate dates, program structure and length, this committee was discharged.

The general committee to implement the meeting plans was formed

² Briegleb was the only speaker on the two-day program who didn't have a degree from the University of California. He did note his link with the faculty since he taught forest management during Professor Barr's absence in 1942.

with Keith Arnold as its chairman. Arnold was elected vice president of the California Alumni Foresters in the fall of 1962 and, by succession, was president during 1964 and the occasion of the Fiftieth Anniversary Meeting. Arnold was transferred to Washington, D. C. in August, 1963 and, in order to provide the necessary local direction in Berkeley, he appointed Harry Camp as his assistant chairman. The committee organization consisted of: Arrangements — Rudolf Grah; Program — Robert Colwell; Ceremonies, Attendance and Awards — Robert Cockrell; and Receptions — Mike Koll. These committee members and the many people who assisted them worked increasingly longer hours as the meeting drew near.

In honor of the occasion, a beautiful California Black Walnut plaque (29 inches square and 2 inches thick) containing the celebration symbol of a microscope in the outline of a tree on a cross section of log was created by the men at the Iron Mine Camp of the California Department of Corrections. This plaque was arranged for through Fred Dunow, deputy state forester for District III of the California Division of Forestry. The carving on the plaque was made by routing out the theme design. The lettering around the design—*University of California* below and *School of Forestry* above—was highlighted with dull gold paint. The natural beauty of the wood was retained. It is prominently displayed in the entrance hallway of the Forestry Library.

CHAPTER 10

The Alumni

THE most important yardstick of any school is the individual and collective success of its graduates. The key word—success—is difficult to relate to any man's career. One man's success may be another man's stepping stone. To some, success is equated with responsibility or authority. To others, it is equated with a productive and beneficial life. To still others, it may be some of each. The reader, it is intended, must apply his own measure of success to the careers of the U.C. forestry alumni described in this chapter.

Any collection of personal history of nearly 1800 individuals who shared, over a 50-year period, a common experience of fellowship, loyalty, and rivalry produces a variety of statistical information. Some of it is presented here.

CAREER EMPLOYMENT

To prepare this history we made every effort to locate every alumnus and inquire about his career. From the greatest number, by far, we obtained a direct response, although for some the record of their latest employment is a few years old. For a relatively small number, 8.6 percent, the record is unknown, beginning at the University portals. To this group mostly belong those who, for a variety of reasons, did not receive a degree. The alumni population of "known" careers produced the figures in the table on page 199.

A separate tally of alumni made from the classification on page 199 and separating alumni in forestry and related resources work from non-forestry employment produced the following:

	<i>Percent</i>
Forestry	65.6
Non-forestry	34.4
	<hr/> 100.0

U.C. ALUMNI FORESTER CAREERS

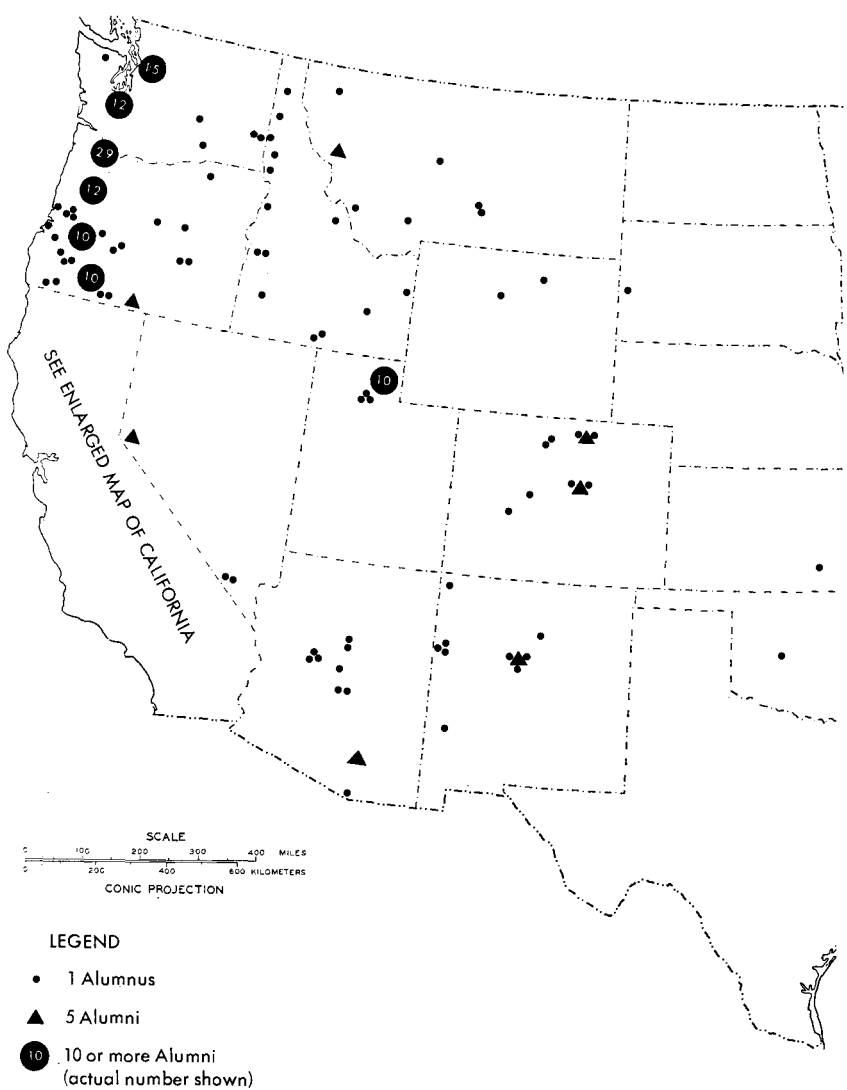
In Percentage of Those Reporting

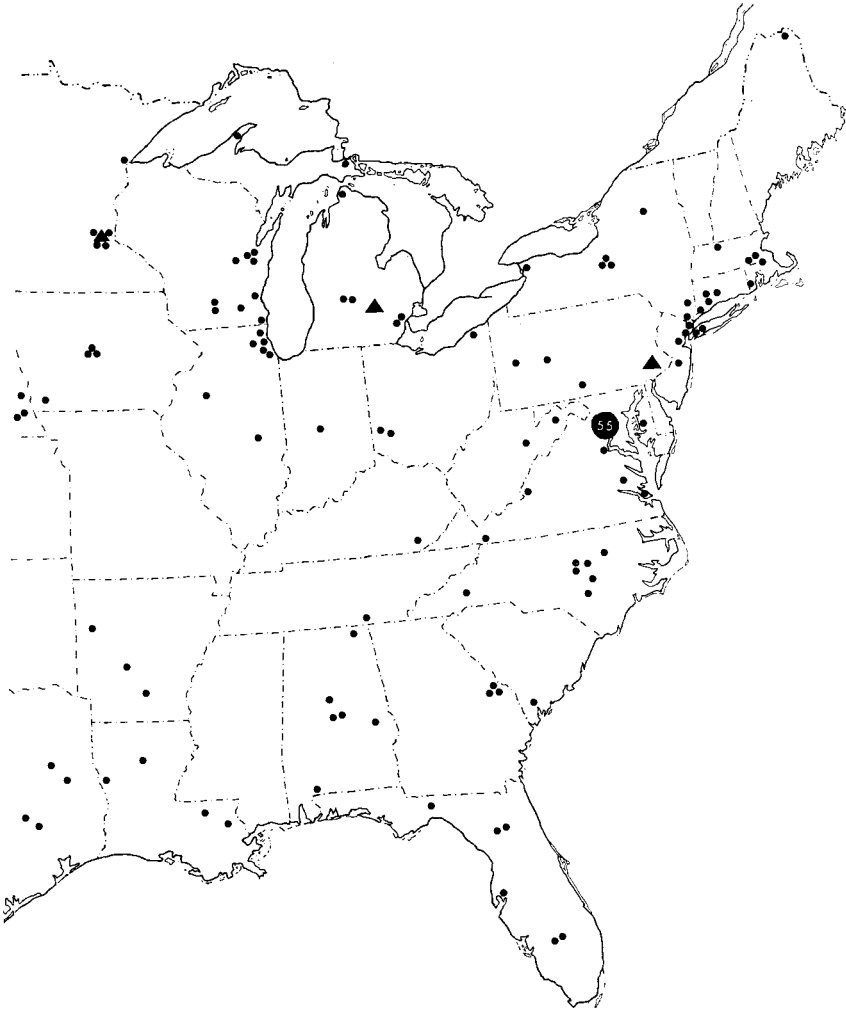
Type of Employment		Municipal Total	0.5
Federal		Education	
USDA Forest Service		University—Forestry	3.6
Administration	18.0	University—Non-Forestry	1.5
Research	6.8	Other Teaching—Sub-univ.	2.8
Total Forest Service	24.8	University Research	1.2
USDA-SCS	0.9	Extension	0.7
USDA-Other	0.2	Total Education	9.8
Total USDA	25.9		
USDI-BLM	2.1	Private Industry	
USNPS	1.4	Forestry Related	16.7
Other	1.1	Non-Forestry Related	9.0
Total USDI	4.6	Total Private Industry	25.7
Other Federal	2.4		
Total Federal	32.9	Self-Employed	
State		Forestry Related	3.3
Calif. Div. of Forestry	5.3	Non-Forestry Related	5.7
Other State Div. of Forestry	0.5	Total Self-Employed	9.0
Other (Incl. Highways and		Students	2.5
Recreation Depts.)	3.5	Military (Active Duty)	4.8
Total State	9.3	Foreign Nationals	2.8
County		Miscellaneous	0.9
Forestry	0.7	Total	100.0
Non-Forestry	1.1		
Total County	1.8		

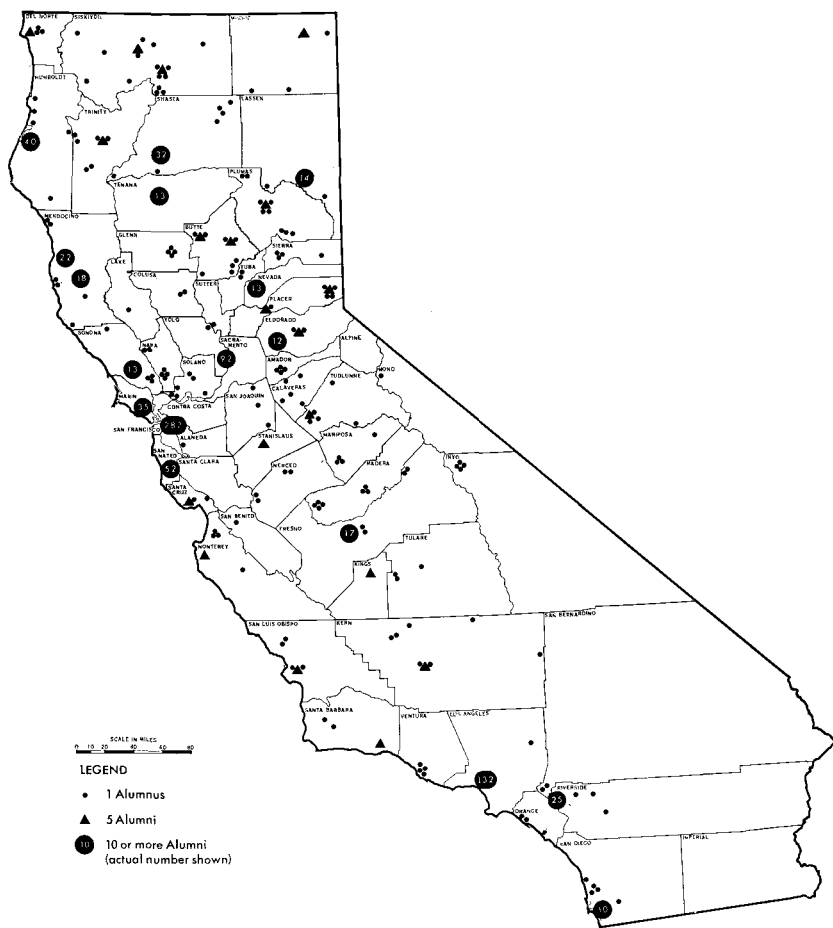
GEOGRAPHICAL DISTRIBUTION

LOCATION OF ALUMNI OUTSIDE OF CONTINENTAL
UNITED STATES

<i>North America</i>	37	<i>Africa</i>	6
United States	22	Egypt	1
Alaska	7	East Africa	1
Hawaii	12	Ghana	1
Puerto Rico	3	Morocco	1
Canada	11	Nigeria	1
Mexico	2	South Rhodesia	1
Costa Rica	2	<i>Middle East</i>	8
<i>South America</i>	4	Iran	1
Argentina	1	Iraq	1
Columbia	2	Israel	3
Peru	1	Turkey	3
<i>Europe</i>	8	<i>Asia</i>	7
Belgium	1	Cambodia	1
Czechoslovakia	1	China	1
France	2	India	2
Germany	1	Java	1
Norway	2	Korea	1
Switzerland	1	Thailand	1
		<i>Australia</i>	5
		Total	75







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*Because foresters seem to be exceptionally mobile, you may notice minor inconsistencies between the text and maps. The cut-off date for map changes was mid-1963.

The geographical location of alumni over the world is presented in three parts. Outside the United States (but including Alaska and Hawaii) is shown in the table on page 199. The rest of the United States, except California, is shown by the map on pages 200-201. California alumni are shown in the map above.

SALARY ANALYSIS

A very high proportion of the questionnaire responses contained usable information to show the pattern of financial remuneration of alumni. This information was analyzed on the same framework as the national study by the Society of American Foresters (SAF) conducted in 1959 and reported in the December, 1960, *Journal of Forestry* (Vol. 58, No. 12, pp. 952-56).

Comparable figures are shown. No deflators have been used.

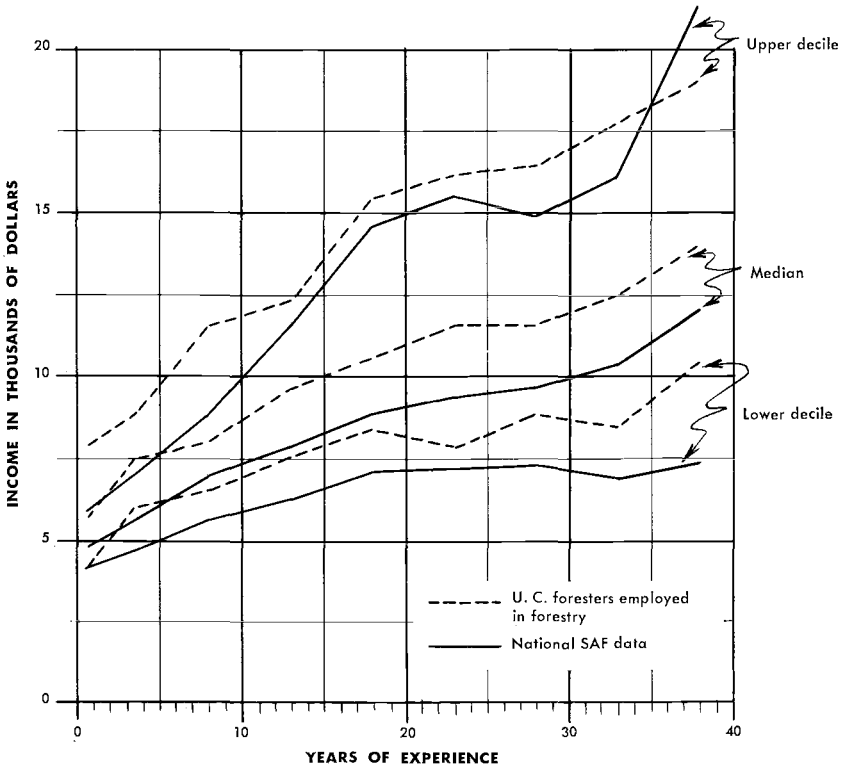
ANNUAL SALARY

Years Since Gradu- ation	U.C. Foresters* (in forestry-related work only)			National S.A.F. Study†		
	Lower Decile	Median	Upper Decile	Lower Decile	Median	Upper Decile
	Dollars			Dollars		
0- 1	4,100	5,800	7,800	4,110	4,800	5,890
2- 5	6,000	7,500	8,900	4,720	5,710	7,000
6-10	6,600	8,000	11,700	5,580	7,010	8,920
11-15	7,600	9,600	12,300	6,230	7,970	11,500
16-20	8,400	10,600	15,400	6,460	8,900	14,630
21-25	7,900	11,600	16,200	7,120	9,490	15,520
26-30	8,800	11,600	16,400	7,170	9,750	14,960
31-35	8,500	12,500	16,200	6,930	10,370	16,070
36+	10,400	14,000	19,000	7,400	12,080	21,460

*Based on 536 returns in 1963

†Based on 7,491 returns in 1959.

When these figures are presented in the form of a graph they show the following:



Source: National figures from 1959 Society of American Foresters study published in Journal of Forestry, December 1960, p. 952-6; vol. 58, no. 12.
U.C. figures from 1963 study.

MILITARY SERVICE

The military service of alumni is not indicated in the biographical section except where it is an important facet of the individual's professional career. Available information was tabulated as follows:

U.S. MILITARY SERVICE OF U.C. FORESTERS
1914-1963

	<i>Total</i>	<i>Army</i>	<i>Navy</i>	<i>Air Force</i>	<i>Marine Corps</i>	<i>Coast Guard</i>
<i>Active Duty (1963)</i>						
Officer	45	19	12	11	3	—
Enlisted	5	4	1	—	—	—
Sub-total	50	23	13	11	3	—
<i>Served—Not now Active</i>						
Officer	385	133	152	77	21	2
Enlisted	368	203	78	59	21	7
Sub-total	753	336	230	136	42	9
Served—Rank Unknown	24	15	4	5	—	—
TOTAL	827	374	247	152	45	9
No Military Service	328					
Unknown	543					
Foreign Nationals	44					
GRAND TOTAL	1,742					

ALUMNI FAMILY RELATIONSHIPS

In the 50 years of graduates, 11 father-son combinations, 19 brother and one brother-sister combinations, and five husband-wife combinations, have attended the School:

FATHER-SON

<i>Father</i>	<i>Son</i>
Robert E. Burton '15 (Ag. Educ.)	Robert Edward Burton '49
Russell W. Beeson '20 (Botany)	Allan W. Beeson '54
Willard B. Coombs, ex. '27	Bruce B. Coombs '53
Alfred K. Crebbin, ex. '28	Peter A. Crebbin '56
Thomas J. Orr '28	Thomas J. Orr, Jr. '53
Norman J. Farrell '31	Norman A. Farrell '59
Carl W. Fowler '34	Gary W. Fowler '61
Richard D. Roseberry '34	Richard P. Roseberry '62
William B. Berry '37	William S. Berry '64
James K. Mace '37	Robert B. Mace '53
Wilbur C. Pooley '42	Michael J. Pooley, Class of '65

BROTHERS (and one *Brother & Sister)

Berry	—	Jack S. '35 and William B. '37
Biddison	—	Lynn R. '51 and Donald L. '55
Bower	—	Hubert I. '25 and Russell W. '30
Bradshaw	—	Kenneth E. '37 and Roy I. '48
Dasmann	—	Robert E. '34 and William P. '36
Fairbank	—	Charles W. '37 and William H., Jr. '40
Jones	—	Richard H. '33 and Roger G. '39
Knauf	—	Eldon R., Jr. '56 and Wayne L. '59
Kolkmann	—	Oliver J. '57 and Harry A. '59
Leone	—	Norman J. '36 and Leonard R. Leoni '40
*Lyons	—	Torrey '38 and Eunice Lyons (Samson) '38
Maguire	—	William P. '30 and James P.—Other '37
Melo	—	Jere L. '64 and Wesley—Class of '66
Miller	—	Harold P. '22 and Ralph A., ex. '27
Nelson	—	Myron J. '36 and Arthur H. '42
Prater	—	Leland J. '33 and William J. '37
Sindel	—	Glen E. '36 and Jean E. '39
Snyder	—	Stewart M., ex. '39 and Paul R. '40
Thomas	—	Leon R. '36 and Eugene L. '40
Wise	—	Robert J. '40 and John E. '43

HUSBAND - WIFE

Ernest L. Baxter '29	Katherine Dillon Baxter '29
Henry W. Anderson '43, M.S. '47	Alice D. Watson Anderson '33
Horace D. Jones '36	Alice Goen Jones '37
Leonard F. DeBano, candidate Ph.D.	Emily Anna Shideler DeBano '54, M.F. '55
John M. MacGregor '65	Kirsten Salstrom MacGregor '65

LADY FORESTERS

There have been nine lady forestry graduates. The first was Alice Craig '28, one of the earliest, if not the earliest, lady forestry graduate in the United States. Four of them married classmates or contemporary forestry alumni of the School. Gerry Larson was married before entering the School. Kirsten Salstrom married a classmate, John MacGregor, while attending the School. The first six lady foresters did not attend summer

camp. The first to attend camp was Ann Shideler in 1952. Following camp, one faculty member remarked, "Ann was the best-looking girl and the smartest forester at camp." Gerry Larson, in 1962, managed to distinguish herself by election to the Phi Beta Kappa and received honorable mention for the University Medal, the highest student award given at the Commencement ceremony. She was the first forester ever to receive this honor. The U.C. lady foresters are:

Alice Craig (Hiatt) '28
 Katherine Dillon (Baxter) '29
 Alice D. Watson (Anderson) '33
 Jane Murdock (Ulrich), M.S. '36,
 Ph.D. '59
 Alice Goen (Jones) '37

Eunice H. Lyons (Samson) '38
 Emily Anna Shideler (DeBano) '54,
 M.F. '55
 Geraldine B. Larson '62
 Kirsten Salstrom MacGregor '65

DEGREES GRANTED

UNIVERSITY OF CALIFORNIA SCHOOL OF FORESTRY

NUMBER OF GRADUATES BY CALENDAR YEARS

<i>Year</i>	<i>BS</i>	<i>MF</i>	<i>MS</i>	<i>PhD</i>	<i>Year</i>	<i>BS</i>	<i>MF</i>	<i>MS</i>	<i>PhD</i>
1914	4	—	—	—	1940	62	—	6	—
1915	2	—	—	—	1941	56	—	8	1
1916	1	—	2	—	1942	43	—	5	4
1917	1	—	1	—	1943	23	—	—	—
1918	—	—	—	—	1944	6	—	—	2
1919	1	—	—	—	1945	3	—	—	1
1920	5	—	—	—	1946	16	—	2	—
1921	6	—	—	—	1947	35	6	3	—
1922	10	—	—	—	1948	45	3	3	3
1923	11	—	2	—	1949	67	8	4	2
1924	8	—	3	—	1950	80	7	6	6
1925	6	—	3	—	1951	59	6	1	3
1926	8	—	3	—	1952	65	3	3	1
1927	10	—	3	1	1953	43	3	2	2
1928	9	—	6	—	1954	27	4	1	4
1929	4	—	5	1	1955	25	1	3	3
1930	21	—	6	—	1956	25	2	6	8
1931	15	—	5	—	1957	34	4	7	1
1932	18	—	1	—	1958	29	3	2	1
1933	26	—	7	—	1959	27	7	9	2
1934	27	—	1	—	1960	27	4	3	1
1935	35	—	5	—	1961	29	3	7	5
1936	34	—	4	2	1962	35	5	10	7
1937	64	—	4	—	1963	37	4	6	11
1938	69	—	5	—	1964	26	1	10	6
1939	86	—	6	1					
					Total	1,405	74	179	79

A total of 1,737 degrees were granted. Because 118 alumni received two and six received three degrees, 1,607 persons obtained degrees in the first 50 years of professional forestry instruction.

The pattern of degrees over the years is shown by table and graph. Included in this pattern are the following: Bachelor of Science (forestry), Master of Forestry, Master of Science (forestry or range management or wood technology), and Doctor of Philosophy (related discipline).

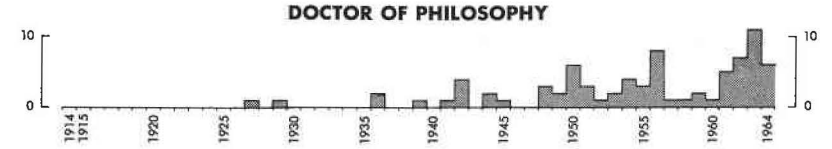
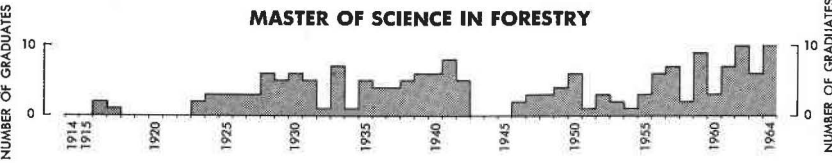
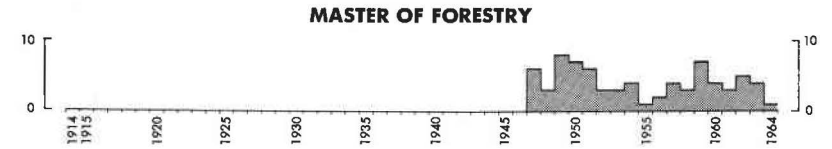
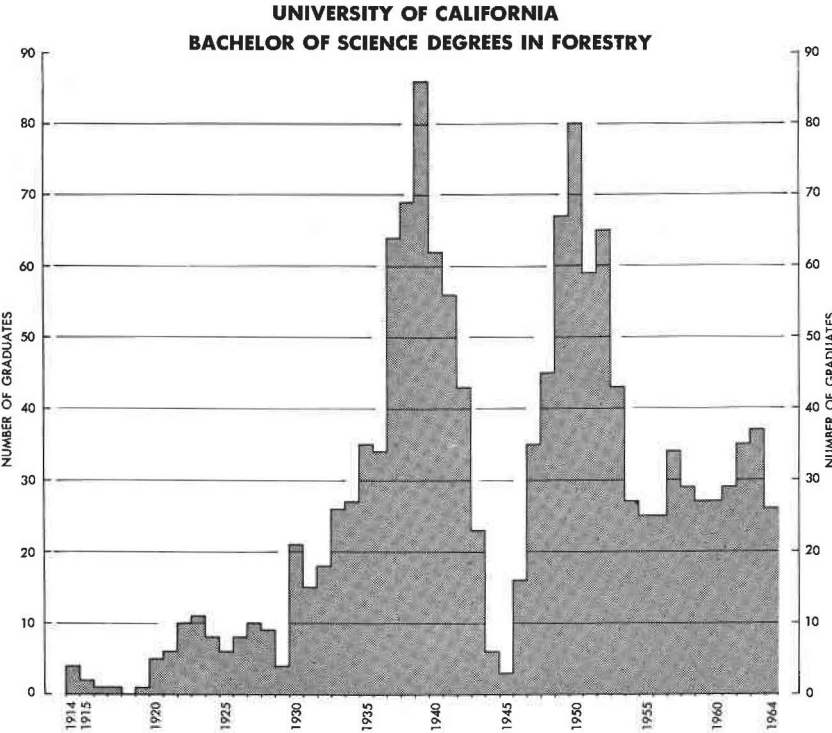
Of some interest is the pattern of multiple forestry degrees from the University of California. There have been 124 persons who have received more than one degree. A number of other persons, who received degrees from the University of California at Berkeley but outside of the pattern shown in the previous paragraph, are not included in this table:

MULTIPLE U.C. DEGREES (Forestry)

<i>Degrees Received</i>	<i>No. of Alumni</i>
BS, MS, PhD	5*
BS, MF, PhD	1†
BS, PhD	18
BS, MF	31
BS, MS	60
MF, PhD	2
MS, PhD	7
	<hr/> 124

*These men are: T. W. Daniel, H. C. Reynolds, I. I. Holland, P. J. Zinke, and J. R. Griffin

†Bruce J. Zobel.



BIOGRAPHIES OF ALUMNI

THE biographical section is organized chronologically. All degrees are noted in the calendar year they were granted. This sometimes differs from the official University record which considers all degrees earned after July 1st to be recorded as of the following year. After June, degrees may be earned as of July, September and, before 1945, in December. In this book, degrees for these dates are included in the appropriate calendar year earned. The many different times during the year that degrees are granted was considered an unnecessary confusion and this distinction was eliminated.

Within each calendar year, names are listed alphabetically under five headings:

- Bachelor of Science
- Master of Forestry
- Master of Science in forestry, range management, and wood technology
- Doctor of Philosophy
- Other Alumni.

Following each name are all known awarded degrees other than the one indicated in the heading. Some college names have been abbreviated. Every effort has been made to show the college name as of the date the degree was granted. Only four-year college degrees or higher are included. Teaching credentials, AA degrees and other certificate work are not included.

The 124 graduates with more than one forestry or PhD degree from U.C. are shown in the appropriate place for each degree, but their career biographical information is shown only where their name occurs first. This is easily located by noting the cross-reference to the earliest U.C. forestry degree.

All U.C. degrees are forestry degrees unless otherwise labeled. Of the first three headings (Bachelor of Science, Master of Forestry, and Master of Science), only the Master of Science may include majors in range management or wood technology and are so specified. All others listed are for forestry. Master's level degrees for other disciplines such as agricultural economics, entomology, plant pathology, and plant physiology are not shown.

Under the Doctor of Philosophy heading, none are for the PhD in Forestry. This program authorized by the University in 1959-60, has not yet had its first graduate, although one student has now (1964) been advanced to candidacy. Accordingly, all PhD degrees are in other disciplines such as: agricultural economics, botany, business administration, entomology, geography, genetics, plant pathology, plant physiology, range management, soil science, and zoology. Individuals are included in this record because of their close association with forestry problems in their graduate programs.

The heading "Other Alumni" includes those associated with the School who did not receive a degree under any of the other four headings. In addition to nondegree undergraduate and graduate students, this heading covers

those students with degrees in other disciplines but who were closely associated with forestry. Although every effort has been made to make this list complete, the very nature of the category precludes completeness.

Thesis titles for MS degrees and dissertation titles for PhD degrees are shown where they exist. Absence of a thesis title indicates the student received his degree under the program which required a comprehensive oral examination in lieu of the thesis. MF professional paper titles are not included.

Instead of providing separate lists of members of Xi Sigma Pi, national forestry honor fraternity, and Alpha Zeta, national agricultural honor fraternity, the appropriate Greek letters (ΞΕΠ and ΑΖ) are shown at the end of the alumnus' statement the first time his name appears.

The symbol † before an individual's name where it first occurs means that he is deceased.

In the interest of space economy, the following abbreviations for frequently mentioned items are used in the biographical section:

BLM	—	Bureau of Land Management
CF&RES	—	California Forest and Range Experiment Station (until 1959)
Div. of For.	—	Division of Forestry (preceded by state name)
FES	—	Forest Experiment Station (preceded by regional name)
F&RES	—	Forest and Range Experiment Station (preceded by regional name)
NF	—	National Forest (preceded by forest name)
PNWF&RES	—	Pacific Northwest Forest and Range Experiment Station
PSWF&RES	—	Pacific Southwest Forest and Range Experiment Station (since 1959. Formerly CF&RES)
SCS	—	U.S. Soil Conservation Service
U.N. FAO	—	United Nations Food and Agriculture Organization
USDA	—	U.S. Department of Agriculture
USDI	—	U.S. Department of Interior
USFS	—	U.S. Forest Service
USNPS	—	U.S. National Park Service

1914

Bachelor of Science (Pre-Forestry)

†Frank B. Herbert, MS Stanford Univ. '20

Frank served his first six years with the U.S. Bur. Entomology and then was with Balfour-Guthrie Co for 18 years until 1938 when he joined the Shell Oil Co as an entomologist. Following his retirement, he entered the real estate business in Santa Cruz, Calif. Frank died in 1962.

F. Paul Keen

Paul devoted his entire career to the study and understanding of the Western pine beetles—particularly *Dendroctonus brevicomis*. His last effort before retirement in 1955 was to bring together the great fund of knowledge accumulated during his life about this insect, which culminated in the publication of *Biology and Control of the Western Pine Beetle*, USDA Misc. Publ. 800. Paul served for 39 years with the USDA in the Bur. of Entomology and Plant Quarantine and finally with the CF&RES at Berkeley. He received the USDA Superior Service Award in 1947, the Western Forestry and Conservation Assoc. Award in 1953, and the American Forestry Assoc. Award in 1954.

He is a Fellow of the Soc. of American Foresters and 1942-45 served the national organization as a council member. Paul was president of the Forestry Club at the time of Mulford's first visit to Berkeley in August, 1913. AZ.

†**Leo W. Meyer**, MF Yale Univ. '17

Leo's early career was spent in partnership with Alexander H. Muzzall '15; they imported exotic woods from various locations in the western Pacific Ocean area. In 1930 he founded an important insurance agency in the Bay Area where he lived throughout his career. Leo died April 17, 1965.

A. Everett Wieslander, MSF Univ. of Mich. '16

"Wies" devoted almost his entire career of more than 40 years to the USFS. He was employed on a number of national forests in Calif. until 1926 when he was persuaded to join the CF&RES under direction of Edward I. Kotok. "Wies" was associated with the Station for about 30 years until his retirement and was responsible for the development and direction of the Soil-Vegetation Survey and the Calif. Forest Survey, a major activity of the Exp. Sta. which has provided first jobs for many young foresters and served as a training ground for many of today's national forest leaders. "Wies" was a founding member of the Forestry Club and has been a loyal and active member of the Calif. Alumni Foresters. He was granted the Merit Award of the Calif. Conservation Council in 1951.

Other Alumni

Vance S. Brown, BS U.C. '14 (Letters and Science—Botany)

Vance served with a number of employers and finally settled on a career with the USFS where he worked more than 37 years. He retired from the service while on the Shasta-Trinity NF in Calif.

Glenn G. Hahn, BS '14 and MS '16 (Plant Pathology), U.C.; PhD Edinburgh Univ., Scotland, '28

Glenn worked his entire career with the USDA first with the Div. of Forest Pathology, with the Bur. of Plant Industry, and finally with the Forest Serv. He retired in 1957 after 40 years, and now serves as research associate in botany at Yale Univ. with rank of assistant professor in the Graduate School. AZ.

Fred V. Holmes, BS U.C. '14 (Commerce)

Fred devoted his career to the marketing of lumber as one of the owners and, eventually, president of the Holmes-Eureka Lumber Co. In his retirement, Fred has taken up African big game hunting with cameras.

Hayward M. Severance, BS '10 and MS '14 (Chemistry) U.C.; PhD Univ. of Chicago '24

Thesis: The essential oil of *Sequoia sempervirens*.

Although Hayward's entire career was devoted to the study of chemistry and teaching, his attendance at many forestry courses and his abiding interest in conservation throughout his life earned him a place in association with the School of Forestry. He retired as associate professor of chemistry at L.A. City Coll.

†**Wm. Powell Smidt**

A charter member of the Forestry Club, Powell was the student who made the first 'Forestry Club' sign which prompted Professor Bridwell to encourage the students to organize a formal club. He left school in his senior year to join the Army. After the war, he worked briefly as an importer in S.F. Later he returned to his first interest and was, successively, in the wholesale lumber business, the lumber milling business and the sawmill business. He lived in Santa Rosa in retirement before his death on April 5, 1965.

1915

Bachelor of Science**Duncan Dunning, MS U.C. '16**

In addition to being one of the first two graduates of the new Div. of For., Duncan joined the USFS and, together with A. E. Wieslander (Pre-forestry) '14, became the first member of the new CF&RES on July 1926. He is perhaps most widely known for his ponderosa pine tree classification system and for his silvicultural cutting system known as "unit-area control." He served his entire career with the USFS, primarily in silvicultural research, and retired in 1951. AZ.

†Alexander H. Muzzall, MS U.C. '16

Alex spent the 20 years of his business life in industrial forestry in the far-western Pacific. For a time he was in the exotic wood import business and associated with Leo W. Meyer, BS (Preforestry) '14, later he was with the Goodyear Rubber Plantation on Mindanao Island of the Philippines. Alex died at sea enroute home from the Philippines in 1936.

Other Alumni**Robert E. Burton, BS U.C. '15 (Agric. Education)**

Bob devoted most of his career to teaching agriculture in the Santa Cruz High School but never lost touch with forestry. Following his retirement from teaching he became a horticulturist at the Univ. of Hawaii and, in more recent retirement, has become a city councilman of the city of Santa Cruz, and is currently a county supervisor for Santa Cruz County. He is the father of Robert Edward Burton, BS '49 and MS '50. AZ.

†Roy M. Hagen, BS U.C. '15 (Agric.—Pomology)

Roy was one of the founding associates of the Forestry Club but devoted his entire career to non-forestry agriculture. In 1915 he entered the Agric. Ext. Serv. and became assistant state leader. In 1921 he became the secretary-manager of the Calif. Cattleman Assoc., in 1930 manager of the Sunmaid Raisin Growers and later manager, president, and board chairman of the Calif. Consumer's Corp. Still later, Roy became a national leader and a pioneer in the frozen food industry. In 1953 he was president of the L.A. Chamber of Commerce and was for a time the chairman of the Statewide Advisory Council of the Coll. of Agric. Roy died in 1959. AZ.

William C. Matthews

After World War I Bill became an assistant logging superintendent for the Goodyear Redwood Co on the Mendocino Coast. When this firm closed down in the 1920's, he moved to Vallejo.

†Russell T. Robinson

Russell was one of the founding members and the first president of the Forestry Club. He devoted his entire career to various aspects of farm management. In the first six years after he left school he managed farms in Alameda, Santa Clara, and Marin counties, 1921-26 he was Alameda County farm advisor. The next ten years he managed the Jacks properties in Monterey County and 1936-42 was the farm management specialist for the USDA in eleven western states. During World War II he was the chief evacuee officer for evacuee property, and finally served as a farm management lecturer at Davis. Russell died in 1956.

†**Orville R. Miller**, BA U.C. '15 (Letters and Science—Economics)

Orville spent most of career in the Pacific Northwest and served on various occasions as president of the Pacific Logging Congress, president of the West Coast Lumbermen's Assoc. and as an officer in the Natl. Lumber Manufacturer's Assoc. At the time of his death in 1948, Orville was president of the Deep River Timber Co, vice-president of the Wauna Lumber Co, secretary of the Mt. Jefferson Lumber Co, and held directorships in the First Natl. Bank of Portland and the Standard Life Insurance Co of that city.

1916

Bachelor of Science

†**Joel S. Conklin**

Joe devoted his entire career to the Clover Valley Lumber Co at Loyaltown in Sierra County and was general manager of that organization at his retirement in 1949. Joe died in March, 1963.

Master of Science

Duncan Dunning, BS U.C. '15

Thesis: A working plan for the Del Monte Forest of the Pacific Improvement Co.

†**Alexander H. Muzzall**, BS U.C. '15

Thesis: The management of redwood.

Other Alumni

†**George F. Cornwall**

George received his interest in and exposure to forestry through his father George M. Cornwall, owner and editor of *The Timberman* and founder of the Pacific Logging Congress. Although George majored in economics he was an active member of the U.C. Forestry Club. He joined *The Timberman* staff in 1915 and rose to managing editor in 1927 and became editor at his father's death in January, 1950. George died in November, 1951.

Knowles A. Ryerson, BS '16, MS '23 (Agric.), and LLD (Honorary) '61, U.C.

Knowles was one of the founding organizers of the Forestry Club and served as first editor of the student periodical, *California Forestry*. Following his bachelor's work at Berkeley, he joined the U.S. Army 10th and 20th Engineers (Forestry) and served in France for two years. From 1919 to 1925 he was with the Univ. of Calif. Agric. Ext. Ser. in L.A. County. The next three years he worked in horticulture service in Haiti. Beginning in 1928, he was in charge of foreign plant introductions for the USDA, and made expeditions to Canada, Mexico, North Africa and the Mediterranean.

During 1934 Knowles was chief of the USDA Bur. of Plant Industry. One of his happiest and proudest achievements came in that year when he was able to arrange for the maintenance and continued operation of the Eddy Tree Breeding Sta. at Placerville, Calif. The Depression had curtailed the private sponsorship of the station and some interim support was necessary before the USFS could budget for and carry the operation of what is now the Forest Genetics Inst.

Knowles returned to Calif. and, from 1937 to 1952, was director of the Davis campus, Coll. of Agric. From 1952 until his retirement in June, 1960, he was dean, Coll. of Agric. at Berkeley. He has held numerous commissioner and delegate positions

with Inter-American and Pacific area boards, councils, congresses and commissions. Since 1938 he has been a member of the Advisory Council of the National Arboretum in Washington, D.C., and is head of the Friends of Davis Arboretum. After his retirement his friends established the Knowles Ryerson Foreign Student Scholarship. Ryerson Hall, a men's dormitory on the Davis campus, was dedicated in 1963. AZ.

Leland S. Smith (Special Student)

Leland worked for a great many years as a range management specialist for the USFS and, upon his retirement, became a consulting range management specialist.

1917

Bachelor of Science

†Ansel F. Hall

Upon his return from military service in World War I, Ansel joined the USNPS. One of his first duties was the construction of a topographic relief model of the Yosemite National Park area which was constructed in Hilgard Hall and which is now on exhibit in the museum at Yosemite Valley. Ansel rose to be the chief naturalist for the USNPS until his retirement in 1937, when he became general manager for the tourist facilities at the Spruce Tree Lodge at the Mesa Verde Natl. Park in Colo. Ansel was associated with this activity for the next 25 years until his death in March, 1962. AZ, ΞΣΠ.

Master of Science

Myron E. Krueger, BS Union Coll. '12, BSA Cornell Univ. '14, ScD (Honorary)

Union Coll. '52, ΞΣΠ.

Thesis: The Bishop Pine.

(See Chapter 5—The Staff)

Other Alumni

†Harvey L. Hansen, AB U.C. '17 (Letters and Science)

Harvey was among the group of embryo foresters who attended the first summer camp in Quincy in 1915. In 1938 he presented the forestry library with a set of reproductions of old French forester's seals which hangs on the wall in the library. He was secretary of the Santa Clara County Cattleman's Assoc. in 1948 and died a few years later.

Wendell T. Robie

Wendell has devoted his entire career to the management of Auburn Lumber Co at Auburn, Calif., of which he is currently general manager and principal stockholder. Wendell has served for 18 years as member and chairman of the Calif. State Board of Forestry. He was one of the organizers of the first ski club in Calif.

1918

No degrees conferred.

1919

Bachelor of Science

Murrell C. Warren

Murrell's suggestion led to the founding of the Calif. Alumni Foresters organiza-

tion. He served as the alumni group's first president. Murrell devoted his entire career to forest products manufacturing in Humboldt County and was in charge of manufacturing for the Calif. Barrel Co in Arcata until that company was closed.

1920

Bachelor of Science

Earl M. Blair

Earl's early and major career activities were related to the management of the U.S. Rubber Co plantations on the island of Sumatra, an association that lasted for 15 years. He retired and moved to Berkeley just before World War II. AZ.

†George G. Byrne, Jr.

Most of George's career was spent with the Coast Counties Gas and Electric Co at Santa Cruz. He died in April of 1945 after a long illness.

Virgil B. Davis

Virgil was chief forester for Union Lumber Co. from 1920 to 1930, when he joined the USFS. He served with them for 27 years before his retirement at Brewton, Ala. AZ.

Carl O. Gerhardy

Carl was on the Union Lumber Co staff for five years. His career has then been with the L.A. County Dept. of Parks and Recreation. In recent years he has risen from the position of assistant director to that of park analyst.

†George M. Gowen

Following graduation George joined the USFS and served his entire 30 years in Calif. He was associated with four national forests and became the first U.C. forestry graduate to reach the forest supervisor level when he attained that office in July, 1929 on the Trinity NF. Later he served with the CF&RES, the last 12 years with the fire control division of the regional office in S.F. He was retired for eight years before his death in February, 1958. AZ.

Other Alumni

†Landis J. Arnold, AB U.C. '20 (Letters and Science—English)

Landis joined the USFS following his graduation and served for 32 years in its Wash. office and Regions 1, 2 and 3. Also, he has written numerous radio and motion picture scripts bearing on forestry. Landis retired in 1952 in Colo. and died there November 8, 1963.

Russell W. Beeson, AB U.C. '20 (Letters and Science—Botany)

Russ joined the USFS following graduation and served for 37 years as a grazing assistant, range examiner, and forest supervisor. During World War II he served as vice-chairman of the USDA War Board. He retired in 1957 and hung out his shingle as a consultant.

†Harry O. Geary, BS U.C. '20 (Commerce)

Harry devoted most of his career to the wholesale lumber business in the N.Y. area where he represented a number of West Coast lumber companies. In 1949 he organized his own lumber brokerage agency in the N.Y. area. Harry died in 1964.

Selwyn J. Sharp, BS U.C. '20 (Commerce)

Sel devoted his entire career to lumber manufacturers association work and served

for 34 years as statistician and finally as secretary-treasurer of the California Redwood Assoc. Sel retired in 1962 and lives in Ojai, Calif.

Thomas C. Vint, BS U.C. '20 (Agric.—Landscape Design)

Tom has devoted his career to the USNPS.

1 9 2 1

Bachelor of Science

†**Robert C. Downs**

While at the university, Bob was a member of the varsity crew and a member of the first Cal crew to be in the Poughkeepsie Regatta (1920). After graduation he worked for the Hobart Mills Estate near Truckee, for the Pacific Lumber Co in Humboldt County, and for the Pacific Gas and Electric Co in Berkeley. He was associated with an auto and garage business in Jackson, Calif., at the time of his death in December, 1929.

Richard C. Hiscox

Dick's entire career was in the retail lumber business. He was owner-manager of the R. G. Hiscox Lumber Co in Berkeley for 34 years. He sold out and retired in March, 1964. AZ.

Lawrence C. Merriam, Sr., AB U.C. '20 (Mathematics)

Lawrence devoted 31 years of service to the USNPS before his retirement in 1963. For more than one-third of this time he served as western regional director. Lawrence is on the council for the Save-the-Redwoods League, a Fellow in the Calif. Academy of Sciences, has received the honor award for the Calif. Conservation Council in 1951 and is an honorary life member of the Sierra Club. AZ.

Thomas K. Oliver

Tom first worked for the Hobart Mills Estate near Truckee. When this company was closed he became manager of Fruit Growers Supply Co lumber mill at Susanville. In more recent years he became sales manager for the company in their L.A. office and is currently vice-president of the Timber Products Co in Medford, Ore. He was a founding member of the Cal Alumni Foresters.

James E. Pemberton, MS U.C. '23

Jim served for 31 years on the staff of the L.A. County Forester and Fire Warden and, on his retirement, held the position of battalion chief.

Alden F. Tissot

Following graduation, Alden took graduate work in education and worked at various times for brief periods as a builder, a nurseryman, a chemist for a paint company and for one and a half years with the USFS as an assistant. The biggest portion of his active life was 22 years as a chemistry teacher in a Riverside, Calif. junior high school.

Other Alumni

Alfred M. Rice

Shortly after graduation Al moved to N.Y. and was last reported in a real estate business in Syracuse, N.Y.

Charles A. Van Riper, BS U.C. '21 (Agric.—Agronomy)

World War I interrupted Van's college education but he managed to meet and

marry a French mademoiselle. After the war he and his bride spent two years at Berkeley so Van could take additional agricultural courses. He then went into the orchard business in the southwestern part of France. Van's agricultural innovations created considerable interest in the region. His tales and literary contributions to the early issues of the *California Forester* were warm and hilarious. Van has served as host for many traveling Californians including President R. G. Sproul, and professors W. Mulford and E. Fritz. He was host to the occasion of Ansel F. Hall's ('17) wedding.

1922

Bachelor of Science

Robert W. Cowlin, MS U.C. '28

After working for four other employers, Bob settled with the USFS for better than 33 years until his retirement in 1962. More than the last third of that career he spent as the director of the PNWF&RES in Portland, AZ, ΞΣΠ.

†**John C. Crowell**

For 13 years after graduation John was in and out of forestry work. In 1935 he joined the Blister Rust Control and was associated with them until he was retired for disability in June of 1955. During World War II John served as a commander in the Navy and was in charge of the naval training school at the Univ. of Colo. at Boulder. John died in January, 1959. AZ.

Thomas J. Edwards

Shortly after his graduation, John joined the Pacific Coast Borax Co in L.A. and later went into the brokerage and financing business.

Don M. Leidig

Don, a founding member of the Alumni Foresters, served his first few years with the USFS as a range examiner in the Utah area. The major portion of Don's career was devoted to the Calif. Dept of Veteran's Affairs, where he rose to district manager and regional manager before his retirement from state service in 1960. Don then joined the mortgage banking firm of Central Securities Serv. in San Jose, and currently is its vice-president. Don settled in Hayward, Calif., and has been active in many civic affairs in that community. He was a member of the city council, and was elected mayor in 1935. He is, perhaps, the only U.C. forester to be elected mayor of a city. AZ.

Harold P. Miller

Harold had 34 years of association with the Crown Zellerbach Corp in Portland, Ore., and was the chief logging engineer of that company before his retirement in 1964. AZ.

John T. McGinn

John spent his career in the wholesale lumber business in the Chicago, Ill., area and is the owner of the John T. McGinn Lumber Co in Park Ridge, Ill. John has made a number of notable individual contributions to the Walter Mulford Loan Fund.

†**Robert M. Riley**

Bob joined the USFS after graduation but was forced to resign because of illness contracted during World War I. In 1932 he joined the Blister Rust Control and was with them for five years. In 1937 Bob became the owner-operator of a dairy farm in Turlock, Calif. He died in September, 1956.

John C. Sammi, MF N.Y. State Coll. of Forestry '32

John has served for 33 years on the staff of the N.Y. State Coll. of Forestry at Syracuse and is professor of forest management at that institution. John is an honorary member of the Philippine Soc. of Foresters after three years on loan to that country.

Reuben W. Smith, Jr.

Reuben was a member of the U.S. Corps of Engineers before he completed his forestry degree and, after a few years with the Calif. Redwood Assoc., rejoined the Army in 1931 and rose to the rank of colonel at the time of his retirement in 1946. Most of his service was in Alaska. He retired to the S.F. Bay Area.

†Everett R. Stanford, MS U.C. '24

Everett's early career was with the USFS. Later he was employed by the Calif. Termite Control Co in L.A. In 1949 he joined the U.S. Post Office in Alhambra, Calif., where he was postmaster at his retirement in 1958. Everett died in April, 1960.

Other Alumni**Reginald Drew**

"Reg" did not get his U.C. degree. He worked for Hobart Mills Estate near Truckee until 1928. He attended Stanford Univ. for a total of nine quarters of work in engineering. In 1934 he joined the CF&RES and worked with them in a number of forestry and engineering capacities. Last news of him came in 1941.

John F. Serex, AB U.C. '22 (Letters and Science—Graphic Arts)

John served with the USFS for 35 years as a civil engineer before his recent retirement.

1 9 2 3**Bachelor of Science****Russell S. Bacon, MSF, Univ. of Mich. '24**

Russ worked for the USFS in the West for about 30 years and, upon retirement in 1954, became the proprietor of the Willows Sport Center in northern Calif.

†Marc W. Edmonds

Marc devoted his entire career to the USFS in Calif. Marc was president of the Forestry Club at the time the Club made the redwood log benches that form the Forester's Circle in the Eucalyptus Grove near Mulford Hall. Marc was the handiest club member with an adz, and it was he who put the finishing touches on the rough work completed by the other forestry members. Marc died in December, 1962.

Guerdon Ellis

Guerdon's first employment was with the Mendocino Lumber Co from 1923 to 1927. His active career with the USFS was 34 years in Calif. He was the supervisor of several forests, his last being the Eldorado NF. He retired in 1960. Guerdon claims 17 grandchildren, which is possibly the record for a U.C. forester.

William H. Gibbs

Bill was first a forester for the Casper Lumber Co and, during the Depression, manager of a 350-man WPA camp for the USNPS. Later he was superintendent of the Muir Woods Natl. Monument, a position he still held at the time of his retirement in the late 1950's.

Amihud Y. Goor (Grasovsky), MS U.C. '25, PhD Yale Univ. '28, DF Univ. of Oxford '32

"Abe" has served as a forestry expert and forest adviser with the FAO of the U.N. in India, Chile, Argentina, Turkey and Greece. He is currently the assistant conservator of forests for the government of Israel.

Marion R. Harris, MS U.C. '27, PhD Univ. of Wisc. '32

Marion was a specialist in plant pathology with the Wash. State Univ. at Pullman Wash. He is a Fellow in the American Assoc. for Advancement of Science, and now retired.

Allen W. Jacobs, MS U.C. '24

After several years in forest consulting work, Allen taught forestry courses at San Jose State Coll. since their introduction more than 30 years ago. He is today a professor emeritus at that institution after more than 36 years of service.

Robert D. Maclay

Bob served for 20 years with the USFS in Wenatchee and Olympia, Wash. He then went to Eugene, Ore., to become a builder. He was a commissioner of Lane County, Ore., for four years and is now semi-retired at Eugene, Ore.

†**Stefanus J. Meiring**, MF Yale Univ. '26

"Steve" returned to his native land of South Africa after his formal education. He was, for 5½ years, principal of the School of Forestry at Saasveld and, for a time, the forester in charge of two areas in South Africa. He died in September, 1944.

Fred D. Monroe

Fred spent his entire active career with the USFS and was forest timber sales officer at the time he retired at Wenatchee, Wash., in 1956.

†**Arnold N. Weber**, MS U.C. '26

Known as "Maggie" to his friends and associates, he devoted his career to the USFS and was on the Eldorado NF for many years. During this time Maggie was a pioneer developer of winter sports in the Sierra Nevada, and served a term as president of the Calif. Ski Assoc. He was the assistant supervisor of the Lassen NF at the time of his death in November, 1942. ☐☐☐

Master of Science

Hugh C. Lott, BS Penn. State Forest Academy (Mont Alto) '22

Thesis: The production and viability of redwood, *Sequoia sempervirens*, seed.

Hugh was the first recipient of one of the Baker and Bidwell Research Assistantships. After completing his degree work Hugh returned to the East Coast and taught high school in the N.Y. area.

James E. Pemberton, BS U.C. '21

Thesis: The relation of bark to total volume in coast redwood, *Sequoia sempervirens* Endl.

Other Alumni

Alfred J. Bellue (Special Student)

Alfred served with the Calif. State Div. of Highways as a supervisor until his retirement in the late 1950's.

Edward D. Collins

"Pop" Collins was employed for a portion of his career with the USFS in the State of Wash.

Everett E. Honeycutt, AB U.C. '23 (Letters and Science—Economics)

Everett joined the lumber industry and rose to the position of logging manager of the Michigan-California Lumber Co before his retirement. ΞΣΠ.

1 9 2 4**Bachelor of Science****James L. Averell**, MF Yale Univ. '26

Following his studies at Yale, Jim was the recipient of the American-Scandinavian Traveling Fellowship and spent the year headquartered at Stockholm, Sweden. Jim then joined the USFS and is currently in the S.F. regional office after nearly 35 years of service.

†**John B. Byrne**

John joined the USFS after graduation and worked in various assignments in Region 5 and then joined a USFS exp. sta. in Fla. In May 1931, John became the second U.C. forester to reach the supervisor level which he did on the Nantahala NF in N.C. John died in October, 1934, following two severe influenza attacks at the time he had been working hard on the development plans for the Civilian Conservation Corp. The USFS named a stone fire-lookout tower in John's memory. This tower is located on Wayah Bald on the Nantahala NF. AZ.

†**Suren R. Gevorkiantz**, MF Harvard Univ. '28

Suren or "George," as he was known to his friends, devoted his entire career of 30 years to the Lake States FES of the USFS. He was one of the leading forest mensurationist and statisticians in the U.S. He received USDA Superior Service Award in 1953. He was a Fellow in the Soc. of American Foresters and served that organization as associate editor of the *J. of Forestry* from 1946 to 1957. George died in St. Paul, Minn. in May, 1958.

Lesley B. Graham

After a short time on the Black Hills NF, Les returned to Calif. and was associated with a number of redwood industries including Arcata Redwood Co.

Harry A. Keith

Harry devoted his entire career to forested areas of the western Pacific Ocean. In 1942, while Conservator of Forests in British North Borneo, he and his family were interned for the war period after which he returned to his former job. He retired in 1952, joined the U.N. FAO in Manila, and was in charge of a mechanical logging center. He now lives in Victoria, B.C.

Leonard F. Kellogg, MF Yale Univ. '27

After a few years with the Central States FES, "Kelly" became a teacher and now serves as professor in the Dept. of Forestry at Iowa State Univ., Ames, Iowa. He is also in charge of the school's traveling summer camp.

Kenneth McLeod, Jr., MS U.C. '27

One of Mac's early services to the school was his mimeographed cover drawing for the first issues of the *California Forester*. He has made a career as a consultant

and forest industrial analyst in Klamath Falls, Ore. As results of his other talents, Mac has established a wide contact in historical and outdoor activities in the southern Ore. area and written more than 1,500 articles about the out-of-doors and the southern Ore. area. Ken received the Beaver Award from the Ore. State Isaac Walton League and was the recipient in 1957 of the American Motors Natl. Conservation Award. $\Sigma\Pi$.

†Pennoyer L. Sherman

Known as "Ping" to his classmates, he left the field of forestry and worked for the Bell Telephone Co in the Monterey area for four years until his death May, 1928.

Master of Science

John S. Barnes, BS Univ. of Mich. '21

Thesis: Redwood growth studies: I. The relative volume production of sprouts and seedlings in second growth. II. The height growth of young redwood in mixtures. III. A site classification for virgin stands.

John joined the SCS and is the Calif. State Conservationist at Berkeley.

Allen W. Jacobs, BS U.C. '23

Thesis: Hastening the germination of sugar pine seed.

Everett R. Stanford, BS U.C. '22

Thesis: A short history of California lumbering including a descriptive bibliography of material on lumbering and forestry in California.

Other Alumni

Edwin W. Pohle, BS Iowa State Coll. '22

Ed went into the retail lumber business and has been, for more than 24 years, the president of the Southern Lumber Co in San Jose. Through his company he donated \$1,000 for a student loan fund which was "made possible by the timely help and faith of Walter Mulford."

1 9 2 5

Bachelor of Science

Hubert I. Bower

Hugh served in a number of capacities with the forest industry in the redwood region and has for the past 27 years been the owner of Bower Engineering, forest consultants.

George L. Hall

"Mike", a son of Wm. L. Hall, a USFS pioneer, after graduation went to Ark. to engage in sawmilling. He moved from assistant manager through secretary-treasurer to president of the Selma Timber Co. in Selma, Ark. This company was founded in 1945 and cuts prime lumber for the building trade and oak lumber for flooring, with an annual cut of 5 million feet.

Percy D. Hanson

"Pete" was the first U.C. forester to be hired as a member of the staff of the School (then Div.). He served as an assistant and one of his major accomplishments was the physical development of the facilities at summer camp, which work was done under the direction of Fritz. He joined the USFS and on November 1, 1944, became

the first U.C. forester to be made a regional forester. He served as regional forester for 12 years at Missoula, Mont., and for eight years in the Alaska region. He retired in January, 1964. Pete served the Natl. Council of the Soc. of American Foresters in 1955-56.

Clifford E. McDuff

Cliff joined the USFS and is the assistant regional forester for range and watershed management for Region 3 in Albuquerque, N.M. AZ, $\Xi\S\P$.

Robert M. Rutherford

Before his recent retirement, Bob was chief of the div. of technical services, USDI, Bureau of Sport Fisheries and Wildlife in Wash., D.D. He is a recipient of the USDI Distinguished Service Award. $\Xi\S\P$.

Maurice E. Thede

Maury was for 30 years with the USNPS and at the time of his retirement in 1962 the regional forester in Region 4 (Western North America) of the USNPS. He received the USDI Distinguished Service Award in 1962. $\Xi\S\P$.

Master of Science

William G. Edwards, BS Geneva Coll. '10; BS '14 and MS '15 Penn. State Coll.

Thesis: The hardwood-using industries of the San Francisco Bay region.

Following his work at Berkeley, Bill returned to Penn. State Coll., where he taught for 34 years. He is currently self-employed as a consulting forester in that community.

Amihud Y. Goor, BS U.C. '23, PhD Yale Univ. '28, DF Univ. of Oxford '32

Thesis: Climate in relation to timber and forage production under natural conditions.

William B. Miller, BS Univ. of Idaho '22

Thesis: Sheep production on the California National Forest.

Bill retired in 1942 as an associate range examiner with the U.S. Fish and Wildlife Serv. in Alaska. In his retirement Bill has been active in veteran's affairs in Silver City and Grant County, N.M.

Other Alumni

W. Kenneth Cox

Ken joined the Caterpillar Tractor Co as a sales development engineer, and was instrumental in many of the developments of uses of the equipment made by that company. He became the manager of sales development and is currently vice-president of the company. Ken has served as director of the American Road-Builders Assoc., the Farm Equipment Inst., the Intl Road Federation, and was director for seven years of the Construction Industries Manufacturers Assoc. before his election to the presidency in 1962-63.

Joseph Strehle

Early in his career Joe went into sawmilling and became manager of a large mill in Veronia, Ore. Later he joined the USFS in the Pacific Northwest.

1926

Bachelor of Science

†Victor A. Clements

Vic joined the CF&RES on graduation and went into the field of forest mensuration research. From 1928 to 1931 he was in the Div. of Silviculture in the Wash. office. Some of Vic's outstanding work included the development of alignment charts for growth and mortality and his development of form class tables. Vic died in May, 1953.

Maurice C. Collins

Maurice joined the Bur. of Indian Affairs of the USDI in the southwestern U.S. and has risen to the position of area forester for that region with headquarters at Gallup, N.M. $\Sigma\SII$.

Kennan M. Emery

Kennan got into the advertising business and was, for a time, a supervisor of dealer advertising Caterpillar Tractor Co. More recently he was executive vice-president of Thompson Advertising, Inc. in Peoria, Ill. Ken is retired and lives in the Bay Area. AZ.

Ralph L. Follett

Ralph is in the engineering and land surveying business in Eugene, Ore.

Verne Lester Harper, MS U.C. '27, PhD Duke Univ. '43

After completing his work at U.C., Les joined the USFS in the research branch. Most of his early work was done in the southeastern U.S. He was the first U.C. forester to become an experiment station director, has moved up through the research branch in the Wash. office, and is presently the deputy-chief of the Forest Serv. and chief of research, the highest position in the Forest Serv. reached by a U.C. forestry graduate. Les is vice-president of the Intl Union of Forestry Research Organizations. He is a Fellow in the Soc. of American Foresters and chairman of the Soc.'s Committee on Intl. Relations. He is an honorary member of the Finnish Soc. of Foresters and has received the USDA Distinguished Service Award. In 1965, the American Forestry Association and the corresponding organization in Germany, the Deutscher Forstverein, established the Bernhard E. Fernow Award for professional achievement in international forestry. Les was the first recipient of this award. AZ, $\Sigma\SII$.

Robert F. Kellett

Bob took up forest utilization as a builder in the Bay Area.

Warren T. Murphy, MF Yale Univ. '27

"Murph" has spent his entire career in the USDA and was for a time the soils and water resources field representative in Utah for the Secretary of Agriculture. Most of his career has been with the USFS and he was once an assistant regional forester at Milwaukee. He is currently the director of the Div. of Flood Prevention and river basin programs in Wash., D.C. $\Sigma\SII$.

J. Donald Sinclair, MS U.C. '29

Don devoted more than 30 years of service to the USFS, mostly in the southern Calif. area as a watershed management specialist on the San Dimas Exp. Forest. Don retired in 1962 and joined the Univ. of Hawaii on a contract assignment as a watershed management advisor in Bangkok, Thailand. Don was the recipient of the Overlander Trust Fellowship in 1937. AZ, $\Sigma\SII$.

Master of Science

Kenneth McLeod, Jr., BS U.C. '24

Thesis: Deer in their relation to man and forest.

†**Howard W. Siggins**, BF Penn. State Forest Academy (Mont Alto) '14

Thesis: Dissemination by wind of seeds of important conifers of California.

Howard joined the CF&RES when it started in July, 1926, and was on a forest investigation field trip in the Sonora area when he was killed in an auto accident in September, 1929. ☒☒II.

†**Arnold N. Weber**, BS U.C. '23

Thesis: Redwood cut-over lands and their use.

Other Alumni

Ambrose B. Everts, BS Univ. of Minn. '26

A. B. worked for the USFS for 34 years as an equipment development engineer. In his retirement at Paradise, Calif., he works part-time as a fire patrol on highway construction projects.

Joseph M. Flynn

Joe was employed by the Bank of America in S.F.

Cyril S. Robinson

A native of England, "Robbie" was a special student following a period of college work in England. He worked for a number of years with the USFS on the Los Padres NF as a grazing specialist. Now retired, he lives in L.A.

1 9 2 7

Bachelor of Science

Myron T. Bunker

Myron worked for more than 25 years with the U.S. Bur. of Budget and was a principal budget examiner. For the past ten years he has been the president and owner of Applewood, Inc. in Denver, Colo.

C. Raymond Clar

Since his graduation Ray has served with the Calif. Div. of For., a period of more than 36 years. Ray rose to the rank of chief deputy state forester and is currently the assistant executive officer of the State Board of Forestry. Ray was so closely associated with the development of the Calif. State Fire Plan of 1940, it is sometimes called the Clar Plan. In 1959 Ray's book, *California Forestry and Government*, was published and for this and some other historical research efforts he was made a Fellow of the Forest History Soc. in 1963.

George W. Craddock, MS U.C. '29

George joined the USFS and is with the Intermountain F&RES. ☒☒II.

†**John R. Freeman**, MS U.C. '31

After finishing his undergraduate work, John joined Leo Meyer '14 in his Philippine Islands lumber manufacturing and shipping business. John returned to school for his MS in 1931 and then joined the Calif. Redwood Assoc. In 1933 he worked for

the Holmes-Eureka Lumber Co as a salesman and returned to the Calif. Redwood Assoc. in 1946. He was president of the Calif. Alumni Foresters in 1940 and died in December, 1953. $\Sigma\Sigma\Pi$.

Thomas H. Harris, MS Univ. of Idaho '36

Tom worked for many years with the USDA Bur. of Entomology and Plant Quarantine in their blister rust control program and was assistant regional leader at the time he was transferred to the USFS regional office in S.F. Tom was in charge of pest control work for the region at the time of his retirement in 1962. He received the USDA Certificate of Merit in 1959 and also became an honorary life member of the Calif. Alumni Foresters in that year. Tom served as "permanent" secretary-treasurer of the Alumni Foresters from 1937 to 1947, as vice-president in 1947, and as president in 1948-49. AZ, $\Sigma\Sigma\Pi$.

Benton Howard

Like his classmate Tom Harris, Ben joined the USDA Bur. of Entomology and Plant Quarantine and was later transferred to the USFS where he is chief of the branch of insect and disease control in the Pacific Northwest.

Ralph W. Kopenhaver

Ralph moved to southern Calif. where he worked for the USFS on the San Bernardino NF.

H. Paul Struble

Paul joined the USFS and devoted most of his career to forestry activities on the Plumas NF where he served for 32 years before his retirement.

Lloyd W. Swift, MS U.C. '30

Lloyd joined the USFS and in his 34 years of service became director of the Div. of Wildlife Management. Upon his retirement in 1963, he became executive secretary of the U.S. office of the World Wildlife Fund. AZ, $\Sigma\Sigma\Pi$.

†George M. Wright

George joined the USNPS and was chief of wildlife research at the time of his unfortunate death by auto accident in February, 1936 in N.M.

Master of Science

Charles G. Geltz, BS Penn. State Coll. '24

Thesis: Semesan and uspelun for the control of "damping-off" and as a stimulus to germination.

"Chuck" did graduate work in forestry at Duke Univ. and in education at the Univ. of Fla. He first joined the staff at Purdue Univ. in 1930 and rose to the position of associate professor and director of summer camp by 1941. He then joined the staff of the Univ. of Fla. where he is professor of silviculture. He is a Fellow in the American Geographical Soc., was secretary of the Fla. Forestry Assoc. for 11 years and is secretary of the Fla. Forestry Council, a position he has held for 15 years. He also engages in consulting forestry. Chuck retired in 1965. $\Sigma\Sigma\Pi$.

V. Lester Harper, BS U.C. '26, PhD Duke Univ. '43

Thesis: The stem form of red fir, *Abies magnifica* Murr.

Marion R. Harris, BS U.C. '23, PhD Univ. of Wisc. '32

Thesis: A grazing management plan for the Berkeley Hills.

Doctor of Philosophy

†**Edward C. McCarty**, BS Univ. of Mont. '16

Dissertation: Grazing intensities and food relationships in *Agropyron smithii*. (Botany, Biochemistry).

Ed had the honor of being the first doctoral recipient associated with forestry. He moved to Riverside where he became associate professor of botany at the junior college. In November, 1930, Ed was co-author, with Arthur W. Sampson, of *The Carbohydrate Metabolism of Stipa Pulchra*, published in *Hilgardia*. *The California Forester* in February, 1939, reported Ed's death.

Other Alumni

†**W. Barton Coombs**

Bart was a native of Mendocino County. His grandfather built the house that is now known as the Little River Inn. Bart worked for several redwood companies as a logging engineer and during the Depression joined a contracting firm and became an experienced concrete engineer. He helped build the Redwood Highway bridge at the mouth of the south fork of the Eel River and worked on the S.F.-Oakland Bay Bridge approach piers. Later he worked on the Eagle Mountain pump lift for the Southern Calif. Metropolitan Water District. He was at work on airfields and other construction projects in the Philippine Islands at the outbreak of World War II. Captured at the fall of Corregidor, Bart was lost when the prison ship that was transporting him from Manila to Japan was sunk in a bombing raid.

William H. McLallen

Bill's entire career has been with the Capilano Timber Co Ltd in Vancouver, B.C. of which he is president. He has been president of the Canadian Forestry Assoc., the Red Cedar Shingle Bureau, and the Consolidated Shingle Assoc.

Ralph A. Miller

Ralph joined the Calif. Div. of Highways at Sacramento soon after graduation.

Henry E. Norton, AB Yale Univ. '22

For the past 15 years Henry has been forester for the Feather River Lumber Co at Reno, Nev. ΞΣΠ.

1928

Bachelor of Science

Alice Craig (Hiatt)

So far as is known, Alice is the first woman to receive a bachelor's degree in forestry in the U.S. Alice's great interest was in conservation and education. She recently recalled the great resistance to a woman's invasion of a man's world but was finally "accepted" by her fellow classmates and was made secretary of the Forestry Club. Her crowning moment came when she was made teaching fellow in forestry for the school year 1929-30. With her husband, Wallace E. Hiatt, Alice was in the dude ranch business at the Broken Arrow Ranch in Jackson, Wyo., for 24 years. She then became assistant to the business manager of the Apache Tribe of the Mescalero Indian Reservation in N.M. She now lives in southern Calif. and is a library clerk at the Orange Coast Coll. Alice is the mother of six children.

†**Arthur C. Edler**

Art died about a year after his graduation. AZ, ΞΣΠ.

†**Andres Lemos**

A native of the Philippines, Andres worked his entire career for the Pullman Co. He died in the mid-1940's.

Thomas J. Orr

Tom spent most of his career with the Weyerhaeuser Co at Klamth Falls where he is the branch forester. Tom's son and namesake graduated from U.C. in 1953.

Kenneth W. Parker, MS U.C. '29

Ken joined the Forest Serv. and in 27 years has risen to the position of chief, Div. of Range and Wildlife Research. Ken served as director of the American Soc. of Range Management from 1948 to 1952. ΞΣΠ.

Raymond B. St. John

For 30 years Ray has been with the USDI Bur. of Sport Fisheries and Wildlife at Albuquerque, N.M., as a supervisory appraiser. AZ, ΞΣΠ.

Adolph E. Edwards (Sinkevitch)

Adolph went into the banking business and for a number of years was located in the Orient. He is presently a supervisor in the head office of Wells Fargo Bank in S.F. He has been with the bank for 18 years.

Travis M. Tyrrell

With the BLM for more than 22 years, Travis has been regional chief of the div. of forestry and area forestry officer, and is currently chief of the Div. of Forest Management in the Pacific Northwest. AZ, ΞΣΠ.

Waldo E. Wood

Waldo retired in January of 1964 after 35½ years of service as a forester and range conservationist with the USFS. He is a life and charter member of the American Soc. of Range Management and in 1961 received the USDA Certificate of Merit and Superior Service Award. AZ, ΞΣΠ.

Master of Science

Urban C. Allen, BS Purdue Univ. '09

Thesis: Balancing farm and forest crops through proper use of land.

Urban was a practicing farmer in the San Joaquin Valley and taught for a number of years in the Kern County high schools.

Robert W. Cowlin, BS U.C. '22

Thesis: The wholesale middleman in the lumber industry.

†**Walter H. Horning**, BS Penn. State Forest Academy (Mont Alto) '14

Thesis: The role of bunching in tractor logging.

Following his graduation, Walter joined the BLM and in 1938 was chief forester of the O. & C. Lands in Ore. Shortly before his death in August 1961 he had retired as chief of the Div. of For. for the BLM in Wash., D.C. but was asked to remain to write the O. & C. history. Walter received the USDI Distinguished Service Award in 1954. ΞΣΠ.

Earl G. Wilson, BS Univ. of Minn. '27

Thesis: The stem form of Douglas fir.

Following his work at U.C. Earl returned to Minn.

Andrew D. Wright, BS Mich. State Coll. '23

Thesis: An ecological study of *Baccharis pilularis*.
Andy dropped out of contact after graduation. ΞΣΠ.

Ernest Wright, BS Ore. State Univ. '23, PhD Univ. of Neb. '41

Thesis: The viability of native and exotic seed exposed to high temperatures.

Ernie's work has been in the area of forest pathology and he was for many years the senior pathologist for the PNWF&RES of the USFS. In more recent years he has been in charge of forest pathology for the Ore. Forest Lands Research Laboratory at Corvallis, and is presently a professor of forest research at Ore. State Univ.

Other Alumni

Alfred K. Crebbin

Al's entire career of 36 years has been with the USFS in Calif. He is the assistant supervisor of the Klamath NF. His son, Peter, received his BS in 1956.

Alfred H. English, BS U.C. '25 (Animal Husbandry)

After his BS, Al did some graduate work in forestry at Berkeley.

Edwin B. Stephens

Ed was associated with the Stephens and Stephens Lumber Co. in Nevada City. While in school Ed arranged for a friend, R. A. Ogan, who was an East Bay landscape architect and a former Iowa State Coll. forestry student, to draw the picture that was used as the second cover of the California Forester.

Willis W. Wagener, AB Stanford Univ. '18, MS U.C. '28 (Plant Pathology), PhD Yale Univ. '34

"Wag" joined the USFS shortly after receiving his bachelor's degree at Stanford, and while assigned to the regional office at S.F. took numerous forestry courses at Berkeley. He was very active in the fall of 1922 on the occasion of the founding of the Alumni Forester's group, which he served as first secretary-treasurer, second president, and first editor. He spent his entire career of 44 years with the USFS. He retired in 1962 and continues to serve as a plant pathology consultant on the international scene. Wag was voted to honorary life membership in the Calif. Alumni Foresters in 1963. ΞΣΠ.

1 9 2 9

Bachelor of Science

†**Ernest L. Baxter**

Ernie married his forestry classmate, Katherine Dillon, and joined the USFS in Calif. He devoted almost all of his career to fire control and was the dispatcher in the regional office in S.F. at the time of his retirement in 1963. Ernie died in Cloverdale on April 15, 1964.

Katherine Dillon (Baxter)

U.C.'s second lady forester, Katherine married her classmate Ernie Baxter.

Elmer R. Ellis

Early in his career Elmer was with the Ellis Brothers Lumber Co in Menlo Park and later joined the Blister Rust Control on the Lassen and Plumas NF's. He is now engaged in pest control work in the East Bay.

Charles L. Tebbe

Charlie worked for four years in private industry on the West Coast and in the Philippine Islands before he joined the USFS. He rose to assistant regional forester of Calif. and the Pacific Northwest for state-federal cooperative forestry before he became the second U.C. forester to become an Exp. Sta. director. This was in 1946 at the Northern Rocky Mountain FES. He was regional forester for the northeastern region from 1952 until 1956 when he succeeded Pete Hanson '25 as regional forester at Missoula Mont. Charlie retired in 1961. AZ.

Master of Science

George H. Barnes, BS Univ. of Wash. '24, PhD Duke Univ. '46

Thesis: The development of even-aged stands of lodgepole pine in British Columbia.

George has been associated for 20 years with Ore. State Univ. and is presently assistant director of the Forest Research Div. of the Univ. Exp. Sta. at Corvallis. ΞΣΠ.

George W. Craddock, BS U.C. '27

Thesis: The successional influence of fire on the chaparral type.

Carl A. Gustafson, BS Univ. of Idaho '27

Thesis: A study of the discoloration of painted surfaces on sugar pine and redwood.

Following graduation Carl joined the USFS, and remained with it for 31½ years. At the time of his retirement he was chief of the Div. of Fire Control in the Wash. office.

Kenneth W. Parker, BS U.C. '28

Thesis: Growth of *Stipa pulchra* and *Bromus hordeaceus* as influenced by herbage removal.

J. Donald Sinclair, BS U.C. '26

Thesis: A study of plant development in different soil horizons.

Doctor of Philosophy

Walter C. Lowdermilk, BS '14, AB '15, MA '22 Univ. of Oxford

Dissertation: Factors affecting surface run-off of rainfall and the surface erosion of soil profiles. (Forestry, Geology, Soil Physics and Irrigation)

Walter joined the SCS and became an international authority on soil erosion problems. He accomplished important work in such places as China and the Near East. He is retired and resides in Berkeley. ΞΣΠ.

Other Alumni

Richard L. Ahlf

Dick moved to Toledo, Ohio, and became a teacher of biology in the Toledo High School.

Warren W. Chase, BA Macalester Coll. '26, MS '28 and PhD '33 Univ. of Minn.

Warren took some graduate work at Berkeley and for the last 19 years has been a professor at the Univ. of Mich. He was treasurer of the Wildlife Soc. 1937 to 1941 and its president in 1952.

†**Gustav W. Hult**, BSF Ore. State Univ. '16

Before his death in May 1959, Gus was a consulting forester and timber broker in Ore.

Charles R. McHugh, AB U.C. '29 (Letters and Science—Slavic Languages)

Shortly after college, Charles was in a brokerage office in Oakland and some ten years later operated a small ranch in Paradise, Calif. The last contact with him came from Tampa, Fla.

1930

Bachelor of Science

Thomas E. Adams

Tom joined the USNPS and in 1939 was at the Shenandoah Natl. Park in Va. By 1946 he had resigned from the federal service and was engineer-inspector with the Northern Insulation Co in Bangor, Me.

William B. Augustine

After a number of different jobs, including the USNPS, Bill joined the USFS in 1950 and is a forester on the Fremont NF in Ore.

Russell W. Bower

Russ has more than 30 years experience with the USFS in Calif. as a ranger and forest supervisor and is presently a forester in charge of long-range fire-control planning in the S.F. regional office.

Charles C. Buck

In more than 33 years with the USFS, Charlie devoted most of this time to fire research work in the CF&RES. In 1954 he became the assistant div. director of forest fire research in the Wash. office. He served for four years as secretary-treasurer of the Calif. Alumni Foresters. $\Sigma\Sigma$ II.

Houghton Durbrow

After graduation Houghton went into the title insurance business in Sacramento.

Frederick W. Grover

Fred joined the USFS, and in 34 years has risen to director of the Div. of Land Classification in the Wash. office. He is a recipient of the USDA Superior Service Award. $\Sigma\Sigma$ II.

Arthur F. Halloran, MS A.&M. Coll. of Texas '41

After his graduate work at Texas, Art joined the U.S. Fish and Wildlife Serv. and is presently a wildlife management biologist at Cache, Okla. Art has written more than 100 popular and technical articles on wildlife and is an honorary member of the Okla. State Wildlife Soc.

August L. Hormay

Gus joined the USFS research activity in Calif. and for 32 years has been a range conservationist with the PSWF&RES. AZ, $\Sigma\Sigma$ II.

Herbert A. Jensen

Herb joined the forest survey section of the CF&RES upon graduation and was instrumental in developing the photo-interpretation and stratification techniques as they are used today. In 1947 he resigned from the USFS to establish the consulting forestry partnership of Hammon, Jensen and Wallen in Oakland. In this capacity he

has developed forest inventories and management plans for properties all over the world. $\Sigma\Sigma$ II.

Anselmo Lewis

Anselmo has been with the USFS since graduation and for many years has been the district ranger for the Mt. Baldy District on the Angeles NF in southern Calif. He was the recipient of the USDA Certificate of Merit in 1961 and of the Conservation Award of the Isaac Walton League in 1957. AZ, $\Sigma\Sigma$ II.

William P. Maguire

Bill worked for a number of years with the USFS and for the last 16 years has been service forester with the Calif. Div. of For. in the Placerville area. Bill was president of the Calif. Alumni Forester in 1957. With George A. Craig '39, he is the co-author of the *California Pine Region Forest Handbook*. AZ, $\Sigma\Sigma$ II.

Matias P. Mortigia

For 30 years Mat has been the owner and operator of a shoe repair shop in S.F.

†William E. Nelson

Upon graduation Bill joined the USFS. Until October, 1946, he was an administrative assistant on the Modoc NF. He then resigned to go into business as the Nelson Equipment Co and died in March 1947, just four months later.

James E. Osborne

Following his graduation from Berkeley, Jim did graduate work in Berkeley and N.C. State Coll. and at George Washington Univ. He entered the USFS and was with it for 26 years as statistician and chief of the biometric services in the Wash. office. He recently resigned from USFS to become a professor of forest biometry at Duke Univ. $\Sigma\Sigma$ II.

Wayne B. Read

Wayne joined the Gardiner Lumber Co in Ore.

Raymond Roberts

For a short time after graduation Ray worked for the Associated Students of U.C. and then returned to Morgan Hill and Gilroy, Calif. to take over the operation of his family-owned department store.

John A. Rudbach

John went into the wholesale lumber business in the L.A. area. $\Sigma\Sigma$ II.

†Horace G. Sabine

Horace first joined the USFS in the lake states area and in 1943 was transferred to the Olympic NF in Wash. From 1944 until his death in August, 1950, he was the timber sales officer on the Wenatchee NF in Wash.

Williard B. Tallman

Will went into the electronics industry and, in 22 years with Eitel-McCullough, Inc., rose to division superintendent.

Pieter J. Van Huizen

Before his retirement in 1960 Van had worked for 29½ years with the USDI Bur. of Sport Fisheries and Wildlife. He was the first manager of the Sacramento Natl. Wildlife Refuge near Willows, Calif. His latest assignment with them was as refuge manager at St. Charles, Ark. $\Sigma\Sigma$ II.

Ernest W. Wohletz, MS U.C. '47

In 1931 Ernie served as the first summer camp teaching assistant, an ordeal he managed to survive for four summers. For a time he was a research assistant at Berkeley and has been, for the past 27 years, associated with the Univ. of Idaho. He is now dean of the Coll. of Forestry and director of the Forest Wildlife and Range Exp. Sta. AZ, $\Xi\S\Pi$.

Master of Science**Frank D. Heyward, Jr.**, BS Univ. of Mich. '29

Thesis: The effect of a grass vegetation upon soil moisture.

Frank moved to La. and worked for the Gaylord Container Corp and more recently with the Southern Pulpwood Assoc. $\Xi\S\Pi$.

Bennett O. Hughes, BS Cornell Univ. '23

Thesis: Factors affecting cost of logging with fair-lead arch wheels.

Ben joined the USFS and in his 29 years with them rose to the position of assistant director for timber management in the Wash. office. He then joined the U.S. Agency for Intern. Development and is the forest adviser in Bogota, Colombia. $\Xi\S\Pi$.

John R. Neetzel, BS Univ. of Minn. '29

Thesis: A study of the root development of western yellow pine seedlings in relation to the distribution of water in the soil.

John joined the USFS as a forest utilization research forester at the Lake States FES in St. Paul, Minn. He is a research associate at the Univ. of Minn.

Johan Lund Owe (John Owe Lund), BS Agric. Coll. of Norway '26

Thesis: The effect of nitrification upon vegetation and forest reproduction in some of the California pine forests.

Johan strayed a bit from forestry and entered the poultry business at Sonoma, Calif.

†Liter E. Spence, BS Univ. of Idaho '28

Thesis: The use of hygrometric paper as an index of the loss of water through transpiration of selected plants.

Liter returned to Idaho where he was a specialist in the Idaho Agric. Ext. Serv. at Boise and later joined the U.S. Intern. Cooperation Administration as an agricultural adviser in Tunisia. He retired to his native Idaho and passed away there in 1964.

Lloyd W. Swift, BS U.C. '27

Thesis: Factors influencing the succession of brush and grass communities in a delimited habitat.

Other Alumni**William Fair**

Bill moved to Gallup, N.M.

Joseph Howell, Jr., BS Iowa State Coll. '25

After some graduate work at U.C. Joe worked at a variety of jobs before settling with the Bur. of Reclamation as a soil scientist in N.M. $\Xi\S\Pi$.

Lester H. Reineke, BS Cornell Univ. '29

Les joined the USFS and is with the Forest Products Laboratory in Madison, Wis., where he has done considerable research on the improvement of saws. $\Xi\S\Pi$.

†**Eldred R. Ware**, BS Colo. Agric. Coll. '24

Eldred, following some post-graduate work at U.C., joined the USFS and was located in Colo. He died in October, 1941. ☞ΣII.

1 9 3 1

Bachelor of Science

Frederick W. Bacon

Fred, or "Porky" as his friends know him, joined the USFS in Calif. and after 32 years of service rose to the position of assistant personnel officer for the region. He then transferred to the PSWF&RES where he is assistant director for station management. Porky retired in 1965.

James C. Ball

Curtis worked for 20 years with the USDA Bur. of Plant Industry and the Bur. of Entomology and Plant Quarantine, and then for a number of years operated an avocado nursery in Santa Barbara, Calif. He has rejoined the USFS as a forester at Upper Darby, Penn.

Ralph C. Bangsberg

Ralph joined the USFS and has had more than 30 years of service in Calif., most recently as fire-control officer of the Shasta-Trinity NF, and presently with the El Dorado NF. ☞ΣII.

Junius W. Dennison

Junius joined the ranks of the military and was last reported a colonel in the Air Force.

Fred M. Dunow

Fred joined the Calif. Div. of For. and after 32 years is the deputy state forester for the Central Sierra District.

Norman J. Farrell

Norm's entire career has been with the USFS in Calif. He has been supervisor on various forests and is presently assistant regional forester for fire control in the S.F. office.

Hereford Garland, MS U.C. '32, PhD Washington Univ. (St. Louis) '38

For the past 19 years "Herf" has been associated with the Mich. Coll. of Mining and Technology and is director of its Forest Products Research Div. ☞ΣII.

Arthur D. Gifford

Art joined the USFS and was for many years on the Plumas NF. ☞ΣII.

†Philip B. Hackley, Jr.

Phil got into the transportation and entertainment business and owned a bus line in Fort Bragg in Mendocino County. He also operated several theaters in southern Calif. He died in June, 1963. ☞ΣII.

Paul L. Johannsen

Following his forestry work at Berkeley, Paul entered the ministry and received several advanced degrees in theology. In 1963 he received his PhD in Christian

Philosophy from Burton Coll. and Seminary. For the past 15 years he has been pastor of the Church of the Bible in Plainville, Conn. $\Sigma\S\Pi$.

Clifford T. Kernohan, Jr.

Cliff is in the farming business in Siskiyou County.

Irving Franklin Pearce

Irving joined the SCS and has been a work unit conservationist on a number of different assignments in Calif.

†Judson M. Rhoads

Jud joined the USNPS and was a ranger in Yellowstone Park at the time of his death in 1938.

Burnett Sanford

Burnett worked for many years with the USNPS and was its regional forester in S.F. at the time of his retirement.

†Lloyd W. Simpson

Lloyd joined the L.A. County Forestry and Fire Dept and was, for a time, the fire warden at Newhall. At the time of his death by auto accident in 1941, Lloyd was a camp supervisor with that organization.

Master of Science

†John R. Freeman, BS U.C. '27

Thesis: A study of sugar pine with emphasis on properties and uses.

Teh-i Li, BS Univ. of Nanking (China) '23

Thesis: Seasonal distribution of soil moisture in woodland, brush and grass associations of the central Pacific coast region of California.

Teh-i returned to his native China and the last word from him indicated that he was in the Coll. of Agri., Univ. of Chepiang in Hanchow, China. $\Sigma\S\Pi$.

Nicholas T. Mirov, BS Grad. Imperial Inst. of Forestry, St. Petersburg (Russia) '16, PhD U.C. '36

Thesis: Methods of oleoresin distillation of California pines.

Nick joined the USFS and was associated with the PSWF&RES for 30 years as a plant physiologist. Upon his retirement from the USFS, he became a research fellow in forest botany for Harvard Univ., although stationed in Berkeley. In 1958 he was the recipient of the first gold medal for research from the USDA and also of the Award for Achievement in Biological Research of the Soc. of American Foresters. He has received research grants from the Rockefeller and Ford foundations. Among Nick's publications is a Russian geography textbook which he used for many years as he taught that subject in the U.C. Geography Dept. $\Sigma\S\Pi$.

William G. Morris, BS Univ. of Wash. '30

Thesis: The effect of high temperature and moisture content upon seed from Douglas-fir and western yellow pine.

Bill joined the USFS and has been associated with the PNWF&RES in Portland.

Theodore B. Plair, BS Miss. State Coll. '29

Thesis: Some factors affecting the cost of bucking in the California pine region.

Ted has been for 29 years with the SCS and is currently head of its woodland conservation department in the Wash. office. $\Sigma\S\Pi$.

Other Alumni

Crawford R. Buell, BS Univ. of Ariz. '24, MA American Univ. '58

Crawford did some graduate work in forestry in association with the class of 1931, but his career has been almost entirely outside of forestry, although he has been with various federal agencies including the Civil Service Commission for 33 years. For the past eight years he has been with the U.S. Post Office Dept and is presently chief of the compensation branch of the personnel division in the Denver regional office. $\Sigma\Sigma\Pi$.

†**Jack A. Diemer**, BS Iowa State Coll. '30

After some graduate work at Berkeley, Jack joined the USFS and was associated with the Lake States FES at St. Paul, Minn. as an assistant forest economist. He died in November, 1941, after a long illness. $\Sigma\Sigma\Pi$.

Robert C. Harlan

Bob panned gold and made his wages for about a year. In 1935 he was with the U.S. Army in the Hawaiian Islands. No further word.

1 9 3 2

Bachelor of Science

Warren E. Barnes

Warren joined the USFS in Calif. and is on the Los Padres NF. $\Sigma\Sigma\Pi$.

Leland E. Berriman

Lee has been with the USFS in Calif. for more than 31 years, mostly on the Angeles NF where he supervises the watershed management staff. AZ.

†**Edward A. Colman**, PhD U.C. '42

Known to his friends as "Ted", he joined the research branch of the USFS and first worked at the North Fork Exp. Area and at the San Dimas Exp. Forest in southern Calif. Later he worked in the lake states and in the Intermountain regions, becoming in 1949 division chief of the watershed management div. of the CF&RES, the position he held at the time of his death in March, 1956. Ted was the author of the book *Vegetation and Watershed Management* and the inventor of the Colman soil moisture instrument. Following his death his many friends established the Colman Memorial Watershed Management Fellowship. AZ, $\Sigma\Sigma\Pi$.

Sidney V. Dennison

After several years with the USFS in Alaska, Sid became a realtor and has owned his own business in the Auburn, Calif., area for the past 15 years. AZ, $\Sigma\Sigma\Pi$.

David W. Dresbach

Interested in soils and a charter member of the Soil Conservation Soc. of America, Dave was for a number of years a work-unit conservationist with the SCS. For the past eight years he has been a field representative with the Calif. State Div. of Soil Conservation at Santa Rosa. $\Sigma\Sigma\Pi$.

Clair E. Harlan

Until September 1950 Clair was with the USFS on the Angeles and Plumas NF's and now is the proprietor of Harlan's Associated Serv. in Wilmington, Calif.

Richard H. Klugh, MS U.C. '36

Dick moved to South America where he is the owner, operator, and technical forester for Industria Forestal in Argentina. $\Sigma\Sigma$ II.

†Arieh Lahav, MS U.C. '33

Following graduation, Arieh returned to his native Israel where he was engaged in forestry and conservation work. He was killed in an automobile accident in February, 1946. $\Sigma\Sigma$ II.

Howard C. Lee, MF Yale Univ. '39

Howard joined the USFS and after a number of assignments as assistant supervisor and supervisor on NF's in Colo., Idaho, Mont. and S.D., is now chief of the Div. of Operations in the Denver regional office.

Kenneth C. McLees

Ken joined the USFS in Calif. and has been on the Sierra NF for most of his career. He is currently in the supervisor's office in Fresno.

Frederick A. Meckel

Fred moved to Coeur d'Alene, Idaho, where he went into the farming business and is now a land surveyor with Ray H. Kindler in that area.

George T. Nordstrom

George's entire career of 31 years has been with the USDI Bur. of Indian Affairs as a conservationist at Sacramento. AZ, $\Sigma\Sigma$ II.

John B. Spring

Starting his undergraduate work at Cornell Univ., John graduated from Berkeley and did some graduate work at Yale. He then entered the USFS and spent most of his career in the Southeast where he is currently assistant regional forester for fire control. John is the son of the late S. N. Spring, professor of silviculture at Cornell and later dean of the Coll. of Forestry at Syracuse. AZ.

Frank W. Stewart

Frank moved to southern Calif. where he taught in high school.

Leif Thorne-Thomsen

Lief strayed a bit from forestry and went into hospital administration. He lives in Chicago.

Gordon B. Vance

Gordon has been a forester for 32 years with the USFS in Calif. $\Sigma\Sigma$ II.

Edward H. Werner

Ed became a consulting forest engineer in Sacramento.

Alvin E. Westphal, MS Univ. of Mich. '33

Alvin did additional graduate work at the Univ. of Alaska, and after a time became design development engineer for the United Manufacturing Co in Chicago. He is now a semi-retired, self-employed, world traveler.

Master of Science**Hereford Garland, BS U.C. '31**

Thesis: The possibility of charcoal as a pulverized fuel.

Other Alumni

Henry A. Beadell, BS Purdue Univ. '31

After some graduate work, Henry was with the Ind. Div. of For. for several years.

Warren F. Hamilton

Warren joined the USNPS and has been with them for 31 years as assistant superintendent of the Natchez Trace Parkway in Miss. and assistant superintendent of Yellowstone Natl Park. He is presently the park superintendent of the Everglades Natl Park in Fla.

Edwin L. Mowat, BSF Ore. State Univ. '24, MF Yale Univ. '27

Ed did one year of graduate work toward his PhD and then joined the USFS and for 36 years was associated with its research branch. During the last 16 years before his retirement in April 1963, he was research forester at the Bend, Ore., research center of the PNWF&RES.

Ben H. Thompson, AB Stanford Univ. '28, MA U.C. '32 (Zoology)

Ben was in forestry graduate work only briefly before turning to his true interest of zoology. His entire career has been with the USNPS of which he is presently the assistant director in Wash., D.C. He has held positions of vice-president, member of the board, and treasurer of the Natl Conference on State Parks, and is a Fellow in the American Inst. of Park Executives. He is the chairman of the Advisory Committee on Federal Recreation for the Natl Recreation Assoc. He has received the Cornelius Amory Pugsley Gold Medal and the USDI Distinguished Service Award. Σ II.

1933

Bachelor of Science

Louis E. Barnum

Louis settled in the Bay Area but out of forestry, and for the past 18 years has been a manufacturing representative for sales for the General Electric Lamp Div.

Maxwell E. Becker

Most of Max's career has been with the federal government on one or another assignment. He has been assistant forestry specialist with the Foreign Operations Administration in East Pakistan with the USFS Rocky Mountain F&RES in Colo., and more recently as a forestry adviser with the Agency for Intl Development in Chile and Honduras.

Benjamin D. Bolt

Ben settled in Bakersfield, Calif., where for the past ten years he has had his own business as a public accountant. In 1946 he was president of the Bakersfield Art Assoc. AZ, Σ II.

George F. Burks

George went directly into the USFS after graduation and was, for many years, associated with the forest inventory in the forest economics div. of the CF&RES. Since that time he has been in the Wash. office as assistant director of the div. of forest

economics research. In 1964 George was appointed administrator of the cooperative forestry program under the McIntire-Stennis legislation.

Harry W. Camp, Jr.

Harry has spent his entire career with the USFS in research and, in his various assignments around the country, has become one of the leading experts at forest recreation research. He was chief of this activity in Wash., D.C., before he was transferred to the PSWF&RES in Berkeley where he is now assistant director.

†Michael N. Dobrotin

Michael worked for a number of years in L.A. with the Calif. Div. of Highways. He died in 1952.

Edward J. Dortignac

Edward has worked for more than 21 years with the USFS and was for a time research center leader at Albuquerque, N.M. Presently he is chief of the water resource branch in the Wash. office. In 1958 he received the USDA Meritorious Award.

Marshall A. Elvin

Marshall worked for a few years on timber sales in the regional office of the USFS in S.F. No recent word from him.

Gray G. Evans

Most of Gray's career has been in the Calif. redwood region where for many years he was the logging manager of the Hammond Lumber Co. When Hammond was acquired by the Georgia-Pacific Corp, Gray was moved to Portland, Ore., where he has been administrative assistant to the senior vice-president. He is now vice-president for the company's western timber and logging operations.

William F. Fischer

Bill's career has been devoted to the USFS. After supervisor assignments on the Cleveland and Six Rivers NF's, he is now a branch chief in the regional office.

Floyd Iverson

Floyd's career has been entirely with the USFS. His last two assignments have been assistant regional forester at Missoula, Mont. and, now, regional forester at Ogden, Utah. In 1962, he received the USDA Superior Service Award, and in 1963 was elected to the Council of the Soc. of American Foresters. AZ, $\Xi\S\P$.

†Arthur London

Following graduation, Art joined the USDA Bur. of Entomology and Plant Quarantine and later transferred to the USFS in its Blister Rust Program. In 1954 Art became the administrative officer for the western area of the Agri. Marketing Serv. In 1950 Art was president of the Calif. Alumni Foresters. He died in January, 1957, AZ, $\Xi\S\P$.

William H. Marshall, MF '35 and PhD '42 Univ. of Mich.

Bill is professor of wildlife at the Univ. of Minn. where he has been for 16 years. He was president of the Minn. Academy of Science in 1958. In 1960-61 he was a Fulbright Research Scholar to New Zealand. AZ, $\Xi\S\P$.

Angelo J. Mazzetta

Angelo is forester with the Aborigine Lumber Co at Fort Bragg.

Richard H. Mors

Dick joined the SCS and was last known to be in Carpenteria, Calif. AZ.

Everett F. Nourse, MS U.C. Davis '62 (Agronomy)

For the past 18 years Everett has been a U.C. farm advisor in Solano County, AZ.

Leland J. Prater

Lee's career has been with the USFS, most of it in the Wash. office where he is in charge of visual information. He has made some very fine motion pictures depicting forestry and recreation.

†Elmer E. Smith

Following college, Elmer joined the USDA Blister Rust Control crew on the Stanislaus NF and was located there at the time of his death in August, 1935.

R. Kenneth Smith

Ken's career has been with the USFS in Calif., most of it on the Modoc NF where he is timber staff officer in the supervisor's office. ΞΣΠ.

Wesley W. Spinney

Wes' career has been with the USFS in Calif., much of it as supervisor of various forests, and presently the Six Rivers NF at Eureka.

M. Deene Stowell

Deene worked for a time with the Navajo Indians at their sawmill in N.M. He is now the asst. mgr. for the Lawrence Whse Co in Redding, Cal.

Kenneth A. Taber

Ken's career has been with the USFS. He was assistant forest supervisor at Deadwood, S.D., before he went to the Denver regional office as a forester.

Claude A. Wagner, Jr.

Another stray from forestry, Claude has been plant engineer, and is now chief plant engineer for Norris-Thermador Corp in L.A. He has been with them for more than 21 years. AZ, ΞΣΠ.

Alice Dorothy Watson (Anderson)

Dorothy, also known as "Ranger," Cal's third lady forester, worked for a number of years in Berkeley as a research assistant. She is married to Henry W. Anderson '43 and now is a homemaker and mother to their three children.

Maurice C. Williams

Maurice joined the Civilian Conservation Corp after graduation and worked on the Prairie States Forestry Project. In 1942 he joined the Caspar Lumber Co at Mendocino, Calif., as a scaler. He was there for two years before he moved to southern Calif.

Master of Science**John R. Curry, BS Cornell Univ. '24**

Thesis: Some applications of statistics to the analysis of forest fire data.
John is a consulting forester at Saranac Lake, N.Y. ΞΣΠ.

Wendell E. Davis, BS Mich. State Coll. '29

Thesis: Growth rings of certain conifers and their relation to precipitation and temperature.

For a number of years Wendell was a statistician with the Army in Wash., D.C.

Harry S. Hinkley, BS Iowa State Coll. '32

Harry did additional graduate work at Yale and at U.C. Davis. For his entire career, he has been a farm advisor with the U.C. Agric. Ext. Serv. in Tuolumne County. $\Sigma\Sigma$ II.

Horace R. Josephson, BS Penn. State Coll. '32, PhD U.C. '39

(See Chapter 5—The Staff)

†**Arieh Lahav**, BS U.C. '32

James C. H. Robertson, BS Univ. of Wash. '27, DF Duke Univ. '46

Thesis: Relative transpiration of seedlings of certain coniferous species.

Jim has been with the Coll. of Forestry at the Univ. of Wash. for 17 years and is now professor of forest management.

Marriner Swensen, BS Utah State Agric. Coll. '31

Thesis: A study in delayed germination of sugar pine seed.

Marriner joined the USFS in Calif. and is now in charge of planning and programming for roads and trails in the regional office.

Other Alumni

Ralph J. Doheny, BS Wash. State Coll. '31

Following his graduate work Ralph joined the Kaiser Co and worked for five years on the Grand Coulee Dam, then three years on the Shasta Dam, and three more years in the Kaiser shipyards in Richmond. In 1944 he returned to Berkeley and got a teaching credential in education and is now a math teacher in the Richmond, Calif., schools.

Walter U. Garstka, BS Penn. State Coll. '29, MF Yale Univ. '30, MS Colo. A. & M. Coll. '49

With more than 30 years of service with the federal government, Walter has been with the Bur. of Reclamation for 17 years. He has been with its Project Planning Div. and the Div. of Engineering Laboratories and is now the chief of the water conservation branch, Div. of Research, at Denver. Walter is a Fellow in the American Soc. of Civil Engineers and, in 1965, received the USDI Distinguished Service Award.

Lawrence R. Short, BS U.C. '32 (Animal Husbandry)

In addition to his graduate work in forestry at Berkeley, Larry studied plant physiology at U.C. Davis. He worked for the federal government on a number of assignments abroad, most of them in the Middle East. He was a range management advisor with the Foreign Operations Administration in Teheran, range livestock and forestry advisor with the U.S. Operations Mission at Tel Aviv, Israel, and, before his retirement in January 1963, range management adviser with the U.S. Agency for Intern. Development at Ankara, Turkey. He received the USDA Certificate of Merit in 1951. AZ.

†**William H. Walling**, BS Cornell Univ. '27

Bill was in the USDI Bur. of Indian Affairs for a number of years before he did his graduate work at Berkeley, and later in the contracting business in Santa Fe, N.M. He died in Chicago in June, 1961.

†**Ernest T. F. Wohlenberg**, BS '12, MF '13 Univ. of Nebr., MF (honorary) Yale Univ. '58

Wohly joined the USFS in Ariz. before his World War I service as a captain in the 10th Engineers. After brief service with private industry in the Pacific Northwest, he joined the Bur. of Internal Revenue as a valuation engineer in 1922. While in this position, which he held until 1937, he took graduate work at Berkeley for three semesters between 1931 and 1933. From 1937 to 1941 he rejoined the USFS in charge of private forestry in the western U.S. Following this he was, successively, general manager, Edward Hines Lumber Co. 1941-45; forest counsel, Western Forestry and Conservation Assoc., 1945-48; vice-president and general manager, Masonite Corp, Ukiah, 1948-54; professor of industrial forestry, Yale School of Forestry, 1954-57. He then retired to Ukiah and had a private consulting practice until his death on September 11, 1963. $\Xi\S\P$.

1934

Bachelor of Science

Melvin E. Barron

Mel first entered the USFS and rose to the position of forest supervisor within eight years. In 1948 he joined the Fruit Growers Supply Co and was resident manager at Susanville. He is currently that company's resident manager at Hilt, Calif., and lives in Ashland, Ore.

Rene Bollaert

Rene lives in the Bay Area but no news of his activities. $\Xi\S\P$.

Kenneth L. Butler

Ken joined the Naval Reserve while in college but the first six years after graduation were devoted to forestry work in the SCS. In 1940 he went on active duty with the Navy and, in the next 22 years, rose to the rank of captain before his retirement in 1962. In his retirement Ken is the book store manager for the American Bible Soc. in Wash., D.C., and serves as principal of the Christian Day School in Arlington, Va.

William D. Chick, Jr.

Bill's entire career has been with the USNPS. In the last ten years he has moved up from chief park naturalist in Wash., D.C., to the regional chief of the Div. of Interpretation.

Robert E. Dasmann

Bob's career has been with the USFS in Calif., where he has been supervisor of the Mendocino NF and is now on the regional foresters staff in S.F.

Theodore W. Daniel, MS U.C. '36, PhD U.C. '42

Known as "Dust Devil" to his summer camp mates, Ted has devoted most of his career to teaching in the Coll. of Forestry at Utah State Univ. where he is professor of silviculture. While still an undergraduate, Ted became the first Calif. forester to be elected to the Phi Beta Kappa honor fraternity. He was a Fulbright Research Scholar to Austria in 1951-52. AZ, $\Xi\S\P$.

Frank W. Embree

Frank joined the USFS upon graduation and for many years has been ranger on the Magalia district, Lassen NF in Calif.

Conrad A. Fischer

Conrad entered the petroleum extraction business and was manager of the Turner Petroleum Co in Long Beach. He is now owner and manager of the T. and F. Oil Co of that city.

Garth F. Flint

Garth became a rancher near Gaviota in Santa Barbara County.

Carl W. Fowler

Carl joined the USDA Bur. of Entomology and Plant Quarantine and was with them for 20 years before transferring to the USFS as a forester. He is now a forester-geneticist at Placerville. Carl's son, Gary, graduated from Berkeley in 1961. $\Sigma\Pi$.

Philip G. Haddock, PhD U.C. '42

Most of Phil's forestry career has been in forest education. He was assistant professor of forestry at the Univ. of Wash. and is now associate professor of forestry at the Univ. of B.C. where he has been located for 11 years. AZ, $\Sigma\Pi$.

William R. Howden

Bob's entire career has been as a forester with the USFS in Calif. He is now in the timber management section of the regional office. $\Sigma\Pi$.

John E. Hughes

When last reported, John was associate professor of anatomy in the Coll. of Medical Evangelists, School of Medicine, Loma Linda, Calif. $\Sigma\Pi$.

Ralph A. James

Known to his friends as "Rowdy," his entire career has been with the USFS in Calif., and almost entirely in fire control. Rowdy is now the northern zone fire coordinator at Redding.

John F. Kellogg

John has managed to utilize his forestry education as a consulting forester in Shongaloo, La., where he was also a Methodist minister. While an undergraduate at Berkeley, John supervised a number of junior high school boys who had paper routes. Three of these lads, John Zivnaska '38, Bob Seale '40, and Barney Nielsen '41 graduated in forestry although none of them now recall that they knew that John was in forestry or that forestry represented a possible career for them. John now lives in Pine Grove, La. AZ, $\Sigma\Pi$.

Jack C. Kern

Most of Jack's career has been with the USFS and in more than 28 years he has risen to, and through, the office of supervisor at Custer, S.D., and is now staff assistant for personnel management in the Wash. office.

William A. Peterson

A successful pitcher on the varsity baseball team during his undergraduate days, Bill turned down the prospects of a professional baseball career to join the USFS. He is supervisor of the Plumas NF at Quincy.

Norman A. Proffitt

Norm is with Pacific Sales and Equipment Co in Oakland, Calif. $\Sigma\Pi$.

Richard D. Roseberry

Most of Dick's career has been with the Diamond Natl Corp (formerly Diamond

Match Co) as chief forester of the Calif. div. and is now the corporation forester for western timberlands with headquarters at Red Bluff, Calif.

Dean F. Schlobohm, MF U.C. '47

Dean has been with the Calif. Div. of For. for 16 years and is now a senior forest technician on the South Sierra District. $\Sigma\Sigma$ II.

Leo P. Slattery

Leo's entire career has been with the USFS in Calif. and is now a forester in the regional office.

†Joseph E. Slayden

Joe was reported deceased in the April, 1935, *California Forester*.

Paul W. Stathem

Paul's entire career has been with the USFS in Calif. He is now forest supervisor of the Shasta-Trinity NF. Paul's daughter Nancy married Dale E. Hosler, a '57 U.C. forester.

Ernest L. Turner

Ernie's entire career has been with the USFS and for many years he has been timber management staff officer for the Lassen NF at Susanville, Calif. AZ.

Robert S. Wiese

For many years Bob was with the U.S. Army Corps of Engineers in the L.A. area and recently joined the U.N. FAO as a hydraulic engineer at Lusaka, Northern Rhodesia, Africa.

Richard C. Wilson

Dick's early work with the USFS was with the CF&RES where he worked on Wieslander's ('14) Forest Survey Project. Then he moved to the PNWF&RES in Portland and was in charge of forest survey in the northwest. He then became leader of a USFS photo interpretation project for the Air Force for a number of years and, after moving through a forest survey techniques research position, became chief of the forest survey branch. In 1963 Dick resigned to take a position with the U.N. FAO in Guatemala. He received the USDA Superior Service Award in 1957. AZ, $\Sigma\Sigma$ II.

Eugene V. Zumwalt, MF Univ. of Wash. '38, PhD Yale Univ. '51

Gene taught for a time at the Univ. of Wash. and later in the Yale Forest School. He resigned from this position to become area forester and range officer for the BLM in Alaska, and 1961 moved to Wash., D.C., where he is assistant director for range and forest management of the BLM. $\Sigma\Sigma$ II.

Master of Science

Boris A. Spassky, Grad. Czech. Technical Univ., Prague, '30

Thesis: The development of ponderosa pine seedlings under different conditions of illumination and soil moisture.

Boris returned to his native Czechoslovakia. $\Sigma\Sigma$ II.

Other Alumni

†Jason K. Brandeberry, BS '27 and MS '29 Ore. State Univ.

Jason joined the USFS after leaving Berkeley and served in numerous capacities in the Calif. region. From 1948 until his death in July, 1953, he was a planning representative with the Missouri River Basin Authority in Lincoln, Nebr.

Arthur H. Doeller, BS U.C. '29 (Commerce)

For the past 18 years Art has been a salesman with Montgomery Ward & Co in Oakland, Calif.

Harold B. Miller

Harold was with the USFS in Calif. when last heard from.

1 9 3 5**Bachelor of Science****Carl G. Albertus**

Carl joined the Calif. Div. of For. and has, for many years, been assistant deputy state forester for the Central Coast District.

Byron B. Beattie

Byron's career has been with the USFS, much of it in Calif. where his last position was forest supervisor of the Sierra NF. He then went to the northeast region where he was assistant regional forester. He is now the div. director for watershed management in the Wash. office.

Jack S. Berry

Jack is the first of two U.C. forester sons of Swift Berry, a Calif. forestry pioneer, graduate of Biltmore Forest School in 1907 and, in his later years, a Calif. state senator. Jack has for the last 14 years operated the Jack Berry Lumber Co in Sacramento. With his brother Bill '37, he did much to help develop the Sierra Cascade Logging Conference and was president of that group in 1962-63. Jack was a natl director of the Hoo-Hoo Lumberman's Club in 1958-59 and was one of the originators of Forest Products Week.

William H. Brainard

Bill joined the USFS and has been in the southwest where he is on the regional foresters staff for recreation and land uses.

Mackay B. Bryan, MS N.C. State Coll. '54

Mack worked for many years with the USFS as a research forester in the southeast. In 1961 he joined the U.S. Agency for Intern. Development as a forestry adviser in the Philippines. AZ.

William E. Bullard

Bill worked for many years as a forester with the USFS in the Pacific Northwest. Later he was forester for the U.S. Public Health Serv. in the Columbia River Basin before he moved to the Wash. office in 1964. ESH.

Paul A. Buss

Paul has worked for 29 years as a forester with the USDI Bur. of Indian Affairs, most of this time at San Carlos, Ariz.

Norman K. Carlson, MS U.C. '39

Norm was with the SCS in Calif. for a number of years before accepting a position as land manager with the Bishop Estate in Hawaii. In that job he has helped pioneer forest plantations and has written two books on trees.

Peter J. Ceremello, DDS U.C. '45

Peter is an orthodontist in the East Bay area. AZ, ΞΣΠ.

Daniel S. Christiansen

Shortly after graduation Dan joined the Civilian Conservation Corps in the Black Hills. His more recent activities are unknown.

Dana W. Cox

Dana has been with the USFS in Calif. since college days, first in the regional office and presently as a resource staffer on the Shasta-Trinity NF.

Norman E. Dirksen

Norm has been with the USFS in Calif. for 28 years, and is currently on the Klamath NF.

Norman E. Dole, Jr.

Norm's 24 years with the USFS have been in Calif., much of it on the Trinity, and later Shasta-Trinity Forest. He is now branch head of timber sale preparation and valuation in the regional office. Norm was president of the Calif. Alumni Foresters in 1963. AZ, ΞΣΠ.

†James A. Egan, MF N.Y. State Coll. of Forestry '37, MA American Univ. '42

Shortly after graduation, Jim joined the USFS in Ariz. where he served as district ranger and on range management staff. Later he moved to the regional office in Albuquerque where he was on the operations and timber management staff. He became supervisor of the Deschutes NF in Ore. in June, 1956, which position he held at the time of his death in March, 1958. AZ, ΞΣΠ.

Joseph E. Elliott, Jr.

The son of a prominent USFS supervisor in Calif., Joe has made his entire career with the USFS in fire control and as timber management staff on a number of forests in Calif. He is now a staff assistant in the Wash. office. AZ.

Robert W. Gardner

Bob has been with the USFS since graduation; first in Salt Lake City as a district ranger then Colo. as a forest supervisor, and now as assistant regional forester in Denver.

John L. Gray

John joined forest industry with the Pickering Lumber Co at Tuolumne, Calif.

John S. Hall, MF Yale Univ. '36

John is with the USFS. He has spent most of his career in Calif. and is now a forester in the regional office. AZ, ΞΣΠ.

William A. Haskin

Bill entered forest industry, for the last 20 years has been with the U.S. Plywood Corp, and is manager of their Sacramento operation.

Fred L. Hector

Fred did some graduate work toward an MS degree in landscape architecture and then was with the USNPS in S.F. as a planner. Since leaving the federal government, he has served as a planning and development consultant in Los Gatos, Calif. AZ.

William T. Jacobson

Most of Bill's service has been with the Calif. Div. of For. He is now an assistant deputy state forester in the Sacramento office.

Bernard M. Kirk, MS Mich. State Coll. '37, MA Univ. of Mich. '60

With his science teaching credential from the Univ. of Mich. Bernard has taught physics in a number of high schools in Mich. and is now in the Ann Arbor High School. AZ, ΞΣΠ.

Albert G. Lew

Albert has been in the nursery business in Berkeley since graduation.

†William W. Lobdell

Bill was associated with the Calif. Pellet Mill Co in S.F. He died in July, 1962.

Frederick A. Meyer, MS U.C. '46

Since receiving his master's degree, Fred has been a state park forester with the Calif. Dept of Beaches and Parks. ΞΣΠ.

Martin H. Mitchell

Martin went into the petroleum industry and for 27 years has been with the Tidewater Oil Co, as general manager of the land dept in S.F. and as regional manager in Karachi, Pakistan. He is now the real estate manager for that company in L.A.

Chester O. Nicholls

Most of Chet's career has been in the redwood region where, for a number of years, he was logging foreman with the Hammond Lumber Co (now Georgia-Pacific Corp). Then, for a few years he was a teacher of vocational forestry in Fortuna Union High School and now teaches forestry in the new forestry curriculum at Santa Rosa Junior Coll.

†William R. Norrish

Following graduation Bill joined the USFS and was on the Eldorado NF at the time of his death in July, 1942.

F. Raymond Sodolski

Ray, who joined the USFS in Calif., is a district ranger on the Tahoe NF. ΞΣΠ.

Hilton D. Taylor

Hilton joined the SCS in Calif.

James B. Titus

Jim worked for ten years with the USFS in Calif. and Colo. as a ranger, and since then has been for 19 years self-employed as an orchardist in the fruit business in Hollister, Calif. He is a member and past director of the Farm Bur., director of the Apricot Producers, and president of the U.C. Alumni in San Benito County.

Howard J. Van Ness

Howard went into forest utilization as a door manufacturer and is associated with the Screentite Door Co in Richmond, Calif.

James Vlamis, PhD U.C. '41

Jim has been with the U.C. soils department and is presently professor of soils.

Alva B. Williams

For many years Alva was with the USFS in the southeastern states. In 1959 he joined the U.S. Agency for Intern. Development as a forestry advisor in Cambodia. AZ.

Harry G. Winkelman

Harry went into forest products sales and has been with the Associated Plywood Mills in S.F., the White Brothers Hardwood Lumber Co, and the U.S. Plywood Corp in Oakland, Calif.

Master of Science**Murlyn B. Dickerman**, BS Conn. State Coll. '34

Murlyn went into research with the USFS, and since 1951 has been the director of the Lake States FES in St. Paul, Minn. Late in 1964 he moved to Wash., D.C. with the director of Science and Education in the USDA. ΞΣΠ.

Shankar N. Kesarcodi, AB Univ. of Bombay '17, Grad. Forest Research Inst. Dehra Dun (India) '21

Shankar returned to the India Forest Serv. after his year in Berkeley. He retired some years later, and moved to London, England, where he now teaches mathematics. ΞΣΠ.

John N. Mitchell, BS Purdue Univ. '31

Thesis: The comparative histology of the secondary xylem of *Sequoia gigantea* and *Sequoia sempervirens*.

John's career has been with the USDA Bur. of Entomology and Plant Quarantine as an operations supervisor and is now with the USFS as a forester and silviculturist on the Lassen NF. ΞΣΠ.

Rudolph Stahelin, Diploma in Forestry, State Polytechnic School, Zürich (Switzerland) '21

Rudy's entire career has been with the USFS as a forest economist. He is now the foreign forest resources research forester in the Wash. office. ΞΣΠ.

Henry J. Vaux, BS Haverford Coll. '33, PhD U.C. '48. ΞΣΠ.

(See Chapter 5—The Staff)

Other Alumni†**Charles B. Eaton**, BS N.Y. State Coll. of Forestry '34

Charlie did some graduate work at U.C. and was chief of the entomology div. of the PSWF&RES in Berkeley at the time of his death in March, 1964.

Edward M. Gaines, BS Wash. State Coll. '34

After some graduate work at Berkeley, Ed joined the USFS and for many years was engaged in research activities in Ariz. He recently returned to Berkeley with the PSWF&RES where he is project leader on the Natl Log Grade Project. Ed is a Fellow in the American Assoc. for the Advancement of Science. He was a councilor in the Ariz. Academy of Sciences in 1958 to 1960, and since 1959 has been a trustee with the North Ariz. Soc. of Science and Art.

Elbert H. Reid, BS Univ. of Wash. '34

Elbert joined the USFS in range research and is chief of the division of range management and wildlife habitat research at the Rocky Mountain F&RES.

†Leon A. Ruben

Leon was in charge of agriculture for the U.S. Army in Mannheim, Germany, at the time of his death in an auto accident in July, 1945.

Karim S. Sai

Karim returned to his native Iran after graduate work at Berkeley and assisted in organizing a dept of forestry and preparing legislation for regulation, protection and utilization of 40 million acres of forest land. He was appointed professor of forestry at the Univ. of Teheran and served as assistant to the agriculture attache at the American Embassy there.

Arthur W. Semans

Art's first job was in the sales office of the Red River Lumber Co and later received a position of sales and production manager for the Meadow Valley Lumber Co at Quincy. In 1946, he established the Semans' Lumber Co as a custom planing mill in Marysville, Calif. He later converted this business to a pine molding manufacturing plant.

Edwin C. Wilbur

Most of Ed's career has been with the SCS and, as a forester, he has been stationed in Temple, Texas. He has received the USDA Certificate of Merit for his work.

1 9 3 6

Bachelor of Science**E. Schuyler Albert**

Schuyler worked for a number of years for the USFS in the northern Rocky Mountain region and later joined the Wash. State Dept of Natural Resources.

Rex T. Albright

Rex stayed with wood utilization as a carpenter in the L.A. area.

John W. Bailey

John joined the U.S. Bur. of Reclamation doing land classification work in the San Joaquin Valley.

Forrest H. Bales

For some years Forrest was an industrial engineer for an East Bay wire cloth company and then moved to Marysville, Calif.

E. Lee Baughn

Lee is with the Social Security Administration of the Dept of Health, Education and Welfare in Calif. at various locations and on various assignments as claims representative, field representative, and is now district manager in Chico.

George B. Beardwood

After graduating in Forestry, George did additional graduate work in botany and education administration and for more than 20 years has been with the school system in Ontario, Calif., as director of in-service training in the Chaffey Union High School and now as professor at Chaffey Junior Coll.

Donald L. Burdick

For more than 18 years Don has been with the Crown Zellerbach Corp at Cathlamet, Wash., where he is now division engineer.

Alex R. Campbell

Alex joined the USFS shortly after graduation and is district ranger on the Los Padres NF in Monterey County.

†Leland G. Cox, PhD Cornell Univ. '42

Lee served for a while in the Dept of Horticulture at Cornell and later worked on special technical projects for Beechnut Packing Co in N.Y. In 1952, he joined the United Fruit Co at Boston and was associate director of research with them at the time of his death in April, 1959. AZ, ΞΣΠ.

William P. Dasmann

For a number of years Bill was with the Calif. Dept of Fish and Game as a game management supervisor and senior game biologist. He is now a forester (wildlife) with the USFS in S.F.

Richard F. Droeg

Dick's entire career has been with the USFS and most of it in Calif. in a variety of staff and administrative positions. Since leaving Calif. in the late 50's, he has been in high field positions and is now the regional forester at Upper Darby, Penn. for the northeastern U.S. ΞΣΠ.

Roy Gravem

Roy has worked on some irrigation projects in Calif. and, lately, has been employed on the Oroville Dam.

Edmund Griffith

Ed moved into the redwood region where he was logging superintendent for the Hammond Lumber Co. He is now logging manager for the Simpson Timber Co at Korb. Ed is a director of the Redwood Region Logging Conference. AZ.

William H. Hansen

Most of Bill's career has been with the USFS in Calif. on various staff assignments. He is now forest supervisor of the Los Padres NF at Santa Barbara.

Earl P. Hanson

Earl's entire career has been with the Calif. Dept of Beaches and Parks and for many years he has been the deputy chief of that organization. After a number of other officer positions, he is now the president of the Natl Conference on State Parks. AZ, ΞΣΠ.

†William A. Hawley

After graduation, Bill joined the USDA Bur. of Entomology and Plant Quarantine in Berkeley and was with them at the time of his death in April, 1938. ΞΣΠ.

Horace D. Jones

Horace joined the USFS and has been with them in Calif. for 27 years with much of the time on the Shasta-Trinity NF where he is now the district ranger at Weaver-ville. Horace likes to keep his forestry in the family. He married Alice Jones '37 and their daughter, Angenett, married Peter A. Twilight '57. Horace served as president of the Calif. Alumni Foresters in 1961. ΞΣΠ.

†Joseph J. Kasak

Joe died of asthma only three months after his graduation.

Eugene H. Kincaid

Gene entered the lumber industry in the redwood region and is now with the Fairhurst Lumber Co in Fortuna, Calif.

Joseph L. King

Joe was last heard from in Sacramento.

Edward C. Koch

For 17 years Ed has been with the U.C. Agric. Ext. Serv. as a farm advisor in Santa Cruz County. AZ.

Norman J. Leone

Norm lost contact shortly after graduation.

James H. Macnair

The latest word from Jim indicated that he was associated with the SCS in Bakersfield, Calif.

Russell P. McRorey

Most of Russ' career of more than 25 years with the USFS has been in Calif. where he was regional logging engineer and finally forest supervisor of the Stanislaus NF. He then moved to the Pacific Northwest where he was the assistant regional forester and, in 1963, was transferred to the Wash. office where he is director of the Div. of Land Adjustments.

Myron J. Nelson

Myron's 28 years with the USFS have been in Calif. on ranger and staff positions. He is now in the Plumas NF. Σ II.

Maurice B. Nichols

Maurice has been with the Standard Oil Co of Calif. for 25 years as a training specialist.

Carl M. Pedersen, MBA Stanford Univ. '46

For the past several years Carl has been with the Aerojet General Corp at Nimbus, Calif., as a development engineer. Σ II.

Glen E. Sindel

Glen has been with the USFS in Calif. During World War II he was ranger on the Mt. Baldy District of the Angeles NF and in 1945, was awarded the James McLachman Bissell Medal "in recognition of an outstanding job of organization." In 1962, he received the USDA Outstanding Service Award. Glen has been the district ranger at Forest Hill on the Tahoe NF for several years.

Bernard S. Sweatt

Barney has more than 25 years of service with the USFS in Calif. as district ranger at Mammoth Lakes, and as timber staff officer at Sonora. He received the USDA Superior Service Award in 1959.

Leon R. Thomas, BA San Jose State Coll. '33

Lee's entire career has been with the USFS, most of it in Calif. where he was supervisor of the Mendocino and Sequoia NF's. In the late 1950's he transferred to Atlanta, Ga., as assistant regional forester; and, a few years later, to a similar position in Ogden, Utah. Lee now has a special staff assignment in the Wash., D.C. office as multiple use coordinator. Σ II.

†Paul E. Tyrrell

Paul's first job out of school was with the USDA Bur. of Entomology and Plant Quarantine. He then joined the USFS as a junior forester on the Shoshone NF in Wyo. About one year later, on August 21, 1937, while leading a crew of men on a forest fire, Paul was killed when the fire shifted and cut off their escape route. Although Paul was caught by the fire, his heroic efforts saved the lives of at least two men. A monument to his memory and to the others who lost their lives in this fire is located on U.S. highway 20 between Cody, Wyo., and the east entrance to Yellowstone Natl Park. This monument was dedicated by assistant chief of the USFS Earle Clapp on August 24, 1941. AZ.

Ralph J. Thursby

Ralph is self-employed as a farmer at Arlington near Riverside, Calif.

†John J. Whelan

After graduation, John worked for a number of years for the USFS in Wash. and was a Tech. Sergeant with the U.S. Army at Ft. Lewis, Wash. from 1942 to 1946. He joined the Calif. Div. of For. in 1947 and was an engineer on the north coast district at the time of his death on July 10, 1958.

Hugo C. Wildschut

Before Hugo's retirement, he was associated with the Corps of Engineers as a technical assistant in the Pacific Northwest, and later overseas as chief of the construction branch. He now lives in Ore.

Master of Science

Theodore W. Daniel, BS U.C. '34, PhD U.C. '42

Richard H. Klugh, BS U.C. '32

Karl F. Thielking, BS Iowa State Coll. '31

Karl is the publications editor for the SCS in Wash., D.C. $\Sigma\Sigma$ II.

Jane E. Murdock (Ulrich), BS Mont. State Coll. '34, PhD U.C. '59

Jane was the fourth lady U.C. forester and the first to receive the MS degree. After rearing her three boys to high school age, Jane returned to school and completed her doctor's degree in plant physiology. She is now employed by U.C. as a junior biochemist. She was the recipient of a postdoctoral award from the Foundation for American Resources Management in 1959-60 for her work on mycorrhiza. $\Sigma\Sigma$ II.

Doctor of Philosophy

Irving H. Isenberg, BS '31 and MS '32 Syracuse Univ.

Dissertation: Chemical studies on the wood of white fir, *Abies concolor*. (Plant Physiology)

Irv has been with the Inst. of Paper Chemistry at Appleton, Wis., for 26 years as a research associate. From 1950 to 1953 he was the publications chairman of the Forest Products Research Soc. He has made a number of chemical studies of wood, and is author of a book on redwood bark. $\Sigma\Sigma$ II.

Nicholas T. Mirov, Grad. Imperial Inst. of Forestry, St. Petersburg (Russia) '16, MS U.C. '31

Dissertation: The relation of some internal factors to the germination of seeds of *Pinus jeffreyi* Murr. and *Pinus lambertiana* Dougl. (Plant Physiology)

Other Alumni

†Robert K. Blanchard, BS U.C. '31 (Chemistry)

After his BS in chemistry, Bob worked for a while on his master's degree in forestry. He joined the CF&RES in fire research and was sent by the USFS to M.I.T. in 1939 for research in lightning meteorology. Bob joined the East Bay Municipal Utility District as a hydrologist in 1950 and was assigned to their surveying dept in May 1959, less than two months before his death in June, 1959. $\Xi\SII$.

Knox Borden

Knox worked for some years with the Hawaii Dredging Co and was, for a time, working for that company at Kuwait on the Persian Gulf.

†Max J. Brunk

Max died while still an undergraduate as the result of spinal meningitis which he contracted during summer camp in 1935.

John Haderle

John is in the claims dept of the Waterman Corp of Calif. in S.F.

James Higginbotham

Jim was last heard from in McFarland in the San Joaquin Valley of Calif.

Byrne C. Manson, BA Stanford Univ. '35 (Mech. Eng.)

Byrne is the director of engineering for the Simpson Timber Co in Wash.

†Edward Whalen, BS Cornell Univ. '35

Ed joined the USFS upon graduation but returned to the state of his undergraduate activities. He was in Salamanca, N.Y., at the time of his death in August, 1962.

Richard Williams

Dick was last heard from living in the Bay Area.

1 9 3 7

Bachelor of Science

R. Keith Arnold, MF Yale Univ. '38, PhD Univ of Mich. '50, AZ, $\Xi\SII$.

(See Chapter 5—The Staff)

James Aschoff

Jim joined the telephone company in the S.F. area.

†Ted C. Atwood

Ted was in the insurance business in Placerville, Calif., until his death on November 10, 1963.

Robert J. Ball

Bob's entire career has been with the Pasadena City Coll. where he has been assistant professor of botany for 26 years. He serves with the USNPS in the summer-time as a park ranger. AZ, $\Xi\SII$.

William E. Barthold

Bill has been with the Eng-Skell Co in S.F. for 23 years and is now sales manager for that organization. ΞΣΠ.

Stanley P. Bee

Most of Stan's career has been as a civil engineer with the city of Oakland where he has been for 19 years.

John D. Beebe

Shortly after his work at Berkeley, John joined the USFS and was for many years in the Calif. region. He then moved to the northern region where he was section chief in the Div. of State and Private Forestry in the regional office. John is now forest supervisor at Sandpoint, Idaho.

Frederic A. Bentley

Fred's entire career has been with the telephone company and most of it in the Bay Area, although he was for a time with the Bell Telephone Laboratories in N.J. He is presently district construction superintendent in San Jose.

Eugene H. Berkenkamp

Until his retirement in July, 1961, Gene had been with the U.S. Air Force for 22 years. His last assignment as lieutenant-colonel with the Air Force was as assistant air attache at the embassy in Stockholm, Sweden. In 1963, Gene joined the Republic Aviation Corp in Farmingdale, N.Y., as assistant manager for design, safety, and reliability. AZ.

†William B. Berry

Brother of Jack Berry '35 and son of the prominent pioneer Calif. forester Swift Berry, Bill first worked for the Michigan-California Lumber Co where he surveyed, cruised, scaled, loaded and logged, built bridges, railroaded and high-climbed. Following World War II duty with the Marines, Bill worked for the Winton Lumber Co at Jackson, Calif. In 1950 Bill joined forces with Minio Ferrari to form a partnership known as California Foresteering, a consulting forestry and gyppo logging group. Always helpful and community minded, Bill was clearing a lot for a boys' club when his tractor rolled over and killed him on August 1, 1955. With his brother Jack he provided the strong leadership and a sparkling wit that made the first years of the Sierra-Cascade Logging Conference a success. His namesake and second son is a 1964 U.C. forestry graduate.

Herbert B. Blanks

For 18 years Herb has been a co-partner in the Ailing House Pest Control at Carmel, Calif. For some years he was a member of the Carmel Planning Commission and is presently serving on the Carmel City Council.

Herbert E. Bolton, Jr.

Herbert teaches industrial arts in the L.A. city school system.

Kenneth E. Bradshaw

For many years, Ken was with the soil-vegetation survey and forest inventory of the CF&RES. In 1956, he transferred to the administrative branch and became the regional soil scientist for the USFS in S.F. He is now chief of the soils branch of the Div. of Watershed Management in that office.

Henry E. Branagh

For 22 years Henry has been with the USFS in Calif. in a number of staff positions and is now forest supervisor of the Tahoe NF. ΞΣΠ.

John Callaghan

Most of John's career was with the Calif. Div. of For. He rose to the position of chief deputy state forester. In 1959 he resigned to become assistant secretary-manager for the Calif. Forest Protective Assoc. in S.F. Two years later he became secretary-manager.

John A. Cameron, Jr.

Jack elected private industrial forestry upon his return from World War II and for 18 years has been the chief forester for the Pacific Gas and Electric Co in S.F.

Raymond F. Conway

Ray moved to Grass Valley, Calif., where he developed a diversified farm business; he has fish, pheasants as well as cattle.

Donald E. Dimock

Don is a range conservationist and range management specialist with the BLM in Calif. $\Sigma\Pi$.

Laurence A. Dodge

Laurence is with the Suburban Lumber Co in Walnut Creek, Calif.

Francis C. Emmert

For some years Francis was forester with the Pine Logging Co of Calif. and now is the owner of the Emmert Timber Co in Fresno.

Robert T. Evju

For 18 years Bob has been the president of the Evju Products Co Inc. in the Bay Area, a wholesale lumber and wood products business.

Charles W. Fairbank

Chuck has been with the Calif. Div. of For. for 26 years, many of them as the deputy state forester for the north coast district.

James W. Felthouse, MS U.C. '39

Jim has worked for a number of forest industrial companies, mainly Diamond Natl Corp in Red Bluff as salesman-estimator.

Robert D. Flannery

Active in soil conservation work, Bob was, for a time, a self-employed consultant. Later he joined a private architect and engineer firm and was their representative for land reclamation work in Adana, Turkey. His most recent assignment is with the U.N. FAO in Korea.

Ira J. Fyock

Most of Ira's career has been with the U.S. Immigration and Naturalization Serv. He is now the supervising immigration inspector at Nogales, Ariz. $\Sigma\Pi$.

Gustav E. Geibel

For 23 years Gus has been with the Calif. Dept of Fish and Game as a fisheries manager.

J. Cordner Gibson, MS Univ. of Southern Calif. '57 (Education)

For a number of years Cordner was an agric. supervisor with the Bur. of Agric. Education in L. A. For the last 14 years he has been with the Calif. State Polytechnic Coll. at San Luis Obispo where he is presently the assistant dean of agric. AZ, $\Sigma\Pi$.

Alice Goen (Jones), AB U.C.L.A. '32 (Botany)

Cal's fifth lady forester, Alice came to Berkeley as a graduate student in 1932 but was not able to complete the work for her master's degree because of the Depression and an employment opportunity in the Wash. office of the USFS. Her work with the Div. was acknowledged by the BS degree granted in 1937. Alice married one of her classmates, Horace Jones '36, and is the mother of a son and daughter. Their daughter is married to Peter Twilight '57. Alice doubles as a bookkeeper in a hardware store in Weaverville, Calif., where her husband is the district ranger for the USFS.

D. Irving Grover, Jr., AB Pomona Coll. '35, MEd U.C. Davis '59 (Agric. Education)

Irv has been with the U.C. Agric. Ext. Serv. as a farm advisor in Napa County for 16 years.

Walter O. Hansen

For many years Walt was logging superintendent for the Ralph L. Smith Lumber Co at Anderson, Calif. Walt resigned when that company was acquired by the Kimberly-Clark Corp and is now a private consultant and contractor for logging engineering and road construction. $\Xi\SII$.

James T. Hill

For more than 18 years Jim has been the owner of the firm James T. Hill, Civil Engineers, in Oakland, Calif.

Charles A. Holstein

Last report indicated that Charles was in the Navy. $\Xi\SII$.

Robert F. Keniston, AB Univ. of Nebr. '29, MS U.C. '41, DF Yale Univ. '62

For 18 years Bob has been associated with the School of Forestry at Ore. State Univ. where he is now professor of forest management. $\Xi\SII$.

Carl B. Koford, PhD U.C. '50

With Carl's main interest in zoological problems, he was with U.C. as acting assistant professor of zoology and later a research associate at the Hopland Field Sta. in Mendocino County. For the past six years he has been with the Natl Inst. of Health in Puerto Rico where he is section chief. $\Xi\SII$.

Elmer E. Ladine

Elmer worked one season as a lookout for the USFS and later for the Calif. Div. of For. Most recent word of him came from San Jose, Calif., where it is believed he went into the ministry.

James K. Mace

For almost all of his career Jim has been with the Calif. Div. of For. with whom he is now deputy state forester for southern Calif. Jim's son, Robert B. Mace, is a member of the class of 1953. Jim was president of the Calif. Alumni Foresters in 1942 and in 1962 he was president of the Calif. Fire Chiefs Assoc. Jim retired in 1965. $\Xi\SII$.

Robert D. McCulley, AB Pomona Coll. '35

Robert has been with the USFS in research and he was for a time research center leader at Franklin, Va. and more recently div. chief of forest management research at the Lake States FES in St. Paul. In 1963 he was transferred to the Wash. office of the USFS. He also is the associate editor for silviculture for the *J. of Forestry*.

Weston D. McNutt

For many years Wes was with the SCS in the Livermore area, Calif.

Paul R. Meier

For the past 15 years Paul has been a recreation planner for the State of Calif. at Sacramento.

Herman P. Meyer, BS Antioch Coll. '33 (Chemistry)

Herm's entire career has been with the Calif. Div. of For. where he is now forest management supervisor in the Sacramento district office. Herm is the only U.C. forester to have a song written about him (see the story of summer camp 1936).

Russell S. Miller, MS U.C. '38

Russ also did some additional graduate work at Berkeley for his junior coll. and general secondary credential. Still later he did vocational agric. work at Davis and received his agric. credential from Cal Poly at San Luis Obispo. Russ taught in the Gustine High School in the San Joaquin Valley for many years and for the last ten years has been farming in that area. ΞΣΠ.

Wesley J. Nelson

Wes has been a general foreman with the Pacific Gas and Electric Co for 22 years. ΞΣΠ.

Rinard E. Pitman

Rinard is a wheat rancher in central Calif.

Melvin M. Pomponio

"Pony" has devoted his entire career to the Calif. Div. of For. and is now deputy state forester for business management and personnel in Sacramento.

William J. Prater

Incapacitated after an automobile accident a number of years ago, Bill lives in S.F.

John F. Quartly

John is in the trucking business in the Lake Tahoe area.

Neal M. Rahm

Neal's entire career has been with the USFS, much of it in Calif. Since leaving Calif. he has been assistant regional forester at Denver and, later, associate deputy chief of the USFS in Wash. In early 1964 he became the regional forester for the northern Rocky Mountains at Missoula, Mont.

Gordon P. Robinson

Most of Gordy's career has been with the Southern Pacific Land Co where he is in the chief forester's office.

David H. Rogers, MF Yale Univ. '38

While Dave's father was a USFS man and long-time supervisor of the Plumas NF, Dave's career has been with private industry. He is president of the Big Bear Timber Co in Redlands in southern Calif., an unusual sawmill that operates almost entirely off sanitation and salvage logs.

Charles L. Schuster

For 16 years Charles has been with the Highways Div. of the Territory and now State of Hawaii and is now the district engineer at Hilo. Charley was a regular member of the junior varsity crew and rowed occasionally in the varsity shell while in college.

William E. Scott, MF Univ. of Mich. '39

Bill is in the construction business in southern Calif. His most recent association is with C. and I. Construction Co of South Gate, Calif., where he is secretary-treasurer.

Archie A. Shukle

Archie first worked for the USFS and was for a time with them in New England. Later he went into ceramic engineering and is now a process engineer with A. C. Spark Plug Div. of General Motors Corp.

A. Emery Sloat, Jr.

Emery joined forces with the Calif. Div. of For. and is now deputy state forester for the central coast district at Monterey.

Eugene E. Stevenson

Gene joined the U.C. Agric. Ext. Serv. and is a farm advisor in Modesto, Calif. AZ, ΞΣΠ.

John William Stone

Bill is in the East Bay area where he is superintendent of the American Forest Products Corp at Newark, Calif.

†Glenn J. Taylor

Glenn entered the Navy in World War II and was killed while on an air combat mission in March, 1943. ΞΣΠ.

Herbert A. Thomas, MS U.C. '39

Herb moved to southern Calif. where he has taught biology and botany and natural science at Santa Ana High School, Long Beach State Coll. and now, as associate professor of botany, at L.A. Harbor Coll. In 1954 he was the recipient of the Calif. Conservation Council Merit Award in Conservation. ΞΣΠ.

Joseph F. Thornton

Most of Joe's career has been with the USFS in Calif. and he has served as supervisor of both the Modoc NF and, currently, the Klamath NF. Joe's effort with the Air Force in World War II resulted in his being reported "missing in action" over Europe and being taken prisoner of war. AZ, ΞΣΠ.

Lincoln H. Thorpe

Lincoln operates Thorpe Farms Inc. in the Stockton and Santa Clara areas where he is on the board of directors of the Tomato Growers Assoc., the Beet Growers Assoc. and on the advisory board of the Calif. Cannery and Growers.

Donald P. Tickner

Don is with the Pacific Gas and Electric Co.

George F. Weaver

For more than 17 years George has been with the headquarters of the 12th Naval District in S.F. where he is district civilian personnel director. ΞΣΠ.

Walter W. White

Walter's early career was with the USFS and SCS as a range manager. For the past 20 years he has been with the Calif. Div. of Highways in the Bridge Dept as an associate bridge engineer.

Robert K. Williams

For some years Bob was with the U.S. Army Engineers in Korea and Puerto Rico. He is now the city manager of Des Moines, Wash.

William E. Worthington

Bill lives in Ventura, Calif. where he is a partner in Hoffman, Vance and Worthington Land Management and operates his own citrus ranch.

Master of Science

Thomas S. Buchanan, BS Univ. of Idaho '35, PhD Yale Univ. '43

Pursuing his field of forest pathology, Tom has had a number of jobs including director of research for the U.S. Intern. Cooperation Administration in Liberia. For the last few years he has been with the USFS in Wash. where he is assistant director of forest disease research. $\Sigma\SII$.

Harvey J. Loughhead, BS N.C. State Coll. '31

For 16 years Harvey has been a forestry consultant in Fla. and, now, in Asheville, N.C.

Arthur D. Smith, BS Utah State Agric. Coll. '36, PhD Univ. of Mich. '57

Arthur's entire career has been at Utah State Univ. where he is professor of range management. With Professor Laurence A. Stoddart, he is the co-author of *Range Management* in the American Forestry Series. AZ, $\Sigma\SII$.

George E. Stoodley, BS Univ. of B.C. '25

Much of George's career was in private industry in the redwood region. Before his semi-retirement, he was timber manager of the Pacific Coast Co at Willits. He is now employed part-time with the Hollow Tree Lumber Co at Ukiah, Calif.

Other Alumni**J. Henry Doll**

Most of Henry's career has been with the USFS in Calif. For the past several years he has been in nursery work and is now at the Humboldt Nursery in Eureka.

George A. Farris, AB U.C. '36 (Botany)

George has been with the USFS on the Lassen NF at Susanville since graduation.

James P. Maguire

Brother of Bill Maguire '30, for 16 years Jim has been with the County of Sonoma, Calif., at Santa Rosa, where he is director of personnel. In 1954 he was president of the Calif. County Personnel Administrators Assoc. and in 1960 was president of the Sonoma County Personnel Assoc. For four years, from 1959 to 1962, he was director of the Sonoma County Cooperative Winery.

Louis C. Saylor

Louis was last reported in the Bay Area.

Richard Sias

Dick worked for a time with the USFS. For the past 13 years he has been with the Southern Pacific Land Co in the Mt. Shasta area.

Warren A. Wood

For some years Warren owned his own lumber company in Ukiah, Calif., but he

is now with Cyprus Mines Corp in L.A. where he is a div. vice-president. Through an administrative mixup, Warren did not complete his degree requirements until the fall of 1964. He received his BS as of 1965.

1 9 3 8

Bachelor of Science

†Earl J. Alcorn

Earl joined the USFS in Calif. and carried out assignments on a number of NF's. He was at Covelo on the Mendocino NF at the time of this death in 1944.

Charles L. Alward

Charles was last heard from in Sacramento.

John E. Armstrong

John is with the Equitable Life Assurance Soc. in Sacramento.

Toivo F. Arvola

For the past 18 years "Tobe" has been with the Calif. Div. of For. in Sacramento where he is deputy state forester for forest management. Tobe was president of the California Alumni Foresters in 1955. $\Xi\Sigma\Pi$.

Max Babin

Max does real estate appraisal work for the City and County of S.F.

Z. Allen Barker

Allen is with the USDA Bur. of Plant Quarantine at Hoboken, N.J.

William M. Beaty

Until 1950, Bill worked for the USFS, mostly on the Modoc NF. He resigned to become manager of the forestry dept for Shasta Forests Co in Redding, Calif. and in 1963 became general manager and vice-president. Shasta Forests Co is the forest and land management organization for the residual property after the sale of the Red River Lumber Co at Westwood to the Fruit Growers Supply Co in 1946. Bill was president of the Calif. Alumni Foresters in 1953.

Stephen L. Beekwith, MF '41 and PhD '50, Univ. of Mich.

For more than 15 years Steve has been with the School of Forestry at the Univ. of Fla. in Gainesville as an assistant and now associate professor (Wildlife Management). AZ, $\Xi\Sigma\Pi$.

Loren E. Bryan

Loren is a rancher in Paicines, San Benito County, Calif., and also serves as executive secretary for the San Benito County Farm Bur.

Harold E. Chapin

Harold moved to southern Calif. where for a time he was forester and fire warden with the L.A. County Fire Dept. He later was with the U.S. Navy Radio Station. $\Xi\Sigma\Pi$.

James W. H. Charlton

Jim's entire career has been with the USFS in Calif. After a variety of assignments he is an assistant staff officer on the Inyo NF.

Robert N. Colwell, PhD U.C. '42, ΞΣΠ.

(See Chapter 5—The Staff)

Robert G. Darmsted

Bob moved to Costa Rica in Central America where, since 1954, he has been general manager and principal stockholder in several timber, land, and mineral development businesses. In mid-1964 the volcano erupting there made business very difficult and he returned temporarily to the U.S.

Harry P. Dechant, Jr.

Pete works in Berkeley for Hexcel Corp, a company that makes light-weight structural core materials of paper and metal. ΞΣΠ.

John G. Degenkolb

John worked for 22 years as a captain and battalion chief with the L.A. Fire Dept and is now self-employed as a fire-protection engineer.

Clarence W. Dietterich

Clarence is sales manager for Southern Plywoods, Inc. in Greenville, Fla.

†**Louis J. Drnovich**

Following graduation, Louis joined the L.A. County Forestry Dept and was with them until he went on active duty with the Army in July, 1941. Louis was killed in the action at Omaha Beach, Normandy, on June 6, 1944. ΞΣΠ.

James W. Dunn

In 1949, Jim was with the U.C. Agric. Exp. Sta. as a technician in plant pathology and specialist in vegetable and avocado diseases. ΞΣΠ.

Gerald M. Finney

Gerry worked for a time with the U.S. Bur. of Reclamation in the San Joaquin Valley and is now with the BLM in Ukiah, Calif. as a land and mineral specialist.

†**Richard N. Gaiser**, MF '41 and PhD '48 Duke Univ.

Dick first worked with the USFS forest survey in Calif. and Va. He served with the Army in Burma during World War II. He was a soil scientist with the Central States FES at Athens, Ohio, from 1948 until his death in July, 1952. ΞΣΠ.

Godfrey D. German

Godfrey has been with the Calif. Div. of For. and is now state forest ranger in Amador County.

Herbert S. Gilman, Jr.

Herb's entire career has been with the Calif. Div. of For. and he is now the district engineer at Redding.

Wright E. Graham

Wright is with the Pacific Fire Rating Bur. in S.F.

Dean B. Griggs

Last report in 1949 had Dean teaching math in the high school at Eagle Rock, Calif.

†**Robert T. Hanson**

Bob worked for one year with the Blister Rust Control in Calif. before joining the

Army Air Force. He was in the Philippines at the outbreak of World War II and was killed in aerial combat on December 13, 1941. In 1948 two undergraduate scholarships entitled Robert Taylor Hanson Liberty Scholarships were awarded. This fund was initiated by Grant Mahoney '39 before he too was killed in aerial combat.

Norman W. Hemphill

For 14 years Norm has been a special agent with the intelligence div. of the Internal Revenue Serv. of the U.S. Treasury in S.F.

Francis I. Hodgkins

Francis is with the Auburn Lumber Co in Auburn, Calif.

Philip H. Intorf

Phil's entire career has been with the USFS. He was for a time in fire research with the CF&RES, and is now timber staff assistant on the Plumas NF. AZ, ΞΣΠ.

Robert A. Johnson

Bob was for 13 years with J. H. Baxter and Co, a pole and wood preserving company, as plant superintendent at The Dalles, Ore. He is now district manager at Renton, Wash. AZ.

Samuel S. Johnson

Sam is the owner of the S. S. Johnson Co (investments), a partner in the Tite Knot Pine Mill and Barclay Logging Co, all of Redmond, Ore. In addition, he is director of the Jefferson Plywood Co in Madras, Ore. and a director of the Union Lumber Co of S.F. In 1962-63 Sam was a director (from Ore.) of the Natl Assoc. of Manufacturer's, and in 1963 was chairman of that organization's Conservation Committee. Also in 1962-63, Sam was a director of the Douglas Fir Plywood Assoc. He is president of the S. S. Johnson Foundation in S.F. In 1964, Sam was elected to the Ore. State House of Representatives. In 1965, he was named to the Advisory Council of the Land Law Review Commission.

Austin S. Joy

In 1953 Austin was with the Pacific Lumber Co at Scotia, Calif.

Herbert B. Kaufner

For more than 24 years Herb has been with the Calif. Div. of For., mostly in the Redding area where he is now the assistant deputy state forester. ΞΣΠ.

Philip N. Knorr, MF Duke Univ. '40, PhD Univ. of Minn. '63

Phil had a number of different jobs before getting his doctor's degree. He is now associate professor and associate forester with the dept. of watershed management of the Univ. of Ariz. at Tucson. ΞΣΠ.

†Martin E. Labaig

Unknown.

John D. Lawson, MEd U.C. Davis '55, EdD Stanford Univ. '63

John has been with the Calif. State Polytechnic Coll. at San Luis Obispo for 13 years and is associate dean of students.

Melvin P. Leonard

Mel started out with Union Lumber Co and then held a number of positions, mostly selling logging equipment. For the past 12 years Mel has been the owner of Redwood Supply Co in Grants Pass, Ore. In that community he has been a member of

the County Budget Committee, the County Board of Equalization, and is also a city water commissioner.

Donald M. Levy

The irrepressible member of the 1936 summer camp and editor of the *Bull of the Woods* newspaper at that camp and composer of such noteworthy ballads as the "Midnight Ride of Herman Pliny Meyer" and the "Bungling Berkeley Loggers of 1936," Don still claims to be "a musician working for himself at various locations and at various salaries." AZ, ΞΣΠ.

Reino O. Liukkonen

Reino is director of the San Mateo County Planning Commission, Calif.

John S. Lockhart

For more than 21 years John has been with the Calif. Div. of For. and is now state forest ranger at Redding.

Eunice Lyons (Samson)

U.C.'s sixth lady forester and sister of Torrey Lyons. Eunice is a homemaker in Sacramento.

Torrey Lyons, MS U.C. Davis '52

For most of his career Torrey has been with the U.C. Agric. Ext. Serv. as a farm advisor in Sacramento. AZ.

John M. Mahoney

John's entire career of 26 years has been with the USNPS, with service at Yosemite as forester and supervisory park ranger. He is now regional chief of the branch of park protection in the Western Regional Office in S. F. AZ.

Orrin Philip Means

In August 1961 Phil retired from the L.A. City Fire Dept as a captain with 21 years of service. He is now the owner of an electrical contracting business, Means Electric, in Northridge, L.A. County.

Lewis A. Moran

Lew's 26 years have been with the Calif. Div. of For. during which time he has risen through the ranks. He was assistant deputy state forester at Redding, deputy state forester at Monterey, and in 1959 became chief deputy state forester at Sacramento. ΞΣΠ.

Nolan C. O'Neal

Nolan's entire career has been with the USFS, most of it in the Calif. region. While fire staff officer of the Los Padres NF at Santa Barbara in 1955, he had the doubtful honor of being the fire boss on the Refugio Fire which burned more than 75,000 acres. Later he became assistant chief of fire control for the Calif. region before going to Wash. as assistant director of fire control in the natl office. In early 1964 he was made assistant chief of information and education in the Wash. office.

Mervyn A. Ortezt

For more than 14 years Merv has been with the U.S. Audit Agency in S.F. where he is personnel management assistant.

Leonidas T. Petersen, BS U.C. Davis '39 (Animal Husbandry)

For 24 years Pete has been with the Calif. Div. of For. and is now in the Sacramento office as deputy state forester for engineering. AZ.

George O. Phibbs

George's career has been with the Calif. Div. of For. After a number of years as state forest ranger, he is now assistant deputy state forester for the Sacramento district.

Henry G. Reents

Hank has been with the Intern. Paper Co for 23 years. After a period at their Weed, Calif., operation as plywood superintendent and then assistant general manager, he is now at the Longview, Wash. operation as manager of manufacturing, western operations.

James G. Rowbury, MBA '47 and PhD '48 Univ. of Mich.

Jim's postwar career has been with the Scott Paper Co. For some years he was chief forester of that company's West Coast Div. at Everett, Wash., and for the past ten years staff forester in the main office at Philadelphia. ☞II.

Edgar I. Rowland

Following his college work Ed joined the BLM and has been regional chief for lands in Calif., state supervisor in Ariz., and is now the state director for BLM in Mont. ☞II.

John A. Rutter

John is with the USNPS. He has been superintendent of the Badlands Natl Monument and assistant superintendent of Rocky Mountain Natl Park and is now superintendent of Mount Rainier Natl Park.

Elliot Sawyer

Elliot was last reported in the Norden area near Donner Summit, Calif. ☞II.

Edward L. Schmahl

Ed is an engineer with the Calif. State Div. of Highways.

Andrew R. Schmidt

Andy's entire career has been with the USFS, most of it in Calif. in a variety of forest staff positions. He then moved to Wash., D.C. where he was branch chief of the Div. of Lands. In mid-1963 he became assistant regional forester in the Div. of Lands and Multiple-Use Soils and Watershed Management in the regional office at Milwaukee, Wisc. ☞II.

Ernest Schneider

Ernie took up wood utilization in the forest environment as a residence builder in Pinecrest, Calif.

Alexander Simontacchi

For many years Al was with the forest survey in the CF&RES. During World War II and for a number of years afterwards he was associated with naval intelligence and photo interpretation. In 1954 he returned to work with the USFS on an Air Force contract photo interpretation project headed by Richard C. Wilson '34. Al is now in the plastic laminate business in Wash., D.C.

Charles F. Smith, MF Yale Univ. '39

Until November 1952, Charles worked for the USFS on a number of different forests in Calif. Since that time he's joined a competitive line of construction materials and is with the Kaiser Steel Corp in Fontana.

†Maurice S. Smith

Following graduation "Snuffy" joined the Navy as an aviator and was at Pearl Harbor for two years. He was awarded the Navy air medal as a result of his courageous aerial observation of the Japanese fleet during the Battle of Midway on June 4-6, 1942. He was listed as missing in action following a patrol plane mission on August 7, 1942.

William A. Smoker, PhD Univ. of Wash. '55 (Fisheries)

For a little over three years Bill has been with the U.S. Bur. of Commercial Fisheries at Auke Bay, Alaska, as assistant laboratory director. Prior to this position he was director of biological research for the Alaskan Dept of Fish and Game at Juneau and assistant supervisor for research at the Wash. State Fisheries Dept at Seattle. Bill is a founding fellow of the American Inst. of Fisheries Research Biologists.

Jack O. Snipes

Jack is the owner of a general contracting business in Dana Point, Calif. He had the misfortune to be on Wake Island at the outbreak of World War II and spent 45 months as a prisoner of war in Japan.

Dana Sperr

Dana's activities with the U.S. Army Infantry took him through five campaigns in Europe during World War II and two campaigns in the Korean War before he joined the headquarters of the Army Infantry Center at Ft. Benning, Ga. as chief management engineer. For the past four years he has been assistant chief management engineer for the U.S. Army Missile Command at the Redstone Arsenal in Ala. $\Sigma\SII$.

Stanley R. Stevenson

Stanley's career is with the USFS in Calif. where, for several years, he has been the forest supervisor of the Cleveland NF at San Diego.

Joseph K. Swank

Joe last reported in from Spanaway, Wash.

John L. Swanson, MA Sacramento State Coll. '57 (Public Administration)

John's career has been in personnel administration with a number of organizations, and for the past seven years with the Calif. State Dept of Conservation as personnel officer. He is the recipient of the Merit Award for Superior Performance. AZ, $\Sigma\SII$.

Henry K. Trobitz

Hank was with the CF&RES after World War II. In 1948 he became associated with the Simpson Timber Co, first in their Wash. operations and more recently in their Calif. redwood operations. He is now manager of that company's extensive Calif. timber lands with headquarters at Arcata. In 1956 Hank was president of the Redwood Region Logging Conference and, in 1962, president of the Calif. Forest Protective Assoc.

Noel P. Walker, AB Univ. of Redlands '35 (Physics)

Since the end of World War II, Noel has been the owner of a citrus and avocado nursery and orchard at Vista, Calif., where he is also a director of the Calif. Farm Bur. $\Sigma\SII$.

Hugh E. Wilcox, MS N.Y. State Coll. of Forestry '40, PhD U.C. '50

After holding a number of different positions, including that of research associate

with the Research Foundation at the N.Y. State Univ., Coll. of Forestry, Hugh is now professor of plant physiology there. $\Xi\S\P$.

John A. Zivnуска, MS U.C. '40, PhD Univ. of Minn. '47, AZ, $\Xi\S\P$.

(See Chapter 5—The Staff)

Master of Science

Maurice K. Goddard, BS Univ. of Maine '35, DSci (Honorary) Waynesburg Coll. '59

Maurice is secretary of the Penn. Dept. of Forests and Waters at Harrisburg, Penn. Prior to this he was director of the School of Forestry at Penn. State Univ. A Fellow in the Soc. of American Foresters, Maurice was a Council member from 1956–59. He became a director of the American Forestry Assoc. in 1962 and was awarded its conservation award in 1960. Maurice was president of the Penn. Forestry Assoc. in 1951–52 and received that organization's conservation award in 1956. In 1962–63 he was a member of the Federal Water Pollution Control Advisory Board and was vice-chairman of the Citizens Committee for the Outdoor Recreation Resources Review Commission Report.

Harold R. Hochmuth, BS Colo. A. & M. Coll. '34

For the past 12 years Harold has been with the BLM in the Pacific Northwest and is now in Wash., D.C. as associate director. He is a charter member of the American Soc. of Range Management and was secretary-treasurer of that society in 1948–49. Harold has received the USDI Superior Service Award and was 1963 honor alumnus at Colo. State Univ. AZ, $\Xi\S\P$.

Eugene D. Marshall, BS Purdne Univ. '34

Gene is a registered representative with a member firm of the N.Y. Stock Exchange and lives in Ventura, Calif.

Russell S. Miller, BS U.C. '37

John W. Wood, BS Mich. State Coll. '35

John's career with the USFS covers 29 years, most of it served in the southeastern U.S. He is now a timber management assistant at Montgomery, Ala.

Other Alumni

Elmer M. Bacon, BS Univ. of Conn. '35, MF Yale Univ. '37

After taking some graduate work at Berkeley, "Bill" joined the USFS and was timber staff officer of the Lassen NF at Susanville, Calif., forest supervisor of the Allegheny NF at Warren, Penn. and, more recently, assistant regional forester at Ogden, Utah. In 1964 he was transferred to the Wash. office as director of the Div. of Cooperative Forest Fire Control. $\Xi\S\P$.

Homer R. Bryan

Homer worked for a time with the Blister Rust Control of the BLM in Ore. before moving to the Hawaiian Islands.

Vincent V. Buerge

After a number of positions, Vince is now with the Computer Sciences Corp at El Segundo, Calif. as an engineer. $\Xi\S\P$.

Robert M. Knapp

Bob is in Berkeley with the U.C. Lawrence Radiation Laboratory.

Edgar Schimberg

Edgar last reported in from Redwood City, Calif.

†James Thanos

Jim became a naval aviator and was in Manila at the time of Pearl Harbor. He later returned to the U.S. and was a flight instructor at Corpus Christi, Texas, when he was killed in a training flight in March, 1943.

William H. Wheeler, Jr., BSF N.C. State Coll. '37

Bill returned to his native N.C. where he served for a time as a consulting forester. He is now a land and timber agent for the Carolina Power and Light Co.

1939

Bachelor of Science**David L. Anderson**

Dave joined the U.S. Army and served for a time as a ROTC instructor at the Univ. of S.F. Later he moved to Wash., D.C. and was involved in munitions work in the Pentagon.

Charles R. Arment

Chuck worked for a number of years as a district ranger for the USFS in Calif. before resigning in 1953 to become Calif. timberlands manager for Diamond National Corp at Chico, Calif. In 1962 Chuck left Calif. to become the assistant state forester for the Hawaii Div. of For. in Honolulu. He returned to the mainland in 1964 to become chief of technical forestry services for Western Wood Products Assoc.

John R. Babcock

John left forestry to be an optometrist in Redwood City, Calif.

Gerald M. Baden, MA Claremont Graduate School '57 (Education)

Gerald is in education and after some years as a biology teacher and counselor at Compton High School in southern Calif., has been for eight years with Fullerton Junior Coll. as a life-science counselor and botany and conservation instructor.

†Fritz Barkan, Jr.

Fritz joined the Army Air Corps shortly after college and became a navigation instructor. He was killed in an air crash at March Field, Calif. on February 1, 1944.

George A. Bauslaugh

Most of George's career has been with the Pacific Telephone Co as a manager in Berkeley and a staff engineer in S.F. He is now a college relations supervisor in San Diego.

George E. Billings

George moved to the middle west where he has been an industrial agent with the Mich. Dept of Economic Development and the director of the Port Huron-Marysville, Mich. Industrial Development Corp. He is now director of Industrial Development Serv. for the Kansas Gas and Electric Co at Wichita, Kan.

Irwin E. Bosworth

Irwin has 24 years with the USFS in Calif. and is now the forest supervisor of the Lassen NF.

Carl L. Breitingner

Carl has been with the L.A. County Sheriff's Dept for more than 21 years and is a deputy sheriff lieutenant. AZ, ΞΣΠ.

Cecil O. Burke

Cecil is among those who stayed in Berkeley following graduation and after 21 years he is now head counselor for the Berkeley public schools.

George A. Craig

With 12 employers since graduation, George claims a near record number. For a time he was with the Calif. Div. of For. While working as Calif. representative of the Western Pine Assoc. He was co-author with William P. Maguire '30 of California Pine Region Forest Handbook. Later he joined the staff of *The Timberman* magazine as associate editor. He resigned this job in 1957 to become the secretary-manager of the Western Lumber Manufacturers, Inc. in S.F. George has authored many articles bearing on timber sales relations between the USFS and buyers.

Arthur G. Crews

Art lives in the San Fernando Valley and works for the sales div. of the Southern Calif. Gas Co. ΞΣΠ.

Robert G. Culyer

Bob's entire career has been with the Owens-Illinois Glass Co, first as assistant manager of the sales div. in S.F. and now sales manager in Portland, Ore.

John R. Douglass

Unknown.

Clayton A. Ellis

For 23 years Clayton has been with the Pacific Motor and Trucking Co in S.F. and is assistant manager for freight loss and damage prevention.

Eugene L. Ely, Jr.

Last information indicated Gene was an agent for the Northwestern Pacific Railroad at Geyserville, Calif. ΞΣΠ.

Alfred G. Estes

After a number of jobs, Al has been, for more than 15 years, an assistant highway engineer with the Calif. Div. of Highways in the L.A. area.

Richard M. Fay

Unknown.

Charles F. Fellers

Most of Chuck's career has been in Calif. where he was salesman and clerk for the Sportsman Shop in Placerville, and later manager for the Schell Fruit Farm in Sebastopol. Following some graduate work in education at S.F. State Coll., Charles joined the Analy Union High School at Sebastopol as a teacher, and in June, 1963, moved to Buffalo, Wyo., where he is a teacher in the Johnson County High School. -

John M. Fenley, MS U.C. '48, PhD Cornell Univ. '57

Jack's career has been varied and world-wide, and although he has been with the federal government for more than 16 years, he has served also as senior ext. agent for

the Univ. of Nevada Ext. Serv. in Las Vegas, and as assistant professor of ext. education at Cornell Univ. in N.Y. He is now regional ext. adviser for the U.S. Agency for Intern. Development in Nigeria, Africa. While at Cornell, John received a Cornell Fellowship of \$5,000 and was editor of *Comparative Extension Publications*.

Albert J. Geiger

For the past 23 years Al has been with the USDA, and for a time was soil conservationist and position classifier in the SCS. He is now office services manager for the USDA Agric. Marketing Serv. in Wash., D.C.

William A. Gillespie

Unknown.

Earl W. Glover

Earl is in the farming business in Dinuba, in the San Joaquin Valley. EΣII.

Donald T. Gordon

Most of Don's career has been with the USFS, PSWF&RES as a research forester. He was in Berkeley for a time before moving to Susanville, Calif., where he is in charge of the activities at the Blacks Mountain and Swain Mountain exp. forests. EΣII.

Samuel F. Gossard

For 11 years Sam has been a forest technician with the Calif. Div. of For. in the redwood region.

Robert Grundman

Following World War II, Bob joined the Union Lumber Co at Fort Bragg and for many years has been its chief forester. In 1962 Bob was president of the Redwood Region Logging Conference. Bob has become a leader in the sustained yield management of second growth redwood.

Sidney M. Hall

Unknown. EΣII.

Ward Hall, Jr.

In his 18 years with the USFS, Ward has been a forester on the Olympic NF, a district ranger on the Snoqualmie NF in Wash., and is now supervising civil engineer for the Malheur NF in Ore.

Clinton T. Hallsted

Before moving to Honolulu with the Honolulu Wood Treating Co of which he is president and general manager, Clint was the district sales manager for American Lumber and Treating Co in S.F.

George F. Hand

Unknown.

James A. Hanson

For 17 years Jim has been with the Escondido Canal Co in San Diego County, and is now superintendent. EΣII.

John R. Harrison

Unknown.

William T. Hartman, MF U.C. '51

Bill was in Texas for a time, but for the past 13 years has been land maintenance superintendent for the East Bay Municipal Utilities District in Oakland. Bill is vice-president of the Calif. Alumni Foresters for 1964. AZ, ΞΣΠ.

†Horace S. Haskell, MS Univ. of Ariz. '45

After completing his master's work, Horace stayed at the Univ. of Ariz. as a research assistant until 1949. He then joined the staff of Utah State Agric. Coll. from 1949-55, and in 1955 became research associate in botany at the Museum of Northern Ariz. in Flagstaff. Horace died in February, 1959.

Samuel M. Hobbs

Sam is with the Jones Lumber Co in Alhambra, Calif.

Joseph Hrabosky

Joe joined the Navy shortly before Pearl Harbor and continues on active duty with the rank of commander. He is presently in intelligence planning with the Defense Intelligence Agency at the Pentagon in Wash., D.C. Meanwhile he is attending school part time and expects to receive his MA in International Affairs from George Washington Univ. in 1964.

Ivan R. Jeans

Ivan moved to Weaverville in Trinity County, Calif. where he was a USFS ranger for a number of years. He is now a road dept. engineer for the county.

Ray W. Jones

Shortly after graduation Ray joined the Sacramento Water Dept where he is now the superintendent.

Roger G. Jones

Roger is a part owner, with his older brother Richard H. Jones '33, of the Jones Lumber Co, Inc. in L.A.

James E. Keogh

After a number of assignments and following World War II service, Jim joined the BLM and has been assistant chief for land planning in S.F. and the manager of the Nevada Land Office in Reno. He is now manager of the Utah Land Office in Salt Lake City for BLM.

Howard P. Kermickel, BS U.C. '54 (Business Administration)

Howard is in appraising work. Recent assignments have included appraiser with the Alameda County Flood Control in Oakland and the U.S. Bur. of Reclamation in Sacramento. He is now with the USNPS as appraiser of lands for the new Pt. Reyes Natl Seashore.

Hasan Kittani, PhD U.C. Davis '52

Hasan returned to California for his doctorate. He is now in his native Iraq where he is director-general of the Forestry Dept in the Ministry of Agric. in Baghdad.

John C. Kleiber

John deserted forestry to become a development engineer for the Permanente Cement Co at Los Gatos, Calif. ΞΣΠ.

John H. Knight

John's entire career has been with the Calif. Dept of Beaches and Parks. He is its deputy-director in Sacramento.

Donald E. Knowlton

Don has been with the Calif. Div. of For. for 24 years as state ranger at Nevada City, then assistant deputy state forester for the Sacramento district, and is now deputy state forester in Fresno for the South Sierra district.

John L. La Jeunesse, MEd U.C. Davis '47

For over 17 years John has been with the San Jose Unified School District in San Jose, Calif. where he is the director of Vocational Agric. In the summer of 1960 he was the recipient of the Natl Science Foundation Biology Scholarship to the Univ. of Colo.

Leonard O. Long

Leonard got into engineering, and for the last 17 years has been with Abbot A. Hanks, Inc., a private research laboratory, in S.F. where he is a soil engineer, civil engineer and a vice-president. ΞΣΠ.

James T. Macres, MA Fresno State Coll. '63 (Education)

Before getting his teaching credential in 1963, Jim was self-employed as a farmer in Calif., and is now a seventh grade mathematics teacher in the Hanford School District in the San Joaquin Valley.

†Grattan (Grant) Mahony

Grant joined the Army Air Corps upon graduation and was in the Philippines at the time of the outbreak of World War II. He had risen to the rank of lieutenant-colonel and had received the Distinguished Flying Cross, the Silver Star, and other decorations at the time he was shot down while on a strafing mission during the invasion of Mindoro Island in January, 1945. Grant was the first soldier in World War II to be elected to Army and Navy Legion of Honor of the U.S., and is believed to have been the first in World War II to have received the DSC, for flying a special and hazardous mission for General MacArthur. AZ.

Frank G. Marron

Unknown.

†Donald H. McAuley

Don joined the Army Air Corps in World War II and was a major in a P-38 fighter squadron when he was shot down over France on April 23, 1944.

†Preston H. McCanlies

Mac first joined private industry in Calif. and worked for Calaveras Land and Timber Co and later the Mt. Whitney Lumber Co. He then became the first forest manager for the Calif. Div. of For. In 1948 he resigned to become logging superintendent of the Edward Hines Lumber Co in Seneca, Ore. He held this position at the time of his death in November, 1950. ΞΣΠ.

Louis N. McNairy

Unknown.

Robert L. Middleton

Bob confesses to many employers since graduation and was, for a time, a tooling engineer with Omega Design Assoc. in L.A. For the past several years, he has been a farmer in Tulare County, Calif.

Albert O. Mittman

For over 18 years Albert has been with the Orange County Assessor's Office in Santa Ana, Calif. where he is now the chief appraiser.

Jack L. Moyer

Unknown.

Irwin G. Nelson

A practical utilization expert, Irwin is a carpenter foreman with J. E. Davies, contractor of Oakland.

Allen M. Newby

Allen was for a time with the Upper Lake High School in Lake County, Calif. and last reported in from Yamhill, Ore.

Henry W. Nordstrom

Unknown.

Paul E. Packer, MS U.C. '50

Immediately after completing his graduate degree work, Paul did graduate work in range management at Utah State Agric. Coll. and then additional graduate work in forestry at Syracuse Univ. For more than 20 years he has been with the USFS at the Intermountain F&RES on various project assignments in Idaho and Mont. He is now the senior project leader for watershed management research at Ogden and Logan, Utah. In 1961 Paul was the recipient of the USFS Outstanding Performance Award. AZ, ΞΣΠ.

Paul S. Pattengale, MS U.C. Davis '49 (Animal Husbandry)

For the past 11 years Paul has been with the Colo. State Univ. at Fort Collins where he is in ext. animal husbandry. AZ, ΞΣΠ.

Dugan H. Pearl

Most of Dugan's career has been in the Pacific Northwest with a number of wood products firms, including Cheney Lumber Co of Tacoma, Wash., where he was assistant timber manager, and Evans Products Co of Coos Bay, Ore. where he was assistant logging superintendent. He is now assistant logging manager for Natl Plywood, Inc. at Roseburg, Ore. In 1960 Dugan was president of the Oregon Logging Conference, and in 1961-62 he was president of the Coos Forest Protection Assoc. Other professional assignments have included directorships with the Columbia River Log Scaling Bur., the Oregon Forest Protective Assoc. and the Industrial Forestry Assoc.

Robert A. Petry

Bob moved to Wisc. where, for the past 24 years, he has been with the Nekoosa-Edwards Paper Co at Port Edwards. He is now their woodlands manager.

Frank D. Pryor, Jr.

Shortly after graduation Frank joined the Army and has risen to the rank of colonel. He was in Pearl Harbor at the outbreak of World War II, a battalion commander of an anti-aircraft battalion in England, and on the general staff in Wash., D.C. He is now senior air defense advisor in Korea. AZ, ΞΣΠ.

Hudson G. Reynolds, MS U.C. '41, PhD U.C. '54

Hudson has more than 16 years of service with the USFS in research, mostly in Ariz. where he has been a research conservationist, a research administrator, and is now a wildlife research biologist. He has received the USDA Certificate of Merit. AZ, ΞΣΠ.

Roy W. Ritchie

After holding a number of other jobs, Roy was forester for the McCloud River Lumber Co before resigning to become resident forest manager for the Calif. Div. of For. at Redding where he has been for more than 10 years.

Curtis M. Rocca

Curt is with the Rocca-Cuvi Co, importers in S.F. AZ, ΞΣΠ.

Edward Schuessler

Ed is a self-employed farmer in Santa Rosa.

Gerald H. Schumacher

Gerald lives in Hanford in the San Joaquin Valley. He is a realtor and has farm interests as well as being secretary-manager of the Kings County Water District. AZ, ΞΣΠ.

William H. Seaman, BE Univ. of Southern Calif. '53 (Mechanical Engineering)

Bill's entire career has been with the Southern California Edison Co in L.A. where he is now the manager for fuel supply.

†**Robert K. Service**

For more than 17 years Bob was with the Collins Pine Co at Chester, Calif. as a staff forester. He served as president for the Calif. Alumni Foresters in 1962. Bob was killed in a logging accident on May 28, 1964.

Gwynne H. Sharrer

For a time, Gwynne was with the BLM at S.F. as the regional chief of its Div. of Forestry. In 1955 he resigned to become a partner in the firm of Mason, Bruce and Girard, consulting foresters in Portland, Ore.

Irving W. Sherman

Irv is in the Philadelphia area where he is the operations manager for the Hilco Homes Corp.

Jean E. Sindel

Jean has more than 20 years of service with the Calif. Div. of For. as a forest practice inspector and technician and now as the forest manager of the Jackson State Forest at Fort Bragg. Jackson Forest is the largest of the forest units in the state forest system and has slightly more than 50,000 acres.

James E. Sorensen

For many years Jim was with the U.S. Immigration and Naturalization Serv. in S.F. as a supervisory immigrant inspector. In 1957 he joined the Sorensen Brothers Mortuary, Inc. in Hayward, Calif., of which he is vice-president. AZ, ΞΣΠ.

Noel Street

Noel has been with the Tidewater Oil Co in Calif. for more than 17 years as a landman and is now district landman in the Bakersfield office.

William E. Sweetland

Last report from Bill came from Eugene, Ore., where he was engaged in the manufacture of archery equipment.

William A. Tope

The only U.C. forester to become a flag rank officer in the U.S. military establish-

ment, Bill is a brigadier general in the U.S. Air Force. He has operated in such varied fields as bomber operations, fighter operations, civil engineering, personnel, supply, aircraft maintenance and is now the chief of personnel for the Air Defense Command at Colorado Springs, Colo. His distinctions in military action include five European campaigns, the Silver Star, the Legion of Merit, the Distinguished Flying Cross and the Air Medal with three clusters. AZ, ΞΣΠ.

Harold B. Turner

Harold's entire career has been with the USFS first as a district ranger on the Plumas NF and now as the timber management officer on the Tahoe NF.

William E. Turpin

Bill is a district ranger with the USFS on the Plumas NF.

Robert Wallace

Bob is at Calif. State Polytechnic Coll. in San Luis Obispo, where he teaches agric. mechanics.

Ralph S. Waltz

Ralph is with the Wilson and George Meyer Co in S.F. He is vice-president and manager of the agric. dept. AZ, ΞΣΠ.

David L. Ward

Dave has been with the Calif. Dept of Fish and Game for 23 years and he is now fisheries manager in the Sacramento office.

Dwight L. Westberg

For a time, Dwight was with the USFS Southern FES at Auburn, Ala. until 1951, when he moved to Essex, Iowa, to become a farmer.

Chester R. Williams

Chet worked for a time for the Rockport Redwood Co in Mendocino County and last reported in from Burlingame, Calif.

Robert H. Youngman

Unknown.

Master of Science

Norman K. Carlson, BS U.C. '35

James W. Felthouse, BS U.C. '37

Marvin D. Hoover, BSF Univ. of Michigan '38

Marvin's entire career has been with the USFS in research and he is the chief of the Div. of Watershed Management Research at the Rocky Mountain F&RES at Ft. Collins, Colo. ΞΣΠ.

Rudolph J. Janecek, BS Penn. State Coll. '37

Rudy moved to South America and last reported from Columbia.

Richard H. May, AB Univ. of Mich. '29

Dick did most of his course work for his master's degree in the years 1931-33, and joined the forest survey of the CF&RES where he was the author of more than 20

bulletins, research notes, and forest survey releases. Before resigning from the USFS in June, 1960, Dick was the forest industry research economist. He joined the U.S. Tariff Commission in the lumber and paper div. in Washington as a commodity industry analyst. $\Sigma\Pi$.

Herbert A. Thomas, BS U.C. '37

Doctor of Philosophy

Horace R. Josephson, BS Penn. State Coll. '32, MS U.C. '33

Dissertation: Factors affecting costs and returns of timber production in second-growth pine stands of the Sierra Nevada foothills. (Agric. Economics)

Other Alumni

Robert T. Anderson, BS Univ. of Minn. '30

Bob did graduate work in forest statistics and then joined the Lake States FES. He last reported in from Mill Valley, Calif.

George S. Figley

George moved to the L.A. area where he is a fire prevention inspector for the L.A. County Fire Dept.

Morris C. Johnson, BS Utah State Agric. Coll. '38

After doing some graduate work towards his master's degree at Berkeley, Morris joined the USFS in Kentucky. $\Sigma\Pi$.

William W. Mather

Unknown.

James McCarthy

Unknown.

William L. Noland

Unknown.

Stewart M. Snyder, AB U.C. '39 (Commerce)

Stewart was the general manager for the Joy Woods Redwood Tree Farm at Bodega, Calif. before becoming, in 1955, the general superintendent of the Paul B. Kelly Timber Co at Cloverdale, Calif.

1 9 4 0

Bachelor of Science

Ronald S. Adams

With more than 16 years of service with the Calif. Div. of For., Ron is senior forest technician in charge of nurseries and reforestation in the state forester's office.

Thomas C. Adams, AB U.C. '40 (Economics), MA '51 and PhD '52 Univ. of Mich.

For more than 11 years Tom has been with the USFS and is presently with the PNWF&RES as a forest economist. AZ, $\Sigma\Pi$.

Peter K. Arpin

Pete is with Taylor and Art Plastics, Inc. in Oakland as sales manager.

Richard B. Bahme, MS U.C. '47 (Plant Physiology), PhD U.C. '49

Always associated with plant nutrition, Dick first worked for the Du Pont Co at Wilmington, Delaware and later joined the Pacific Guano Co in Berkeley. He is presently western regional director of the Natl Plant Food Inst. in S.F. AZ, $\Xi\SII$.

Keith V. Barron

Keith was in Saudi Arabia until 1949 with the Arabian-American Oil Co. He returned to Calif. but later went back to Arabia to work for the Saudi Government Railroad. AZ, $\Xi\SII$.

†**Robert J. Buel**

Bob joined the Air Corps as a fighter pilot and was listed as missing-in-action in the southwest Pacific in March, 1942.

†**Charles H. Bunting**

A timber cruiser through and through, Charlie worked for a time with the Southern Pacific Land Co and later established his own consulting forestry practice. In the early 1950's, he moved to Redding, Calif. and became widely respected for his cruising and appraisal services. In July 1961, while on a family trip to Idaho in a chartered airplane, the plane crashed and burned. Charlie was pinned in the wreckage and unable to escape but was able to assist the pilot and his family to get free of the aircraft.

The Redding Forest Forum supports an annual financial award to students from the Redding area attending an accredited forestry school. This fund is called the Charles H. Bunting Memorial Scholarship. AZ, $\Xi\SII$.

Paul V. Crist

Paul is an area representative for the Calif. Farm Bur. Federation in Anaheim, Calif.

Glen L. Deitz

Glen's career in production and sales has led from his job as sawmill superintendent for the Northern Redwood Lumber Co at Korbelt to the Diamond National Corp at Red Bluff, where he was, for a time, the production manager, and is now sales manager. $\Xi\SII$.

Joseph P. Dion

For 17 years Joseph has been with the San Diego County Dept of Agric. where he is now deputy commissioner.

William H. Fairbank, Jr.

Associated with the Calif. Div. of For. for many years, in 1957 Bill transferred to the Dept of Water Resources for the State of Calif. where he is assistant director. Bill is a younger brother of Charles Fairbanks '37. AZ, $\Xi\SII$.

R. Dana Fish, Jr.

With more than 23 years in the Transportation Corps of the U.S. Army, Dana is a lieutenant colonel and now the commanding officer of a transportation group in Va. On two occasions he has received the Army Commendation Medal. AZ, $\Xi\SII$.

Kenneth P. Fosberg

For more than 14 years Ken has been a ranger with the City of Oakland Park Dept.

Howard E. French

Howard is in the redwood region in the lumber industry as a lumber buyer and sales manager. He is currently manager of the T. M. Dimmick Co at Piercy, Calif.

Paul B. Furbush

For 23 years Paul was a technician and range management specialist with the Calif. Div. of For. He received a medical retirement from the Div. Paul did the first research work and wrote the first paper on the weed Medusa Head, a noxious range plant.

William O. Gansberg

Bill moved to the Pacific Northwest where he has been with a number of industrial forest products firms. He is currently purchasing agent for the U.S. Plywood Corp in Seattle, Wash.

Frank G. Goble

For 23 years Frank has been with the D. B. Milliken Co, manufacturers of precision cameras and instruments, in Arcadia, Calif., and much of this time as president. In 1965, he resigned to become president of the Thomas Jefferson Research Center, an organization devoted to social problems arising from human irresponsibility. AZ, Σ II.

C. Wayne Goodwin

Wayne's entire career has been with the Southern Pacific Co, Land Dept in S.F. where he is the assistant manager.

Paul H. Googins

Paul joined the USFS in Calif. and is an engineer on the Sierra NF.

Norman B. Herkenham, MS U.C. '47 (Zoology)

The major portion of Norm's career has been with the USNPS as a park naturalist at Yosemite Natl Park and as principal naturalist in Wash., D.C. He is now regional chief of natl park and recreation area planning at Santa Fe, N.M. AZ, Σ II.

Donald G. Heron

Don has more than 16 years with the USFS and is district ranger at North Fork on the Sierra NF.

I. Irving Holland, MS U.C. '41, PhD U.C. '55

After some years as a forest economist with the USFS in Wash., D.C., Irv resigned in 1960 to accept appointment as associate professor of forest economics in the Dept of Forestry at the Univ. of Ill. at Urbana. Σ II.

Stanley W. Jacobsmeyer

Stan was one of the finest softball pitchers in the history of the Forestry Club. He is now sales manager for the Owl-Service Rock Co in Riverside, Calif.

Eric E. Jakobson

Eric is a staff forester with Masonite Corp in Ukiah, Calif.

Edward P. Jepsen

Since 1951, Ed has been with the Wells Fargo Bank in S.F., and is now an assistant vice-president.

Richard H. Jones

After a period of service with the Michigan-California Lumber Co as logging engineer, Dick hung out his shingle as a consulting engineer and surveyor in Camino, Calif.

Irwin E. Joy

Irwin worked for several years as a timber faller with the Pacific Lumber Co at Scotia before becoming the self-employed store owner of Joy's Hardware at Portola, Calif. where he has been located for 11 years.

George Kitazawa, MS '44 and PhD '47, N.Y. State Coll. of Forestry

George's advanced degrees are in wood technology and his career is concerned with adhesives. Since leaving the State Univ. of N.Y., where he was a research associate, George has been in charge of the Central Research Laboratory of the Borden Chemical Co at Philadelphia.

William F. Kleiman

Bill is with the materials and research dept of the Calif. Div. of Highways at Sacramento.

Daniel B. Langford

Dan worked in the quality control laboratory for Novaply (U.S. Plywood Corp) at Anderson, Calif. for a number of years. He is now living in the vicinity of Auburn, Calif. and probably writing and illustrating children's books.

James E. LeConey

Most of Jim's career has been as a civilian with the Aeronautical Systems Command at the Wright-Patterson Air Force Base at Dayton, Ohio. His present position is task manager for engineering criteria.

Leonard R. Leoni

A younger brother of Norman J. Leone of the class of 1936, Leonard last reported in from Hanford, Calif. AZ, $\Xi\SII$.

Edgar G. List, Jr.

Edgar deserted forestry to become a tool engineer and, for a time, was with Lockheed Aircraft Corp in Burbank. In 1959 he joined the Aerojet General Corp at Azusa, Calif., where he is a development engineer.

Gordon W. Ludwig, MS Georgia Inst. of Tech. '53 (Sanitary Engineering)

For seven years Gordon was with the U.S. Public Health Serv. as a major. For the past 11 years he has been president of Pascal and Ludwig, Inc., an underground engineering contracting firm in Upland, Calif. AZ, $\Xi\SII$.

†William R. Madsen

Bill was in the fruit business and associated with the Riviera Orchard in Live Oak, Calif. at the time of his death in February, 1961. $\Xi\SII$.

Lawrence H. McCollum

For 19 years Larry has been with the Pacific Lumber Co at Scotia where he is the chief forester.

Charles Mehlert

For over 18 years Chuck has been with the Calif. Dept of Beaches and Parks in

various capacities including supervisor of Tomales Bay State Park and as park planner in Sacramento, and now, in Monterey.

Alfred H. Merrill

Al's entire career since his war service has been with the Hammond Lumber Co, and now the Georgia-Pacific Corp, in Humboldt County, of which he is chief forester.

Vernon A. Nielsen

Vernon last checked in from Selma, Calif. in the San Joaquin Valley. AZ, ΞΣΠ.

John D. Otter

John is with the Calif. Div. of For. as an assistant civil engineer at Carmel, Calif. AZ.

Robert H. Parsons

Nearly all of Bob's career has been with the L.A. County Dept of Forestry and Fire Warden where he is now a div. assistant chief.

Paul E. Pugh

Unknown.

Robert N. Ross

For some years Bob was with the SCS in Hollister, Calif., as a work unit conservationist. In 1947 he joined the Calif. Div. of Soil Conservation and is now a field representative in the Paso Robles area. AZ, ΞΣΠ.

Roy W. Saarni

With the USFS in Calif. for his entire career, Roy has been a ranger on the Inyo NF and Tahoe NF and is now on the supervisor's staff of the Cleveland NF in San Diego. AZ, ΞΣΠ.

†Richard C. Santee

Following school Dick joined the Navy and was the damage control officer on the USS Bunker Hill. He was killed in a kamikaze attack on April 11, 1945.

Robert H. Seale, MS Univ. of Ida. '42

Since 1949 Bob has been with the Univ. of Ida., School of Forestry, first as assistant professor and now associate professor and assistant to the dean. Ernie Wohletz '30 is the dean. AZ, ΞΣΠ.

Vincent W. Shally

Vincent has more than 20 years of service with the SCS in Calif. and is now area conservationist in the Watsonville area. ΞΣΠ.

Alfred E. Simmen

For a number of years, Al was wood technologist for a pencil slat factory in San Leandro. He last reported in from the Yreka, Calif. area. AZ.

†Robert C. Sinclair

Following school Bob worked for private industry and was assistant forester for two years and foreman for one year with the Yosemite Lumber Co. In 1943 he joined the Red River Lumber Co as a timber sales inspector. Bob died in Redding, Calif. in September, 1945. AZ, ΞΣΠ.

Alfred A. Smith

Alfred is the owner and president of the Guardian Products Co, Inc. in L.A. $\Xi\S\P$.

Paul R. Snyder

Since his World War II service, Paul has been in the steel construction, general machinery and contracting business in the Paso Robles area. He started with E. C. Livingston, Inc. and became its president. He is now the owner and general manager of the System Steel Builders of Paso Robles. $\Xi\S\P$.

John C. Spear

For more than 18 years John has been with the Libby, McNeill and Libby, canners, first as a plant engineer in Calif. and now as regional engineer in the State of Wash.

Edward C. Stone, PhD U.C. '48, AZ, $\Sigma\S\P$.

(See Chapter 5—The Staff)

Ronald W. Swart

Unknown.

James E. Taylor

Jim is with the USFS in the Portland, Ore. regional office where he is in charge of operations and management studies.

Eugene L. Thomas

Until 1947 Gene was with the SCS in Calif. and since that time has been a field representative for the Calif. Div. of Soil Conservation at Placerville.

†F. Ralph Throop

Immediately after graduation, Ralph worked with the Natl Youth Authority in the Mt. Shasta area before switching to the USFS with assignments on the Shasta, Mendocino, Stanislaus and Tahoe natl forests in Calif. Ralph then joined the Calif. Div. of For. as assistant ranger and forest technician. In the early 1950's he accepted a position as instructor in forestry at the Lassen Union High School and Junior Coll. in Susanville, Calif. Later he rejoined the USFS and worked for a few years at the Tropical Research Center in Puerto Rico. In 1959 he returned to Berkeley where he worked in the fire div. of the PSWF&RES until his death in November, 1959.

†Percy A. Vincent

Percy was in the hardware business in Santa Rosa, Calif. until the time of his death in 1948. AZ, $\Xi\S\P$.

Sylvan H. Wall

During the school year Sylvan is the field director of nature study in the Tilden Nature Area, a park adjacent to Berkeley, for the local schools of the East Bay Area. In this job he conducts two nature classes a day with a new class of students each day. In the summer he moves his ranger naturalist teaching talents to a natl park and, over the years, he has served in nearly every natl park in the West.

James E. Warren

Most of Jim's career has been with the Calif. Dept of Parks and Recreation but, for a time in the early 1950's, he was with the Calif. Div. of For. He is presently in Sacramento.

†Robert L. Wilkinson

Bob was a teacher in the Pleasant Hills High School in Lafayette, Calif. before his death in September, 1956. $\Xi\S\P$.

Robert J. Wise

Bob has worked for a number of private industrial firms in the Eugene, Ore. area and he is now a broker with the First Calif. Co in that city.

Master of Science

Lief D. Espenas, BS N.Y. State Coll. of Forestry '38

Lief is in wood technology and director of the Forest Products Research Center of Ore. State Univ. at Corvallis. $\Xi\Sigma\Pi$.

Earl J. Hodgkins, BS Mich. State Coll. '38, PhD Mich. State Univ. '56

Earl is professor of forestry at Alabama Polytechnic Inst. at Auburn, Ala.

Jerome S. Horton, AB Univ. of Redlands '31 (Botany)

Thesis: The sample plot method as a method of quantitative analysis of chaparral vegetation in southern California.

Jerry has been with the USFS for more than 30 years, most of it as a research forester with the CF&RES in Glendora, and now with the Rocky Mountain F&RES at Tempe, Ariz. $\Xi\Sigma\Pi$.

James H. Husted, BS N.Y. State Coll. of Forestry '35

Jim is with the USNPS in the Wash. area.

Louis W. Schatz, BS Penn. State Coll. '34

Louis lives in the Tacoma, Wash. area where he is president of the General Plastics Manufacturing Co.

John A. Zivnуска, BS U.C. '38, PhD Univ. of Minn. '47

Other Alumni

Raymond E. Balch

Ray is with the U.S. Post Office Dept and is the postmaster at Angwin in the Napa Valley, Calif.

Milton Beecher

Unknown.

Bernard Feyer

Unknown.

†**Justino Segueria**

Because of the imminence of war, Justino was recalled to his native Philippines before he completed his master's work and he resumed his reserve captaincy in the Philippine Army. He was a professor in the School of Forestry at the Univ. of Philippines. During the Japanese occupation he was a lieutenant colonel in the Philippine Scouts. While participating in guerilla activity during World War II he was captured and killed. $\Xi\Sigma\Pi$.

Lisle L. Walker, BSF Ore. State Univ. '39

For a time Lisle operated the Cascades Mountain Farm at Troutdale, Ore., east of Portland. For the past nine years he has been a draftsman in the assessor's office for Multnomah County at Portland.

Paul G. Wolslayer, BS Penn. State Coll. '38

Unknown.

1941

Bachelor of Science

James G. Beemer

Jim strayed a bit from forestry and is a senior staff engineer for the Columbia-Geneva Div. of the U.S. Steel Corp. at Pittsburg, Calif.

Charles F. Boyns

Chuck served, during World War II, in the Army Medical Administration Corps, and was a hospital administrator in the Pacific Northwest for a number of years before going into the life insurance business in Seattle, Wash.

Levi T. Burcham

, MS Univ. of Nebr. '50, PhD U.C. '56 (Geography)

Most of Lee's career has been with the Calif. Div. of For. where he is assistant deputy state forester for forest management and has charge of the range management activities. In 1964 he took a leave of absence to do environmental research work for the U.S. Dept of Defense. AZ, ΞΣΠ.

James A. Burris

Since World War II Jim has been a partner in the Burris Window Shade Factory in Oakland.

Jeremiah F. Calef

A Navy photo interpreter during World War II, Jere joined the soil-vegetation survey of the CF&RES for a few years. Later he moved to Sonora, Calif., where he entered the hardware business.

Paul Casamajor

, MF U.C. '58, ΞΣΠ.

(See Chapter 5—The Staff)

Roger W. C. Clemens

, MS U.C. '56

Before getting his master's degree, Roger was a teacher at the Ft. Bragg High School in Mendocino County. Since that time he has been an instructor in the Coll. of San Mateo.

John C. Converse

John's career has been with the Southern Counties Gas Co in L.A. where he is supervisor of building design.

Kermit A. Cuff

After a number of years with the CF&RES and as a district ranger with the USFS, Kermit joined the Southern Pacific Land Co in S.F. where he is now chief forester. AZ, ΞΣΠ.

Everett S. Doe

, MSPA Univ. of Southern Calif. '61 (Fire Administration)

Ev's entire career has been with the L.A. County Fire Dept where he is a div. assistant fire chief.

Daniel D. Dotta

For more than 17 years Dan has been with the Calif. Div. of For. and is a forest technician in the state forester's office at Sacramento.

John C. Dowdakin

John is forest technician and service forester with the Calif. Div. of For. in the district office at Monterey.

†Herbert E. Dudley

Before his untimely death in 1961, Herb was the assistant district attorney for Sonoma County at Santa Rosa.

George C. Edmunson, MS U.C. '51

George is with the SCS, and has had a number of assignments in Calif. He is now the work unit conservationist in the Los Banos area. AZ, ΞΣΠ.

†Louis Arvid Erickson

Following service with the U.S. Navy in World War II, Arv joined the forestry staff of the Diamond Match Co at Stirling City, Calif. He was killed in a truck accident on that job in June, 1947.

John D. Fair, Jr.

John joined the U.S. Marine Corps and was for many years with the Fleet Marine Force in the Pacific. In 1956 he resigned and went to work for the U.S. Plywood Corp at Redding, Calif., where he is quality control superintendent. AZ, ΞΣΠ.

Cal Ferris

A genuine aviation enthusiast, Cal was an accomplished pilot and president of the U.C. Flying Club in his undergraduate days. During World War II he served for five years in the Air Force and received the DFC and Air Medal. Upon release from active duty he joined the USFS in the Calif. region where he has been chief pilot, director of air operations, and now is an aerial analyst. AZ, ΞΣΠ.

Adrian W. Ford

For more than 16 years, "Spud" has been a forester on the staff at Collins Pine Co at Chester, Calif. ΞΣΠ.

Harold L. Gentry

Not a noted correspondent, Harold is believed to have joined a natl security agency. AZ, ΞΣΠ.

Delmon B. Gish

Delmon's entire career has been with the Pacific Telephone Co in the Bay Area and he is a PBX installer.

Charles S. Glidden

For more than 15 years Charles has been with the Klamath Lumber and Box Co, Inc. in Klamath Falls, Ore., where he is timber manager.

James R. Gunther

Another poor letter writer, Jim joined the U.S. Border Patrol shortly after graduation. ΞΣΠ.

John Heyer

John's entire career has been with the Southern Pacific Land Co, and is now its assistant district forester at Grass Valley.

Wesley G. Hill

Unknown.

Peter M. J. Hirschenberger, Jr.

Since his military service in World War II, Pete has been with the USFS on the Plumas NF, currently as forester in the Greenville district.

†Harvey A. Hunewill

Following graduation Al worked for about a year in the USFS in the Mono NF. He then joined the Army Air Corps in the fall of 1942 and was killed less than three months later when his bomber crashed on an advanced training mission.

Willard R. Ivarson

Willard has had a number of lumber sales positions in one company in southern Calif. and on the northern Calif. coast. He is now employed in the Bay Area. AZ, ΞΣΠ.

Milan Jogo

Milan was with the Calif. Div. of Highways before receiving a medical retirement. He now lives in Berkeley.

Leroy Jorgensen

Lee is an appraiser in the East Bay Municipal Utility District in Oakland.

Edward S. Kotok, MS Univ. of Mich. '47

Like his father, Ed has devoted his entire career to the USFS. Ed is the chief of forest utilization research for the Intermountain F&RES at Ogden, Utah.

Robert T. MacDougall, Jr.

After service in World War II, Bob hung out his shingle as a consulting forester in Ukiah, Calif.

Richard C. Marshall, AB U.C. '50 (Architecture)

Following his graduation in forestry, Dick got a certificate in meteorology from U.C.L.A. in 1943 and was in the Air Force for four years. Following World War II, he studied architecture in France before receiving his degree in architecture at U.C. He was employed for a number of years in an architectural office in S.F. and then, for a short time, was a visiting professor at the University of Calcutta, India. For the past five years he has been a partner in Marshall, Leefe and Ehrenkrantz, architects, in S.F., and serves part time as a lecturer in architecture at Berkeley.

T. Alan McClay, MF Duke Univ. '49

Al's career has been in the USFS as a research economist. It has taken him from Charleston, S.C., to Portland, Ore., and to Wash., D.C. Al is now on a foreign assignment in Guatemala.

John E. McQuillan

For more than 16 years Mac has been with the John K. Kealy Co in Oakland where he is the sales manager. They are manufacturers' agents for luggage, leather goods, and men's and women's apparel.

Donald E. Meyer

When he last reported in, Don was the assistant manager of the Walgreen Drug Co in Denver, Colo. ΞΣΠ.

Robert M. Miller

Bob has been with the USFS for more than 23 years and is a research forester for the PSWF&RES in Berkeley. He is in charge of all data processing and computer services. $\Sigma\Pi$.

Grant A. Mitchell

Grant makes his home in Lodi, Calif. where he is the parts manager for Mitchell and Koenig, an automotive firm.

Dudley F. Munns

Dud last reported in as a civil engineer with the Texas Oil Co in Redding, Calif.

N. Barney Nielson

For real stick-to-it-iveness, Barney probably takes the grand prize. He worked his way through Berkeley public schools delivering papers. While at Cal, Barney supervised a number of grade school boys with paper routes just as he had been supervised by John Kellogg '34. Following graduation, this line of work continued to suit Barney and he is now the neighborhood distributor for the *Berkeley Gazette*. This is a period of service of approximately 30 years with one company and probably unmatched by any other '41 alumnus who has been out of school only 23 years.

Rolfe M. Ockenden

Rolfe is a general contractor and developer in Marin County.

Philip A. Pitsker, MF Yale Univ. '48

Phil worked for a number of years with the G. S. Nolte, consulting civil engineers, firm in Palo Alto where he was head of the mapping section. He is now self-employed as a photogrammetrist and has changed his name to Allan Pit.

J. Howard Powell

Following graduation, Howard moved to N.Y. where he was employed by the Fairchild Aircraft Corp as a wood technologist and later as section chief of the plastics design div. In 1959 he returned to Calif. to the employ of Aerojet General Corp at Sacramento where he is a technical specialist. AZ, $\Sigma\Pi$.

Norbert D. Ramirez

Unknown.

George J. Rau

George first joined the Calif. Div. of For. and became a technician on the Jackson State Forest at Fort Bragg. Later he joined the forestry staff of the Union Lumber Co but is now a self-employed consulting forester and land surveyor in the Mendocino County area.

†Thomas T. Sagimori

Following graduation Tom joined the Army and was a tech sergeant with the famed 442nd combat team, all Nisei Japanese. Tom was wounded several times and was killed in battle in northern Italy on April 5, 1945. The 442nd has the reputation of garnering more Congressional Medals than any other outfit. $\Sigma\Pi$.

Harry M. Scott

Harry found his career in civil engineering and is head of the survey dept for Adams and Ells, civil engineers and surveyors in El Monte, Calif.

Edwin E. Sechrist, Jr.

For the past 15 years Earl has been with the Calif. Div. of For. in the technician ranks and he is now assistant deputy state forester for forest management at Sacramento.

Theodore H. Simpson

Ted has been with the USFS for more than 21 years in Calif., much of it on the Klamath NF. For the last few years he has been the forester for timber management on the Tahoe NF.

Arnold C. Snyder

Arnold's entire career has been with the USFS in Calif. and for the past several years he has been the district ranger for the High Sierra district on the Sierra NF. This is the highest ranger district in the U.S. and is actually occupied for only a portion of the year.

Alden J. Thompson

Alden is a Major in the Strategic Air Command headquarters of the U.S. Air Force in Nebr.

Clarence W. Van de Wetering

Clarence is a battalion chief with the L.A. County Fire Dept. ΞΣΠ.

Evan I. Veirs

"Bud" was a self-employed rancher in the Watsonville area for a while. He later joined the USDI Bur. of Indian Affairs at Hoopa, Calif. as a forester and, more recently, the USFS as an assistant ranger on the Six Rivers NF.

Ralph N. Watters

Ralph went into the food products business and worked for a time with Tea Garden Products Co in San Leandro as a production control superintendent and purchasing agent. For the past several years he has been with the Cling Peach Advisory Board in S.F. as the assistant manager.

John E. Weaver

Unknown.

Charles F. White

"Chuck" has been a salesman for a number of beverage and bottling firms in the L.A. area and is now with the Globe Bottling Co Inc.

Richard A. Wright

For many years Dick was a special agent with the FBI in the Chicago area. In 1958 he joined the Lockheed Missiles and Space activity at Sunnyvale, Calif. where he is the manager of plant protection.

Master of Science

Rudolf F. Grah, BS Ore. State Univ. '39, PhD Univ. of Mich. '57

(See Chapter 5—The Staff)

George M. Hansen, BS Ore. State Univ. '39

George is a forester-journalist and has worked in trade promotion with the West Coast Lumbermen's Assoc. and was editor of the C. C. Crow Publications in Portland. He is now supervisor of publications for the PNWF&RES in Portland.

I. Irving Holland, BS U.C. '40, PhD U.C. '55

Robert F. Keniston, BS U.C. '37

†**Clarence P. Kinkor**, BS Iowa State Coll. '37

Before his academic work at Cal, "Kink" worked for the SCS in Ariz., and later for the USDI Bur. of Indian Affairs. Following his master's degree work, he returned to the Bur. on the Papago Indian Reservation in Ariz. where he was the land operations div. chief. In 1954 he became the officer in charge in the State of Nev., which job he held at the time of his death in September, 1957. In 1959 he was posthumously awarded the USDI Citation for Meritorious Service. $\Xi\SII$.

Hudson G. Reynolds, BS U.C. '39, PhD U.C. '54

Carl C. Wilson, BS Univ. of Ida. '39

Carl's career in the USFS has led from district ranger, administration in the Plumas NF and later on the Angeles NF. In 1956 he joined the research staff of the CF&RES in Berkeley as div. chief of forest fire research. In the station management reorganization, Carl became an assistant director of the PSWF&RES in charge of all fire research in Calif.

Lin B. Zulick, BS Franklin and Marshall Coll. '37 (Biology), BS Penn. State Coll. '40

Lin has been with the Intern. Paper Co for more than 18 years in the southeastern U.S. and is now the area superintendent at Natchitoches, La. $\Xi\SII$.

Doctor of Philosophy

James Vlamis, BS U.C. '35

Dissertation: The effects of oxygen tension on certain physiological responses of rice, barley, and tomato. (Plant Physiology)

Other Alumni

Frank Brickwedel

Frank is with the Simpson Logging Co at Klamath, Calif.

Norman E. Graham, BS '41 and MS '51 (Agric. Econ.) U.C.

Norm was in forestry for six semesters and summer camp but changed his major and graduated in agric. economics with honors. Norm is in the agric. mortgage loan dept of the Travelers Insurance Co in Fresno, AZ, $\Xi\SII$.

Ralph Jensen, BS Univ. of Ida. '36

Ralph worked for a number of years with the USFS in Utah and was last reported to be employed by the BLM in Mont.

Harold F. Murdoff

"Pappy" had several years of fire control work with the USFS before school, and returned to work with them.

Stanley A. Palmer

Stan continues his service as a major in the U.S. Air Force in Texas.

†**Edwin C. Sindel, Jr.**

Ed went into naval aviation during World War II and was killed in an air crash in Alaska on May 9, 1942.

Hutton Theller, BS U.C. '41 (Chemistry)

Hutton started out in forestry and even served as a teaching assistant at the 1940 summer camp. His primary interest is in wood chemistry and for many years, after receiving his formal education, was with the Crown Zellerbach Corp at Camas, Wash. "Hut" was in the main office of the Crown Zellerbach Corp in S.F. for several years and in 1964 became the manager of its Film Products Div. in Greensburg, Ind. AZ, ΞΣΠ.

1 9 4 2**Bachelor of Science****Ira H. Alexander**

While in the Army, Ira did some graduate work in mathematics at Oxford Univ. in England. For the past 16 years he has been with the L.A. County Engineering Dept as a civil engineer. ΞΣΠ.

Robert E. Anglemeyer

Shortly after graduation, Bob joined the U.S. Navy and continues with it as a commander and officer in charge of VP-31 Detachment "A" at NAS Moffett Field, Calif. ΞΣΠ.

Herbert H. Baer

After his war service, Herb joined the forestry staff of the Hammond Lumber Co in Humboldt County, Calif., and continues as forester with the succeeding company, Georgia-Pacific Corp.

Charles A. Bailey

Charles joined the Navy and, following World War II, was assigned to a number of university reserve officer training units. He continues his service with the fleet in the Pacific.

Frank L. Bonham, MS Univ. of Southern Calif. '49 (Education)

Frank has been with the San Diego City Schools for 15 years as a teacher and is now at the city coll. ΞΣΠ.

John S. Buxton

Following discharge from war service, John went into business as a logging contractor in Humboldt County. He is in the retail lumber business in Pioneer, Calif.

Adrian J. Carignani

"Zeke" is in the shoe business in S.F.

Warren A. Carleton

Warren joined the Winton Lumber Co immediately after his World War II service and is now the assistant manager in charge of log requirements. He has been president of Keep Calif. Green, Inc.

†Milton T. Cunha

A champion boxer in his undergraduate days, Milt applied his combat experience to the efforts of the U.S. Marine Corps and gave his life to this service in the Battle for Tarawa on December 9, 1943. AZ, ΞΣΠ.

George H. DeKay, Jr.

A stray from forestry, "Chuck" joined the steel business and is the vice-president and general manager of the Herrick Iron Works at Hayward.

William T. Dresser

Bill joined the USFS in Calif., has been district ranger on the Los Padres NF, assistant supervisor on the Angeles NF, and assistant chief of the Div. of Information and Education in the regional office. In July, 1964, he was made supervisor of the Angeles NF. AZ, $\Sigma\Sigma\Pi$.

†William T. Frazier

Bill joined the Calif. Div. of For. and was assistant forest technician at Jackson State Forest and, later, forest technician at Howard Forest in Mendocino County. Bill died in Ukiah on March 20, 1953.

Alpheus E. Garrissere

Al is with the Pacific Gas and Electric Co in Chico, Calif. as a senior gas engineer.

Donald R. Gedney

Don joined the USFS and is a forest economist on the forest survey at the PNWF&RES in Portland.

William M. Gerson

Bill is with the USFS in Calif. and, after a number of ranger assignments, is now the timber management officer for the Klamath NF. AZ, $\Sigma\Sigma\Pi$.

Robert B. Goldsworthy

For a time after his war service, Bob was with a redwood lumber company in Humboldt County. He is now a logging and timber supervisor with the U.S. Plywood Corp in Redding, Calif. AZ, $\Sigma\Sigma\Pi$.

William J. Griffin

Bill is on the staff of the regional forester of the USFS in S.F. after service on the Lassen and Mendocino natl forests. $\Sigma\Sigma\Pi$.

Loren Haneline

Loren worked briefly for the USFS in Alaska and Ore. and for the U.S. Public Roads Administration in the Yukon Territory and, later, for the Calif. Div. of For. He is now a self-employed builder and owner-manager of The Seas Motel and Apartments in Laguna Beach, Calif. $\Sigma\Sigma\Pi$.

George W. Heller

George is an assistant bridge engineer with the Calif. Div. of Highways at Sacramento. $\Sigma\Sigma\Pi$.

William P. Hoffman, LLB Stanford Univ. '52

Bill worked for a while as a forester with the CF&RES and, since receiving his law degree, has been the deputy district attorney for Santa Clara County.

George R. Hooper

Less than a month after his graduation, George joined the Navy and continues in that service as a commander. He has had more than 12 years of service on destroyers and has held command of two of them. He is on the staff of Commander Carrier Division 18 of the Atlantic Fleet.

Arthur E. Isensee

Art worked for a time as an outside salesman for a lumber company and then as a partner for a general contracting firm in Covina, Calif. He is now self-employed as a general contractor in Glendora.

Elmer C. Jorgensen

Unknown.

Michael J. Koll

Mike manages the Univ. Alumni Bear's Lair and Tahoe Alumni Center and is director of education and recreation for the Calif. Alumni Assoc. $\Sigma\Sigma\Pi$.

Richard M. Lloyd

Dick is in the management group of the Ed Fountain Lumber Co and the Fountain Lam-Loc Corp in L.A. AZ, $\Sigma\Sigma\Pi$.

Jack E. Moore

Jack joined the USFS in Calif. and, after a number of ranger assignments, is now timber management officer on the Eldorado NF.

Edward F. Morris

Ed is with the USFS in Calif. and for several years has been a ranger on the Los Padres NF. AZ.

Arthur H. Nelson, PhD Cornell Univ. '49 (Conservation)

Following World War II service, Art went into teaching. After further study at Cornell he became professor of biology at S.F. State Coll. AZ, $\Sigma\Sigma\Pi$.

Robert E. Nelson

Bob joined the USFS and was for many years with the soil-vegetation survey of the CF&RES. In 1958 he transferred to Hawaii as the principal research forester for the USFS in the Hawaiian Islands.

James A. Nicholson

Jim worked for a number of years with the F. M. Crawford Lumber Inc. in Redding and Ukiah, Calif., as forester and manager of logging and timber lands. He is now self-employed in the real estate business in Reno, Nev. $\Sigma\Sigma\Pi$.

Arthur F. Noskowiak, MF U.C. '49, PhD N.Y. State Coll. of Forestry '59 (Wood Technology)

Before getting his doctorate, Art was with the School of Forestry at Colo. State Univ. as an assistant professor. While at Syracuse, he served as an instructor and he is now assistant professor of forestry at Wash. State Univ. $\Sigma\Sigma\Pi$.

Wilbur C. Pooley

Wilbur is a cattle rancher near Oakdale, Calif. His son, Michael, is a forestry-range management major in the class of 1965.

†**Robert Praun**

Following graduation, Bob joined the Army Air Corps and, as a first lieutenant, had flown some 20 missions at the time he was killed in action over Sicily on July 4, 1944. $\Sigma\Sigma\Pi$.

Ray C. Robinson, Jr.

Ray is vice-president of Harper, Robinson and Co, U.S. Custom House brokers in S.F. AZ, $\Sigma\Sigma\Pi$.

Emerson L. Smith

Em has served as forester for Caldor Lumber Co and the Stockton Box Co in the central Sierra. He is now self-employed as a consulting forester and land surveyor in Auburn, Calif. AZ, $\Xi\S\Pi$.

Robert P. Smith

Bob is with the Twin City Lumber Co in San Rafael, Calif. $\Xi\S\Pi$.

Leon A. Snyder, PhD U.C. '49

Lee served for a time as a geneticist with the USDA Exp. Sta. in Puerto Rico. For the past ten years he has been professor of genetics at the Univ. of Minn. in St. Paul.

George A. Soares

After periods of service with a number of forest industries in Calif., George is now a forester with Mason, Bruce, and Girard, consulting foresters, in Portland, Ore. $\Xi\S\Pi$.

Robert V. Stephens

Bob worked for a time as a lumber buyer, salesman, and kiln superintendent for the Eastshore Lumber and Mill Co in Oakland. For the past several years Bob has been an assistant highway engineer with the Calif. Div. of Highways.

James P. Tryner

Jim's career has been with the Calif. Dept of Beaches and Parks. After several years as supervisor of the redwood state parks, he is now supervisor of planning and development in the Sacramento office.

†Robert J. Tucker

Unknown.

Myron S. Wall, Jr.

After his war service, Myron organized the consulting forestry partnership of Wall and Larson in Sacramento. After building his own mountain home at Squaw Valley, he decided he really wanted to live in the mountains, and dissolved the partnership. He carries on his consulting business as Myron Wall and Associates at Tahoe City.

Paul J. Zinke, MS U.C. '52, PhD U.C. '56, $\Xi\S\Pi$.

(See Chapter 5—The Staff)

Master of Science**Harold L. Baker, BS Utah State Agric. Coll. '39**

For many years Harold was with the CF&RES in Berkeley as a forest economist. In 1958 he moved to Honolulu, Hawaii, where he is land economist and professor of forest economics at the Univ. of Hawaii. AZ.

J. Whitney Floyd, BS Utah State Agric. Coll. '36

Whit returned to his native Utah where, for 28 years, he has been with the Utah State Univ. and is now dean of the Coll. of Forest, Range and Wildlife Management. For many years he served as Utah's state forester and, in 1957, was president of the Assoc. of State Foresters. $\Xi\S\Pi$.

Edwin J. Jankowski, BS Univ. of Ida. '41

Ed is chief forester for the Northwest Paper Co at Cloquet, Minn.

Stanley L. Pringle, BS Univ. of New Brunswick '41

Stanley worked for a time for the Dept of Forestry at the Univ. of New Brunswick. He last reported in from the U.N. FAO at Rome. $\Sigma\Sigma\Pi$.

Walter M. Schall, BS N.Y. State Coll. of Forestry '40

Walt's entire career has been with the Kroehler Manufacturing Co, first in southern Calif. as wood technologist and, after the war, in Ill. where he is plant manager of their Naperville furniture factory. $\Sigma\Sigma\Pi$.

Doctor of Philosophy

Edward A. Colman, BS U.C. '32

Dissertation: Interrelations of soil and water during infiltration. (Soil Science)

Robert N. Colwell, BS U.C. '38

Dissertation: Translocation in plants with special reference to the mechanism of phloem transport as indicated by studies on phloem exudation and upon the movement of radioactive phosphorus. (Plant Physiology)

Theodore W. Daniel, BS U.C. '34, MS U.C. '36

Dissertation: The comparative transpiration rates of several western conifers under controlled conditions. (Plant Physiology)

Philip G. Haddock, BS U.C. '34

Dissertation: A study of the rest periods in seed and buds of *Pinus lambertiana* Dougl. and *Pinus jeffreyi* Murr. (Plant Physiology)

Other Alumni

Howard W. Fiedler, BSF Univ. of Mich. '41

Howard did some graduate work in forestry and soils, and for the past 11 years has been with the Ladish Co in Cudahy, Wisc., as an industrial engineer. $\Sigma\Sigma\Pi$.

Raymond W. Isle, BS Kansas State Coll. of Agric. '38, MEd U.C. Davis '56

Ray had completed most of his forestry courses for his degree at the time he joined the Navy in 1942. When he returned from military service, he joined the U.C. Agric. Ext. Serv. and has served as a farm advisor for 17 years in Sonoma County and, currently, Mendocino County.

Gordon W. McPeak

Gordy is an executive with the Univ. of Calif. Lawrence Radiation Laboratory in Berkeley where he has been for 17 years.

†**Brian T. Smith**

Before completing his degree work, Brian joined the Army Air Corps and was reported missing in action over Kiel, Germany, in October, 1943.

Tom W. Taft

Unknown.

Edwin H. Vorhees

Unknown.

1 9 4 3**Bachelor of Science****Harry C. Abraham**

Harry's career has been in forest industry in the Central Sierra. Starting as forester for the American River Pine Co and as general superintendent of the Pickering Lumber Corp, he is now the manager of land, timber, and logging for the American Forest Products Corp at Kernville. Harry was president of the Calif. Alumni Foresters in 1954.

Henry W. Anderson, MS U.C. '47

Henry has been with the USFS in Calif. for 18 years and is a hydrology project leader for the PSWF&RES in Berkeley. Mrs. Anderson is Alice Dorothy Watson '33. ΞΣΠ.

Wesley T. Bailey

Not a noted correspondent, Wes was last reported to be working on glues, resins and detergents for the Calif. Research Corp. in Richmond, Calif.

William R. C. Beaty

Bill's entire career has been with the USFS in Calif. and he has held ranger posts on the Los Padres NF and the Shasta-Trinity NF. He is now the fire control officer of the Angeles NF.

Harold F. Bowman

Hal has faith in the private enterprise system. From the start he has been with private industry in the Redding area of northern Calif. and seems to have better staying power than the companies he has worked for. Although he is still responsible for management of the same forests he had on his first job, he is now working for his third employer. The Kimberly-Clark Corp bought out the Ralph L. Smith Lumber Co, which in turn had bought out the Castle Creek Lumber Co. ΞΣΠ.

Clifton C. Brinkley

Cliff, since 1958, has been with the Webb and Knapp Construction Corp in S.F. He is now a vice-president.

Sam H. Bryan

For many years Sam was with the Calaveras Land and Timber Corp and moved up through the forester positions to treasurer and vice-president. When Calaveras sold out to American Forest Products Corp in 1962, Sam remained on as forester-manager of the operation. He is also chairman of the State Forester's Advisory Committee on reforestation methods. ΞΣΠ.

Harry S. Clark

Harry moved to Ore. and is chief forester of Pope and Talbot, Inc. at Oakridge.

†Robert H. Douthitt

Bob served in the Army during World War II and was working for the Graeagle Lumber Co in Plumas County when he was accidently shot and killed by a deer hunter in September, 1949. AZ, ΞΣΠ.

Mario J. Frosali

Mario is a highway engineering associate with the Calif. Div. of Highways in L.A.

Albert W. Herbert

Al has been with the American Forest Products Corp for many years and is now with the same company in Lakeview, Ore. ΞΣΠ.

Alfred E. W. Kelley

Al, a witness to the Japanese surrender ceremony while serving on the U.S.S. Missouri, went into the real estate business in the Oakland area and, for a time, owned the Al Kelley Co. In April, 1958 he joined the Pacific States Mortgage Co in Oakland and is now its vice-president. AZ.

Perry A. Lamb

Perry is in the real estate business in Carlsbad, Calif. AZ, ΞΣΠ.

Richard Margosan

The most recent word from Dick indicates that he is with the Calif. Dept of Parks and Recreation. ΞΣΠ.

Richard B. Marsh

Dick is a planner with the L.A. County Dept of Recreation and Parks.

Mendel Mazelis, PhD U.C. '54

After receiving his doctorate, Mendel was for some years with the USDA Western Regional Research Laboratory at Albany, Calif., as an associate chemist. He is now an assistant professor and assistant biochemist with the Dept of Food Science and Technology at U.C., Davis. AZ.

John H. Murray

John chose a career with the USFS, and is now the timber management officer of the Plumas NF. AZ.

Gaylord A. Orr

Gay is with the Pacific Telephone Co in S.F.

Harry B. Rathner

For over 15 years Harry has been with the BLM in Nev. and Calif. and is now range manager in Worland, Wyo.

Ned A. Smith, MS A. & M. Coll. of Texas '49

For the past 13 years, Ned has been with the Southern Pacific Co Land Dept as a range specialist. He was stationed for many years in Winnemucca, Nev., but is now an agronomist with that company at Hanford, Calif.

Arthur R. Templeton

Art is a typographer for Lederer, Street and Zeus Co in Berkeley.

John E. Wise

When John last reported in, he was with the Wilson and George Meyer and Co, sales agents for agric. chemicals in S.F.

Bruce J. Zobel, MF U.C. '49, PhD U.C. '51

After receiving his doctorate, Bruce was a silviculturist with the Texas Forest Serv. at A.&M. Coll. of Texas. In 1956, he became professor of forest genetics at the School of Forestry at N.C. State Coll. in Raleigh. ΞΣΠ.

Other Alumni

Hollis M. Black, Jr.

Unknown.

Anathol Goldman

Unknown. $\Sigma\Sigma\Pi$.

Charles Mitchell

Unknown.

†Kenneth Shearer

Ken left school to enter naval aviation during World War II. He was killed during a training flight accident at Corpus Christi, Texas, on June 20, 1942.

Al J. Weisgerber

Al has 27 years of service with the USFS in Calif. and, after ranger assignments on the Los Padres and Lassen NF's, he is now in the supervisor's office on the Modoc NF, in Alturas, Calif.

1 9 4 4

Bachelor of Science

Richard W. Chaney, BS U.C. '48 (Civil Engineering)

Dick's entire career has been with the Calif. Div. of Highways, first as an associate highway engineer in S.F., and now as a senior highway engineer in San Diego.

William R. Foster

Bill last reported in from Bishop, Calif., where he was in the insurance and real estate business.

Peter B. Jansen, BS U.C. '53 (Civil Engineering)

Peter has 13 years of service with the Calif. Div. of Highways and is a senior highway engineer in the S.F. area. $\Sigma\Sigma\Pi$.

Raymond E. Johnson

Ray has 20 years with the USFS in Calif. and is now forester for range and wildlife on the Stanislaus NF.

Warren T. Smith, MS U.C. Davis '52 (Agric. Education)

For 12 years Warren has been with the Calif. State Polytechnic Coll. at San Luis Obispo and is dean of agric. Warren's assistant is J. Cordner Gibson '37 and the activities dean is John D. Lawson '38.

Miles F. Sullivan, MF U.C. '47

Miles has worked with the redwood industry in Mendocino County, starting out with Wolf Creek Timber Co at Rockport. Later, when this company was sold to the Pacific Coast Co at Willits, he continued as production manager. $\Sigma\Sigma\Pi$.

Doctor of Philosophy

Philip N. Joranson, BS Univ. of Minn. '37, MS Iowa State Coll. '38

Dissertation: The cytogenetics of hybrids, autotetraploids, and allotetraploids in the grass genus *Melica* L. (Genetics)

Phil worked for several years with the Inst. of Paper Chemistry in Appleton, Wisc., where he was in charge of the forest genetics div. In 1962, he joined the USDA office of Cooperative State Research Serv. in Wash., D.C. In this position he is principal forester and acting assistant administrator for cooperative forestry research.

Clarence Sterling, AB U.C. '40 (Botany)

Dissertation: Growth and vascular development in the shoot apex of *Sequoia*. (Botany)

While Clarence actually took his degree in botany, he did the equivalent of a BS in forestry and was associated with the forestry class of 1940. For the past 14 years Clarence has been on the Davis campus of the University where he is now professor of food science and technology. He is a member of the Phi Beta Kappa honor fraternity and has been the recipient of Guggenheim and Fulbright fellowships. ΞΣΠ.

Other Alumni

Edward Beattie

Ed joined the Navy and was in action at Iwo Jima and Okinawa. In the fall of 1964 Ed returned to Berkeley to finish his work toward a degree.

Ralph E. Fowler

Unknown.

Joseph G. Hattersly, AB '48, MA '64, U.C. (Economics)

Joe started in the School before World War II. He returned to the School during 1946-47 before transferring to economics. After his AB he was a stock broker for ten years. Joe now works for the city of Pasadena and maintains his interest in forestry by helping the development of trails and tree groves on the Angeles NF. ΞΣΠ.

†Jean Kampschmidt

Before completing his studies, Jean entered the military service and was a co-pilot of a C-47 Transport. He was shot down in military action over Holland on September 17, 1944.

1 9 4 5

Bachelor of Science

Harry Diffenbaugh

Since 1951, Harry has been the owner of the Green Thumb Nursery in Monterey, Calif.

Martin J. Peterka

For many years Martin was the logging and sawmill superintendent of the White Pine Lumber Co at Orofino, Idaho. In 1961 he became a lumber sales serviceman for the Potlatch Forests, Inc. at Lewiston, Idaho.

Kenneth D. Smetts

For a time Ken was a civil engineer for the East Bay Municipal Utility District. He is now chief engineer for American Modulux which manufactures prefabricated classrooms.

Doctor of Philosophy

George S. Allen, BASc '33 and MASc '35, Univ. of B.C.

Dissertation: Embryogeny and the development of the apical meristems of *Pseudotsuga taxifolia* (Lamb.) Britt. (Botany)

After completing his doctorate, George returned to the Univ. of B.C. as assistant professor of forestry and in 1953, became dean of its School of Forestry. In 1961 George was appointed director of forestry research for the Weyerhaeuser Co at their research center at Centralia, Wash. ΞΣΠ.

Other Alumni

Thomas Aldrich

Tom is a farm advisor for the U.C. Agric. Ext. Serv. in San Luis Obispo County.

†**Charles F. Bishop**

Charles left school while still in his freshman year to join the war effort. He was killed during the war.

Francis Roberts

Unknown.

1946

Bachelor of Science

Edwin L. Angwin

Ed is a district ranger with the USFS on the Plumas NF in Calif.

Arnold M. Bjornsen

Arnie made private industry his career, starting as a forester with Shasta Forests Co and then as camp clerk with the Ralph L. Smith Lumber Co in the Redding area. He then worked several years with Hammon, Jensen and Wallen, consulting foresters in Oakland. Since 1959 he has been an associate timber and range land appraiser with the Calif. Div. of State Lands in Sacramento.

Richard D. Cosens

Don worked for a number of years with the CF&RES in Berkeley and, since 1952, has been a forester with the Soper Wheeler Co, a private forest enterprise in the northern Sierra Nevada. ΞΣΠ.

Harold E. Crandall

After a period as field engineer for the city of Napa, Calif., Hal is now the director of public works for the city of Sonoma.

Harry R. Glover

Harry is an assistant investment officer for the Wells Fargo Bank in S.F.

Lawrence G. Hansen

Larry is a salesman with the Hobbs Wall Lumber Co in S.F.

Ralph D. Hodges, Jr.

Ralph worked for private industry in the Pacific Northwest before becoming the Calif. representative for the Western Pine Assoc. In 1955 he continued in private

industry as forester for the Wetsel-Oviatt Lumber Co in Sacramento. Ralph's successful association experience led, in 1959, to the position of chief forester for the Natl Lumber Manufacturer's Assoc. in Wash., D.C. AZ.

Herbert M. Hull, PhD Calif. Inst. of Tech. '51 (Plant Physiology)

Herb's career has been with the USDA, first with the USFS and now as plant physiologist with the Agric. Research Serv. in Tucson, Ariz. AZ.

Hector Langdon

Hector's entire career has been with the USFS as a forest engineer in southern Ore.

John H. Masson

John's entire career has been with the Collins Pine Co at Chester, Calif. where he is on the forestry staff. ΞΣΠ.

John M. Phillips

For many years John has been with the Snellstrom Lumber Co in Eugene, Ore. Recently he took on an additional part-time assignment as instructor in forestry at the Eugene Technical Vocational School. In this he is assisted by Bob Kintigh, MF '47.

Douglass F. Roy, MS U.C. '62

Doug has more than 16 years of forest management research service with the PSWF&RES in Berkeley. ΞΣΠ.

Clarence W. Stevens

Clarence is a major in the U.S. Air Force and is assistant operations officer at the Keesler Air Force Base at Biloxi, Miss.

David Tackle, MS U.C. '52

Dave is a research forester with the USFS and has spent most of his years in the northern Rocky Mountain region. He is now a project leader at Bozeman, Mont. In 1962 Dave served as president for the Mont. Academy of Sciences.

Basil A. Vlossoff, BA Univ. of Mont. '36 (Foreign Language)

For many years Basil was forester for the Speckert Lumber Co in Marysville. Since 1962 he has been with the U.S. Corps of Engineers at Sacramento.

Lee B. Williams

Unknown.

Master of Science

Ruben V. Caceres, Agr. Eng., Natl. School of Agric., Lima, Peru '41

For some years Ruben was a lumber inspector and forester with the Tropical and Western Lumber Co in L.A. Since 1955 he has been a senior civil engineering assistant with the L.A. County Engineering Dept.

Frederick A. Meyer, BS U.C. '35

Other Alumni

Bernard G. Duberow, BS Univ. of Mich. '44

Bernard did some graduate work at Berkeley before joining the USFS in Ore. where he is now assistant timber staff officer in the supervisor's office of the Deschutes NF. ΞΣΠ.

G. Lloyd Hayes, BS Univ. of Ida. '34, MF Yale Univ. '40

Lloyd has been for 28 years a researcher with the USFS and is now chief of the Div. of Forest Management Research at the Rocky Mountain F&RES at Ft. Collins, Colo.

†Daryl Price

Daryl left school before completing his degree work to become a corporal and anti-tank gunner in the Army. He was killed in action in Belgium on January 7, 1945.

Dudley F. Zoller, BS U.C. '38 (Business Administration)

For some years Dudley was county agric. commissioner for Siskiyou County in northern Calif. In 1957 he became agric. district coordinator with the Nev. Dept of Agric. at Las Vegas. ΞΣΠ.

1 9 4 7

Bachelor of Science

Deane L. Bennett

In Deane's 17 years with the Calif. Div. of For. he has been associate state forest ranger, fire prevention officer for District IV, and statewide training officer. His present position is that of law enforcement coordinator in the State Forester's Sacramento office.

Vernon A. Brown

Vern is a civil engineer with the U.S. Geological Survey in Menlo Park.

Robert Burns

Bob's career has been with the Calif. Div. of For., first in Monterey and later in Nevada City. He is now in the State Forester's office in Sacramento. ΞΣΠ.

Wayne F. Chambers

Wayne is forester with the Bohemia Lumber Co, Inc. at Culp Creek, Ore. ΞΣΠ.

Douglas W. Clayton

After a number of forest industry jobs with Hammond Lumber Co in the Eureka area of the Calif. north coast, Doug is now the assistant property manager for Georgia-Pacific Lumber Co, successor to Hammond Lumber Co.

Paul Cox

Paul has 17 years of service with the Calif. Div. of For. and is senior forest technician for forest management at Sacramento. AZ, ΞΣΠ.

John C. Dozier

John worked for a time with K. B. Wood and Assoc., consulting foresters in Portland, Ore., and for the past 11 years has been a forester with the American Forest Products Corp at North Fork, Calif.

James H. Dulitz

Jim is the Calif. Div. of For. ranger for San Luis Obispo County.

David L. Duncan

Dave is a major with the Air Force Special Weapons Project at Albuquerque, N.M. ΞΣΠ.

David H. Erb

For 13 years, except for military service during the Korean War, David has been with the Wood Procurement Dept of the W.Va. Pup and Paper Co in Va. where he is on the forestry staff. ΞΣΠ.

William H. Ferry

After a number of private industry jobs, first with Roddis Plywood Co in Arcata, Bill is with Masonite Corp at Ukiah, Calif. ΞΣΠ.

William C. Finster

Bill's career began as a forester with the Southern Pacific Land Co. Later he became the first forester and timber appraiser on the staff of the Board of Equalization for the State of Calif. In 1960 he resigned to become a missionary with the Methodist Church Board of Missions and is located in Salisbury, Southern Rhodesia in Africa. Bill was president of the Forestry Club at the time of ground breaking for the Forestry Building on March 19, 1947. This occasion was solemnized in simple, quiet dignity and attended only by Dean Mulford, Professor Krueger, Bill, and George Craig '39 who took the only photograph of the occasion. ΞΣΠ.

John H. Gross

Unknown.

John H. Hastings

John's career has been with the Calif. Div. of For. and, after being a fire protection planner in the Sacramento office, he rose to assistant deputy state forester in southern Calif. In 1963, John returned to Sacramento as deputy state forester for fire control in the State Forester's office.

Jack L. Hiehle

Jack is with the Calif. Dept of Fish and Game as a game manager in the Sacramento office. ΞΣΠ.

Arthur W. Holmes

Art is a buyer with the Georgia-Pacific Lumber Co in Ore. ΞΣΠ.

Richard C. Houston, MA S.F. State Coll. '61 (Secondary Administration)

With 13 years of service with the S.F. Unified School District, Dick is head of the science dept at the Abraham Lincoln High School. Dick's mountaineering prowess is widely known. He was a member of the Calif. Himalayan Expedition to Makalu in 1954. He has served on numerous committee assignments with the Sierra Club and the American Alpine Club and was acting editor of the *American Alpine J.* in 1956-57. He has written a number of technical mountaineering articles. AZ, ΞΣΠ.

†Frank Arthur Jacobson

Art was a salesman with the Chase Lumber Co in San Jose until 1950 when that company became affiliated with the American Forest Products Corp. In 1953 he was made assistant sales manager. He died of polio on January 25, 1954. AZ, ΞΣΠ.

Robert C. Janes

Bob's career is with the USFS in Calif., and after some ranger assignments and the fire control officer assignment on the Plumas NF, he is now a management analyst in the regional office. ΞΣΠ.

William C. Johnson

Bill has been continuously in lumber sales. Since 1955 he has been with the Hobbs Wall Lumber Co, Inc. in S.F. where he is now executive vice-president. Bill was elected to Phi Beta Kappa during his undergraduate years. ΞΣΠ.

Fred W. Keast

Fred is the fire planning coordinator in the State Forester's office of the Calif. Div. of For.

William H. Kuphaldt

Bill is a forester with the American Forest Products Corp in Murphys, Calif. ΞΣΠ.

Robert M. Maclean

Bob has been with the Calif. Div. of For. since graduation and is now a senior forest technician and a forest practices inspector for the north coast district.

Robert E. McCarthy, LLB McGeorge Coll. of Law (Sacramento, Calif.) '58

Bob's entire career has been with the BLM where he is now chief of its branch of operations and procedures in Wash., D.C. AZ.

Kermit R. Michel

Kermit is president of the Michel Lumber Co at Lake Oswego, Ore.

William O. Noack

For a time Bill was self-employed in the livestock industry, and for the past seven years has been with the Kaiser Steel Corp at Fontana, Calif., where he is the chief estimator in the fabrications div.

Clinton B. Phillips

Clint is with the Calif. Div. of For. in the State Forester's office where he is the coordinator of forest fire research. Clint has been assistant editor and editor of the *California Forester* since 1957. AZ, ΞΣΠ.

Haydn P. Reinecker, Jr., MS Univ. of Mich. '60

Since his hitch in the Marine Corps, Jerry has been with the Calif. Div. of For. and is assistant deputy state forester for engineering in the Sacramento office. ΞΣΠ.

Harry V. Reynolds, Jr.

With 23 years of service with the USNPS, Harry was, for many years, the law enforcement officer at Yellowstone Natl Park. Part of his training for this job included graduation from the FBI Natl Academy. For the past several years, Harry has been the staff park ranger at Wash., D.C. He has received the USDI Superior Performance Awards twice (1958, 1963) and the Valor Award Commendation in 1957.

William P. Ronayne

Bill has 15 years with the USFS in the Pacific Northwest and has been district ranger much of the time. He is now on the timber staff of the Gifford Pinchot NF at Vancouver, Wash.

Michael O. Schori

Mike is with the Calif. Div. of For. and was for many years the assistant deputy for business management in the Sacramento office. He is now the deputy state forester for southern Calif. since Jim Mace retired in 1965. ΞΣΠ.

Alfred E. Shepperd

For many years Al was a forester with the American Forest Products Corp, and for the past 10 years has been an associate with Frank and Dean Solinsky, Inc., consulting foresters in S.F.

Irvin E. Toler

Most of Irv's career has been as forester and now chief forester for the Scott Lumber Co, Inc. at Burney, Calif.

Charles L. Wagener

Charlie is a service forester with the Calif. Div. of For. at Oroville.

Howard E. Wilson

Howard is a major in the Natl Security Agency in Md.

Master of Forestry**Robert G. Kintigh**, BS Penn. State Coll. '43

For years Bob was a forester with the BLM in Ore. Since 1961 he has been the proprietor of the Mountain Home Ranch in Springfield, Ore. and purveyor of Christmas trees, cattle, timber and consulting services. He teaches one day a week in the Eugene Technical Vocational School and assists John Phillips '46. $\Xi\Xi\text{II}$.

Richard M. Saville, BSF Univ. of Mich. '43

Dick reported in recently from the Chicago area but his activities are unknown. $\Xi\Xi\text{II}$.

Dean F. Schlobohm, BS U.C. '34**Elmer W. Shaw**, BS Purdue Univ. '41, AB Colo. State Univ. '61 (Technical Journalism)

With the USFS for many years as a research forester in Wash., and technical editor in the Rocky Mountain F&RES at Ft. Collins, Elmer is now with the BLM at Anchorage, Alaska. He has written three books and five bulletins, numerous articles, and is recipient of ten literary awards, mostly for his poetry. Two of these won intern. awards. Elmer's "Ten Commandments for Technical Writers" is a classic.

Ronald D. Sperry, AB San Jose State Coll. '41 (Physical Science)

Ron is a valuation engineer with the Internal Revenue Serv. in S.F. $\Xi\Xi\text{II}$.

Miles F. Sullivan, BS U.C. '44**Master of Science****Henry W. Anderson**, BS U.C. '43

Thesis: Soil freezing and thawing as related to some vegetation, climatic soil variables.

Maurice W. Day, BS Univ. of Minn. '31

Thesis: The control of certain shrubs in the Lake States.

Maurice has been with the Mich. State Univ. for 26 years and is assistant professor and superintendent of the Dunbar FES at Sault Ste. Marie, Mich.

Ernest W. Wohletz, BS U.C. '30

Other Alumni

Jacques J. Pinkard, BS Utah State Agric. Coll. '47

For a time Jack was assistant development engineer for wood products in the testing and development laboratory of Sears, Roebuck and Co in Chicago. For the past nine years he has been a woodland conservationist for the SCS in Ore.

†**Douglas S. Smith**, BA '44, BSF '46 Univ. of B.C.

In his first year of graduate work, Doug was drowned at Stinson Beach on April 20, 1947. ΞΣΠ.

1948

Bachelor of Science

Ralph C. Andree

Following graduation, Ralph joined Shasta Forests Co and worked as a timber sales inspector until 1955 when he became a forester with the U.S. Plywood Corp in Anderson, Calif. In 1962 Ralph joined the Stanford Research Inst. at Menlo Park as an industrial economist. AZ, ΞΣΠ.

Osman A. Badran, BS Fouad Univ. (Cairo) '41, MS U.C. '49, PhD Univ. of Mich. '51

After finishing his academic work in the U.S., Osman returned to his native country as a lecturer of forestry in the Coll. of Agric. at Alexandria Univ. Later he joined the U.N. FAO as a forestry expert in the Middle East and was assigned in Syria. In 1960 he returned to the Alexandria Univ. where he is professor of forestry. ΞΣΠ.

Bruce W. Black

Bruce joined the USNPS, and, after a number of assignments at natl parks and natl monuments of Calif., he is now chief park naturalist at the Cape Hatteras Natl Seashore in N.C.

Roy I. Bradshaw

A brother of Ken Bradshaw '37, Roy has been with the lumber dept as an engineer with U.S. Plywood Corp at Anderson, Calif. for the past 11 years. He is now prod. mgr. of the company's McCloud division. ΞΣΠ.

Lloyd R. Britton

Lloyd joined the USFS in southern Calif., and after ranger assignments on the Cleveland NF, he is now the staff fire control officer on the San Bernardino NF.

Roland J. Christiansen

Roland works for the BLM.

James C. Denny

Jim is with the Calif. Div. of For. and for many years was in the Redding district office. He is now assistant deputy state forester in the business and personnel office. ΞΣΠ.

†**Edward T. Engen, Jr.**

Ed worked for two years at the Berkeley Insect Laboratory of the USDA Bur. of Entomology and Plant Quarantine before taking a leave of absence to do graduate

work. His first semester of graduate work was halted by his death from leukemia on December 29, 1950.

Ralph L. Fenner, MS U.C. '55 (Agric. Economics)

Ralph first worked for the Calif. Div. of For. and then joined the CF&RES. Always a strong proponent of the use of fire to eliminate fuel hazards, Ralph resigned from the USFS to become a consulting pyro-technologist. He has developed a number of devices and techniques to achieve his objective of quick fuel removal during safe periods. He has developed fire grenades and electrical ignition devices and, more recently, a fine fuel moisture indicator known as a Xerometer. He also helped develop a remote, radio reporting fire weather station. Σ II.

Edwin L. Garthwaite, MBA Stanford Univ. '50

Ed returned to active duty with the Navy for two years during the Korean conflict, and then joined the Marble Mortgage Co of Oakland as manager. In 1962 Ed became president of the Western Mortgage Co of Walnut Creek.

D. Keith Gordon

For several years, Keith was with the Fruit Growers Supply Co at Susanville as a forester. He is now with Western Lumber, Inc., lumber wholesalers at Medford, Ore. Keith is the son-in-law of T. K. Oliver '21.

Robert R. Grahlman, AB Coll. of Pacific '43 (Botany)

Bob's entire career has been with the Collins Pine Co at Chester, Calif., where he is the assistant sales manager. Σ II.

Kenneth W. Hadley

Ken has been a forester with the USDI Bur. of Indian Affairs on assignments in Wash. and Calif., and is now in the Portland office.

William J. Haussler

Bill has 18 years of service as a park supervisor and park planner with the Calif. Dept of Beaches and Parks and is now the recreation staff specialist with the State Dept of Water Resources in Sacramento.

Richard L. Holland, Jr.

When Dick last reported in, he was assistant manager of the steel department of the American Wholesale Hardware Co in Long Beach, Calif. Σ II.

Robert T. Hughes

Most of Bob's career has been with Crane Mills at Corning, Calif., where he is a forester.

Peter J. Joos

Peter worked for a time with the Rockport Redwood Co in Mendocino County before joining Frank and Dean Solinsky Co, consulting foresters in S.F.

Nathan Lozanov

Nathan last reported in from Bridgeport, Conn. Activities unknown.

Myron B. McFarland, Jr.

Myron is secretary-treasurer, manager, and part-owner of the M. B. McFarland and Sons, Inc., and agri-business concerned with farm management, crop financing, crop processing, and product sales as well as farm real estate transactions, in McFarland, Calif.

Stanley G. McPherson

Stan is a partner in the insurance firm Dunn-McPherson Co in S.F.

Lawrence C. Merriam, Jr., MF '58 and PhD '63 Ore. State Univ.

Son of Lawrence C. Merriam '21, Larry worked for a number of years with the Ore. State Highway Dept as a parks planner and forester. He is now assistant professor at Mont. State Univ. in Missoula. Larry is a member of the Board of Trustees of the Natl Park Assoc. for the term 1962-65. AZ, ΞΣΠ.

Howard E. Moore

Howard has 16 years of service with the Calif. Div. of For., is now assistant deputy state forester in the Fresno area. AZ, ΞΣΠ.

Foster E. Murphy

A varsity crew man during his two years at Berkeley, Foster was returned to active duty with the Air Force during the Korean conflict. Upon his return to civilian life in 1952, he entered the life insurance business and is now a general agent for the Pan-American Life Insurance Co in Tyler, Texas. ΞΣΠ.

Paul B. Neese

Paul's entire career has been with the Marin Municipal Water District in Marin County where he is a surveyor.

Jesse A. Palm

Jesse joined the USFS and has spent most of his career in various stations in western Nev. on the Toiyabe NF.

Stanley S. Peterson

Stan is a certified public accountant and partner in the Charles H. Peterson and Co of Mountain View. AZ.

Dale C. Prentice

Dale joined the Western Pine Assoc. and has served as district forest engineer in Klamath Falls, Ore. and Redding, Calif. Since 1959 he has been secretary-manager of the Southern Ore. Conservation and Tree Farm Assoc. of Medford, Ore.

Alfred E. Rueger

Al became an industrial forester in the redwood region and rose to assistant timber manager for the Dolly Varden Lumber Co in Arcata, and timber manager of the Fairhurst Lumber Co in Eureka. In 1961 he became the timber manager for the F. M. Crawford Lumber Co in Ukiah.

David W. Sabiston

For many years Dave was an associate hydraulic engineer with the State Dept of Water Resources at Sacramento. He is now a senior engineer on the State Water Rights Board.

William M. St. John, Jr.

Bill last checked in from the vicinity of Eureka, Calif.

Paul E. Shively

Paul's entire career has been with Fiberboard Paper Products, a corporation of S.F. of which he is chief forester. Paul has had a number of executive responsibilities with Keep California Green, and was president of that group in 1962. He has also served in a number of assignments with the Calif. Forest Protective Assoc., and was the 1963 president of that organization.

Robert J. Smith

Bob joined the USNPS and is the ranger in charge of protection for Yosemite Natl Park.

George W. Snyder

George last reported in 1952 from Belgium where he was studying French in preparation for missionary work in Africa.

Dean Solinsky

Dean is vice-president of Frank and Dean Solinsky, Inc., consulting foresters in S.F.

Carl H. Stoltenberg, MF U.C. '49, PhD Univ. of Minn. '52

Following his doctorate work at Minn., Carl for a time was assistant professor at the School of Forestry, Duke Univ. Shortly thereafter, he joined the USFS and became chief of the Div. of Forest Economics Research in the Northeast FES. In 1961 he was appointed professor and head of the forestry dept at Iowa State Univ. and thus became the fourth U.C. trained forester to head a school of forestry in the U.S. The others are E. W. Wohletz (BS '30 and MS '47), at Univ. of Ida.; J. W. Floyd (MS '42), at Utah State Univ.; and H. J. Vaux (MS '35 and PhD '48), at Berkeley.

Theodore G. Storey

Ted joined the USFS as a fire research forester. He worked for a number of years in the CF&RES in Berkeley before going to the Southeastern FES at Asheville, N.C. Later he returned to Berkeley and in 1963 moved with the forest fire laboratory staff to their new quarters in Riverside, Calif. $\Sigma\Sigma$ II.

Harvey A. Striplin, Jr.

Harvey worked for many years as a forest technician and service forester with the Calif. Div. of For. in the Sacramento area. In 1957, he joined with Jim Greig '50 to form the consulting forestry firm of Cal-Pacific Forest Consultants in Sacramento and Soquel.

Frank A. Timmers

Most of Frank's career has been as a hardwood lumber salesman with the Strable Lumber Co in Oakland. He is now with Van Arsdale-Harris Lumber Co in S.F. $\Sigma\Sigma$ II.

Harold R. Walt, BS U.C. '50 (Business Administration), MBA U.C. '52

Harold first became the business manager of the U.C. Biological Laboratory. Later he became assistant to the chancellor and assistant director of Univ. Ext. for northern Calif. In 1961 Harold left the Univ. and joined the Kaiser Engineers in Oakland where he was the assistant budget director until 1965 when he was appointed deputy director of the Calif. State Dept of Finance. He continues his interest in forestry with his tree farm in Mendocino County. AZ, $\Sigma\Sigma$ II.

Edward R. Walter

Unknown. $\Sigma\Sigma$ II.

Glenn V. Walters

Glenn joined the Calif. Dept. of Water Resources in the Livermore area. $\Sigma\Sigma$ II.

Paul W. Ward

Paul entered wholesale lumber sales, representing the Anderson Valley Lumber Co. (Boonville) in S.F. He is now with Arcata Redwood Co in S.F. $\Sigma\Sigma$ II.

James B. Watson

Unknown. ΞΣΠ.

Bryce D. Webster

Bryce has been with Rockport Redwood Co, Hammond Lumber Co, and Georgia-Pacific Corp in the redwood region as a logger. Since 1960 he is the logging manager for Weyerhaeuser Co at Arcata, Calif. ΞΣΠ.

Edward S. Weeden

Edward last reported from Long Beach, Calif. where he is with the J. H. Baxter and Co, manufacturers of poles and preserved wood products.

Master of Forestry

Lawrence A. deGrace, AB Univ. of Alberta '43 (English and Philosophy), AB '46 (Biology and Botany), and BSF '46 Univ. of B.C.

Most of Lawrence's career has been with the Industrial Forestry Serv., Ltd. of Prince George, B.C. where he is the manager. ΞΣΠ.

Carl F. Ehelebe, BS Ore. State Univ. '43

Carl worked for a time with the USFS in Puerto Rico and last reported in 1957 from Guatemala where he was with the U.S. Operations Mission to that country.

Jack S. Rothacher, BS Univ. of Mich. '39

Most of Jack's career has been with the USFS in the Pacific Northwest where he was on a number of administrative assignments. In 1959 he became the project leader for watershed management research with the USFS at Corvallis, Ore.

Master of Science

John M. Fenley, BS U.C. '39, PhD Cornell Univ. '57

Thesis: An airplane seeding experiment on ranges of deciduous cover of central Utah.

Donald F. Hervey, BS Colo. A. & M. Coll. '39, PhD A. & M. Coll. of Texas '55

Thesis: Reaction of an annual-plant community to fire.

Donald's entire career has been with the Colo. State Univ. at Fort Collins in the range management field. For the past several years he has been professor and head of the range management dept. In 1961 Don received the Distinguished Service Award for Colo. State Univ. and became an honor alumnus of that institution's forestry group.

Richard B. Marston, BS Utah State Agric. Coll. '40, PhD Utah State Univ. '63

Thesis: Effects of contour-trenches and vegetational recovery upon the hydrologic characteristics of Parrish Basin, Utah.

Dick has 23 years as a research forester with the USFS. Much of this time he has been with the Intermountain F&RES at Ogden, Utah and with the Central States FES at Columbus, Ohio. Late in 1964 he joined the Pacific Northwest Water Laboratory of the U.S. Public Health Serv. in Portland, Ore. AZ.

Doctor of Philosophy

Andrew P. Mazurak, BS Mich. State Coll. '33, MF Yale Univ. '36

Dissertation: Effect of particle-size of minerals and replaceable cations on water-stable aggregates. (Soil Science)

Sixteen years of Andy's career have been with the Univ. of Nebr. at Lincoln where he is professor of agronomy.

Edward C. Stone, BS U.C. '40

Dissertation: Auxin and respiration changes during stratification of sugar pine (*Pinus lambertiana* Dougl.) seed and their relation to subsequent embryo growth. (Plant Physiology)

Henry J. Vaux, BS Haverford Coll. '33, MS U.C. '35

Dissertation: An economic-statistical analysis of lumber requirements for California housing. (Agric. Economics)

Other Alumni

Kenneth G. Gustafson, BS U.C. '48 (Agric. Economics)

Almost all of Ken's career has been with the Penn Mutual Life Insurance Co as a salesman in their Oakland office.

1949

Bachelor of Science

William F. Ackerly

Bill worked for a time with the Calif. Dept of Fish and Game as an assistant game manager on various assignments around the state. He then joined Hammon, Jensen and Wallen, consulting foresters in Oakland, as a forester. At the present he owns a chicken ranch in Sonoma County.

Paul B. Adams

Paul's entire career has been with the Southern Pacific Railroad Co in S.F. and Oakland where he is now general water and fuel supervisor.

Joseph C. Akers

Joe joined the Diamond Match Co as a field forester and moved up to assistant timberland manager when the company became the Diamond Gardner Corp. The company continued its merger program to become the Diamond Natl Corp. and Joe is now manager for logging and lands.

Harold F. Anderes

Harold worked for a time with Fibreboard Products in the Truckee area and then joined the Ivory Pine Co at Dinuba as a forester and continues with that company as woods manager under the company's new name of Sequoia Forest Products Industries, Inc. AZ, ΞΣΠ.

Eugene T. Ares

Gene worked for a time with the USFS in Calif. as an assistant district ranger. Since 1955 he has been with the SCS in Monterey County, Calif. where he is a work-unit conservationist.

Richard J. Austin

Dick worked for a time as an advertising salesman with the Fresno Shopping Guide in Fresno, Calif. before joining the USFS in 1957. For a time he was project sales officer at North Fork, Calif., and is now assistant ranger at Foresthill, on the Tahoe NF. ΞΣΠ.

Frank J. Baron (Baronovich), PhD U.C. '57 (Plant Physiology)

Following his academic work at Berkeley, Frank joined the CF&RES in Berkeley as a research forester and physiologist. He is a member of Phi Beta Kappa, the national honorary scholastic fraternity. AZ, ΞΣΠ.

Charles R. Belforte

Charles is a forester with the Glenco Forest Products Co at Elk Creek, Calif. ΞΣΠ.

William H. Bishop

Bill is with the Glenco Forest Products Co at Goodyears Bar, Calif.

Robert H. Blanford, MS U.C. '50

Bob joined the Calif. Div. of For. as a technician in the Redding area and in the Riverside district headquarters. He is now in Sacramento. ΞΣΠ.

Robert Bouchet

For many years Bob has been with the Southern Pacific Railroad Co in the engineering dept and lives in the East Bay area.

John M. Bradley, Jr.

John is president of the Southern Timber Management Services at Birmingham, Ala. ΞΣΠ.

Robert W. Brougher

Bob is chief of the survey section for the city of Hayward, Calif.

Robert Edward Burton, MS U.C. '50

Ed is the son of Bob Burton '15 and the first second-generation U.C. forester. Ed moved to Mendocino County where, for several years, he was forester for the Willits Redwood Products Co. Since 1954 he has been the owner and manager of the Ed Burton Co which manufactures some of Ed's patented products. His latest is a sewage disposal system which uses shredded redwood bark. ΞΣΠ.

Robert Z. Callaham, PhD U.C. '55 (Botany)

Bob joined the USFS, CF&RES, and worked there as a biological aid part-time while he was doing his graduate work. After receipt of his doctorate, he worked full-time for the station as a geneticist. After a brief period of duty at the PNWF&RES Research Center at Spokane, Wash., Bob returned to Berkeley where he was the assistant director of the PSWF&RES and in charge of the Forest Genetics Institute at Placerville. Late in 1964 he was named chief of forest genetics research in the Wash. office of the USFS. ΞΣΠ.

Ted S. Chancey

For the past 12 years Ted has been with the Dierks Forests, Inc. at Mt. Pine, Ark., as a management forester.

Allen K. Clapp

In 1953 Allen joined the staff of *The Oregonian* newspaper in Portland, and was for a time its circulation dealer in the Roseburg area, and now is its advertising salesman.

William H. Clopton, LLB Santa Clara Univ. '58

After completing service with the U.S. Air Force in 1954, Bill attended law school at Santa Clara where he received his degree in 1958. He is now an attorney-at-law and a member of the firm of Thorne, Staton, Clopton, Herz and Stanlek, San Jose, Calif.

Thomas M. Conrow

Tom has done some graduate work in education at Whittier Coll. and at the Univ. of Southern Calif. He returned to the Air Force in 1950 and was, for a time, an instructor at the Nellis Air Force Base in Nev., and later the director of intelligence at Elmendorf Air Force Base in Alaska. He returned to reserve duty in 1962 and is now a student at Chico State Coll., majoring in biology. $\Sigma\SII$.

Glenn A. Coleman

Glenn worked for a time with the Simpson Logging Co in Klamath, Calif.

William B. Critchfield, PhD U.C. '56

Bill's career has been with the USFS in research and has spent most of his time at the PSWF&RES in Berkeley. $\Sigma\SII$.

Thurlow S. Culley, Jr. BS U.C.L.A. '60 (Engineering)

After a number of jobs, Thurlow became a shipping dispatcher for the Hammond Lumber Co in L.A., Calif. Since 1960 he has been associated with the Rocketdyne Div. of North American Aviation, Inc. for which he is now a senior research engineer at its Canoga Park operation. $\Sigma\SII$.

Harold Davidson, MS '53 and PhD '57 (Horticulture) Mich. State Univ.

Following his bachelor's degree, Harold worked briefly for Hammon, Jensen and Wallen, consulting foresters in Oakland. He then went to Mich. State Univ. where he worked on his advanced degrees and served as a part-time instructor in its dept of horticulture. He is now associate professor on that staff. $\Sigma\SII$.

Francis R. Davis, MF U.C. '53

Dick took up high school teaching and taught for a time in the Fortuna Union School in Fortuna, Calif. Since 1957 he has been a teacher in the Miramonte High School in Orinda, Calif. AZ, $\Sigma\SII$.

John M. Dodge

For the past 12 years, John has been with the Calif. Div. of For. He served as assistant state forest ranger in Mendocino County before becoming a forest technician in Monterey County and is now in Riverside County. $\Sigma\SII$.

Cecil J. Eden

Jay is a forest technician with the Calif. Div. of For. and is at the state nursery at Davis. AZ.

Russell W. Engel

Russell has been from one end of Calif. to the other with the USFS. He has served as a fire control assistant on the Six Rivers NF in the north and is now a district ranger on the Cleveland NF in the south. $\Sigma\SII$.

Charles D. England

For the past 13 years, Dix has been a forester with the Masonite Corp at Ukiah, Calif. $\Sigma\SII$.

Franklin A. Furtado

In 1954, Frank was a ranger with the USNPS at Sequoia Natl Park.

George C. Francis

Since 1950, George has been with the BLM. After a period in Ore. as a forester and program officer, George is now the district manager at Ukiah.

Phillip N. Garbutt

Phil is an assistant district forester for Shasta Forests Co at Adin, Modoc County.

Carlton K. Gifford

Unknown.

Robert R. Gilbert, AB U.C. '43 (L & S—General Curriculum)

Bob completed his AB in Letters and Science and his military service in World War II before getting his BS in Forestry. Six months later he rejoined the Army and is now a lieutenant colonel with more than 18 years of service. For a while Bob was a professor of military science and tactics at Wisc. State Coll. at Milwaukee and then received some foreign area specialist training in Tokyo. He is now chief of the div. and air/amphibious operations instructor of the Field Operations and Tactics Div., Unconventional Warfare Dept at the U.S. Army Special Warfare School at Fort Bragg, N.C. ΞΣΠ.

Charles A. Graham, MS U.C. '56

With more than 28 years of service, Charles is the superintendent of the San Joaquin Exp. Range, PSWF&RES at Coarsegold, Calif. ΞΣΠ.

John S. Hale

John serves as section head of the coastal engineering section for the L.A. County Engineer's office and serves as a part-time instructor at East L.A. Coll. John is the recipient of a special award from the L.A. County Board of Supervisors for a new method of hydrographic surveying. ΞΣΠ.

Guy R. Higginson

Guy has been on a number of assignments with the BLM in Ore. and is now the assistant district manager at Salem.

Ralph J. Hollingsworth, MS Univ. of Southern Calif. '57 (Education)

Ralph is a teacher with the L.A. Board of Education at San Pedro.

Joachim R. Hundt

Joe is an assistant highway engineer in the photogrammetry section in the Calif. Div. of Highways office in S.F.

Peter P. Kepon, Jr.

Pete has been a lumber salesman since graduation, first with Strable Lumber Co in Oakland, and now with Arcata Redwood Co in southern Calif., Nev., and Ariz. ΞΣΠ.

John E. Knepp

John is a lumber salesman with the Carter Lumber Co in Oakland. ΞΣΠ.

Richard A. Larsen

After graduation, Dick had two years of military service in Korea before he went into sales work in southern Calif. He is now a salesman and part owner of the Tri-County Plastics Co in Colton, Calif.

Robert L. Leatherman

Bob's entire career has been with the McCloud River Lumber Co where he is head forester and logging engineer. The company recently merged with U.S. Plywood Corp.

Dean W. Lloyd, Jr.

Dean is the fire control officer on the Plumas NF and is the man who calls the students from the U.C. Forestry Summer Camp for fire duty.

Robert S. McBride

Bob got a few years experience with the USFS before attending forestry school, and now has 24 years of service. After duties in various parts of Region 5, Bob is now a forester in the div. of state and private forestry in the regional office in S.F. AZ.

Clarence E. Mello

Clarence did some additional graduate work in range management and wildlife management at Davis. He is now self-employed as a manufacturer's representative in L.A.

David Mensing

Dave is in the redwood sales office of the Georgia-Pacific Corp in S.F.

Ralph C. Meyer

Ralph is a salesman with the Strable Lumber Co in Oakland. ΞΣΠ.

†David R. Navon

An army paratrooper during World War II, David joined the smoke jumper unit of the USFS at Missoula, Mont. following graduation. As a member of a smoke jumping team on the Mann Gulch Fire, in Mont., on August 6, 1949, David and 12 others of the fire team were killed in a flare-up of the fire. David's parents have honored his memory with an annual contribution to the Memorial Reading Room in the School of Forestry library. ΞΣΠ.

James P. Nordyke

Jim is a life insurance counselor in Honolulu, Hawaii.

John E. Pedlar

John worked for a time as an assistant forest technician with the Calif. Div. of For. He then became an estimator for Fibreboard Paper Products Corp in S.F. and is now estimator and purchasing agent for Western Paper Box Co in Hayward.

Richard E. Petoney, MS '52 and PhD '56 N.Y. State Coll. of Forestry

Dick has been at Syracuse for most of his career as an instructor while doing graduate work, later as a research associate and now as a professor. ΞΣΠ.

Richard M. Pomeroy, MF U.C. '64

Dick's career has been with the USFS in the State of Wash. He was fire and watershed staff officer on the Mt. Baker NF in Bellingham, Wash. in 1963 when he received an educational leave of absence to return to Berkeley to get a Master of Forestry degree. Following this he returned to the Pacific Northwest regional office. ΞΣΠ.

Elmer R. Pratt

For the past 14 years, Elmer has been with Hammon, Jensen and Wallen, consulting foresters in Oakland. ΞΣΠ.

M. William Raibley

Bill worked for a number of years with Shasta Forests Co as a timber sale inspector in the Redding and Pondosa areas. In the mid-1950's he switched from seller to buyer and is now forester for Cheney Lumber Co at Pondosa in Shasta County.

Robert L. Ray

Bob is a forester with the Hollow Tree Lumber Co in Mendocino County.

Larry E. Richey

With some service before getting his degree, Larry has 18 years with the Calif. Div. of For. After coming up the technician ladder, Larry is now assistant deputy state forester for District 1 at Santa Rosa. $\Sigma\SII$.

Bruce J. Rogers, MS U.C. '50, PhD Calif. Inst. of Tech. '55 (Plant Physiology)

Bruce served for six years as assistant professor at Purdue Univ. in Ind. and, since 1961, has been associate professor of plant physiology at the Univ. of Hawaii. $\Sigma\SII$.

John J. Summerly

John worked for a time as an assistant forest technician with the Calif. Div. of For. Since 1947 he has been with the State Dept of Parks and Recreation at Eureka, Calif., where he is district park forester.

John W. Thaxton, Jr.

John is a captain in the active reserve of the U.S. Air Force. In addition to three years of active duty during World War II he has been on active duty since October 1951. As a bomber navigator, he has been stationed from Idaho to Fla., and he is now an electronics officer in Northeast Cape Air Force Sta. in Alaska.

S. Ross Tocher, MF U.C. '50

Ross is an associate professor at Utah State Univ. at Logan. $\Sigma\SII$.

A. Robert Tuckey, Jr.

When Bob last reported in, he was with the Federal Aviation Administration at Roseburg, Ore.

Russell G. Weeks

Since 1953 Russ has been with the Calif. Div. of Highways in the Bay Area and is now an assistant highway engineer at Lafayette, Calif.

†Felix H. Weil

Felix was employed by the East Bay Municipal Utility District at the time of his death in October, 1953.

John C. Weiner

John has been out of touch with us for a number of years. In 1951 he was reported to have returned to active duty with the Air Force.

Thomas Wintringham

Tom worked for a number of years as an assistant kiln operator with the Paul Bunyan Lumber Co at Susanville. In 1957 he joined the USFS as a blister rust control officer on the Plumas NF. Tom is now an assistant district ranger at Klamath River, Calif.

Bruce M. Wirth

Bruce was reported in 1952 to be working for a teaching credential in physical education at Berkeley.

Charles D. Worthman

Charles worked briefly for the USFS on the Sierra NF in Calif. before joining the USDI Bur. of Indian Affairs and was first assigned to the Klamath Agency in Ore. Later he moved to N.M. and last reported from the Wash., D.C. area. $\Xi\S\P$.

Master of Forestry

Frederick R. Baugh, BS Utah State Agric. Coll. '36

Fred is a staff officer on the Sawtooth NF of the USFS at Twin Falls, Ida. $\Xi\S\P$.

George W. Gillett, BS Iowa State Coll. '40, PhD U.C. '54

In 1957 George was an assistant at Mich. State Univ. and was last reported to be in the Botany Dept at the Univ. of Hawaii. $\Xi\S\P$.

Arthur F. Noskowiak, BS U.C. '42, PhD N.Y. State Coll. of Forestry '59

Carter P. Qualls, BS Mich. State Coll. '48

Except for a brief call to Air Force duty in 1952, Carter has been with the USFS in Ariz. and N.M. since graduation. He is now on the regional forester's staff at Albuquerque.

William E. Reifsnyder, BS N.Y. Univ. '44, PhD Yale Univ. '54

Except for his actual residence period at Yale Univ., Bill worked as a research meteorologist with the CF&RES in Berkeley until 1954. Since then he has been on the staff of the Yale School of Forestry as an associate professor of forest meteorology.

Carl H. Stoltenberg, BS U.C., '48, PhD Univ. of Minn. '52

Frank E. Tucker, BS Univ. of Minn. '39

For the past 21 years Frank has been with the USFS in Calif. and is now assistant staff officer with the Shasta-Trinity NF at Redding. $\Xi\S\P$.

Bruce J. Zobel, BS U.C. '43, PhD U.C. '51

Master of Science

Osman A. Badran, BS Fouad I. Univ. (Cairo) '41, BS U.C. '48, PhD Univ. of Mich. '51

Thesis: Maintenance of seed viability in closed cone pines.

Donald W. Hedrick, BS State Coll. of Wash. '39

Thesis: Reseeding burned chaparral lands.

Don is with the Dept of Animal Husbandry at Ore. State Univ. $\Xi\S\P$.

Robert W. Mezger, BS Penn. State Coll. '47

Thesis: The effect of spacing on the growth of ponderosa pine.

Bob worked for a time with the USDI Bur. of Indian Affairs at Klamath Agency, Ore., and then hung out his shingle as a forestry consultant. Since 1959 he has been the chief forester with the U.S. Natl Bank of Portland at Klamath Falls.

James E. Street, BS Mont. State Univ. '47

Thesis: Survival of brush seedlings on California game ranges.

Jim is an associate agriculturist with the U.C. Agric. Ext. Serv. on the Davis campus. $\Xi\S\P$.

Doctor of Philosophy

Richard B. Bahme, BS U.C. '40, MS U.C. '47 (Plant Physiology)

Dissertation: The nutrition and related metabolic response of certain orchid embryos. (Plant Physiology)

Leon A. Snyder, BS U.C. '42

Dissertation: A cytogenetic analysis of isolating barriers in *Elymus glaucus* Buckl. (Genetics)

Other Alumni

John M. Fielding, BS Univ. of Queensland (Australia) '47

John returned to his native Australia.

William Main

Bill is owner and president of the Main Lumber Co at Redding, Calif.

John M. Morrow, BS U.C. '49 (Agric.)

For the past 17 years John has been with the Calif. Div. of For. and almost entirely in the north coast district. He is now a forest technician in Mendocino County.

Paul D. Reiling

Paul's career has been with the USFS in Calif., and, after a number of forest assignments, is now with the Lassen NF at Susanville.

William C. Robinson, AB U.C.L.A. '36 (Botany), MA U.C. '49 (Geography), PhD Boston Univ. '60 (Geography)

Bill served for a number of years as a physical geographer with the U.S. Army Quartermaster Research and Engineering Command. Bill was the first acting chief of the new Earth Sciences Div. of the U.S. Army Quartermaster Research and Engineering Command. In early 1962 Bill accepted an appointment as lecturer in geography at the Univ. of New England in Armidale, New South Wales, Australia. $\Sigma\Sigma$.

Mark F. Smiley, BS Univ. of N.H. '48

Unknown.

1950

Bachelor of Science

David N. Bigbee, MA Long Beach State Coll. '59 (Secondary Education)

Dave is a math teacher with the Riverside city schools in Riverside, Calif.

William Boodt, MS U.C. '52 (Agric. Economics)

Bill's career has been with Fibreboard Paper Products Corp. After various assignments with the company from S.F. to Seattle, Wash., he is now a product development representative in the Portland, Ore., office. $\Sigma\Sigma$.

William R. Boring

Bill is with the USFS in the Pacific Northwest and is now a forester on the watershed staff in the regional office at Portland.

Richard L. Brown

Dick has had considerable forest industry experience in southern Ore. and northwestern Calif. and, since 1957, has been an engineer with Rellim Redwood Co at Crescent City, Calif.

Quenton H. Bruton

Following graduation, Quenton joined Shasta Forests Co in Redding as a staff forester. Within four years he was promoted to district forester of that company's operations in Fall River Mills in northeastern Shasta County where he administers nearly 300,000 acres of forest land with the assistance of Phil Garbutt '49. AZ, ΞΣΠ.

William R. Bueermann

Bill is an assistant branch manager for U.S. Plywood Corp in Oakland.

Dean T. Callahan, BCE Ga. Inst. of Technology '47, MF U.C. '51

Dean is with the Crown Zellerbach Corp in Ore. ΞΣΠ.

Silas B. Carr

Si is forest and logging manager for the Gualala Redwoods Inc. which operates in Mendocino and Sonoma Counties. ΞΣΠ.

Robert W. Cermak

Bob joined the USFS and was the district ranger on the Plumas NF at Challenge, Calif. for several years. He is now asst. supervisor on the Inyo NF. ΞΣΠ.

Mahmood A. Clor

A native of Iraq, Mahood is not a good correspondent and last reported from his country's embassy in Wash., D.C.

Clyde A. Coggins

With four years of Army service before taking his forestry work, Clyde returned to the Army in 1950 and is now a lieutenant colonel. After assignments in Japan and Alaska. Clyde is now an action officer in Wash., D.C. ΞΣΠ.

Ralph W. Collings

For the past 12 years Ralph has been with the BLM as range conservationist in Utah and land examiner in Mont. and Calif. He is now in Sacramento.

George M. Coombs

George joined the USFS in Calif., and after an assignment as crew foreman on the Angeles NF in southern Calif., he is now a district ranger on the Klamath NF. ΞΣΠ.

Allen H. Cross

Al worked for a time as a logging engineer with the Clover Valley Lumber Co at Portola. In 1957 he joined the Pacific Gas and Electric Co as a forester on its Shasta div.

James A. Crull

Jim is with the appraisal dept with the Bank of America in San Luis Obispo, Calif. ΞΣΠ.

Wilmar L. Curry

Bill worked for a time as work unit conservationist with the SCS at Bieber, Calif. He then joined the Wash. State Dept of Natural Resources as a farm forester at Puyallup, Wash. In 1960 Bill, joined the Wash. State Univ. Agr. Ext. Serv. as the county ext. agent chairman at Everett, Wash.

James B. Davis, MF U.C. '52

Jim first worked for the Calif. Div. of For. and, since 1959, has been on assignment to the USFS, PSWF&RES in Berkeley. In this capacity he works on numerous federal-state cooperative fire research projects. He is in charge of fire control research and fire retardant testing for the station. In late 1963, he changed to the USFS payroll. $\Sigma\Sigma\Pi$.

Max H. Doner

Most of Max's career has been with private forest industry. He was forester with Cheney Forest Products in Ore., and from 1954 to 1963 he was forester with the Big Bear Timber Co in Redlands, Calif. In 1963 he joined the USFS on the Plumas NF.

William A. Doss

In 1955, Bill was manager of the tree and garden spraying dept of Gring Pest Control in Berkeley.

Ernest E. Draves, BS U.C. '48 (Agric. Economics)

Ernie is with the USFS, and until 1962 was in the Calif. region on various ranger assignments and, finally, as a staff officer for information and education in the regional office. He is now in the Wash., D.C. office as a visitor programs information specialist.

Gerald A. Dunn

Unknown.

Jack H. Durbin

Jack worked for a time with the Fruit Growers Supply Co at Westwood, Calif. Since 1958 he has been with the Marble Mortgage Co of S.F. as assistant treasurer. $\Sigma\Sigma\Pi$.

John M. Ebnet

John is a design engineer with the Missile and Space Systems of Douglas Aircraft Corp in L.A.

John R. Enright

Since graduation, John has been in lumber sales with the J. E. Higgins Lumber Co in the Bay Area. He is now the general manager of the San Jose office.

John A. Estes

John is self-employed as a surveyor in Mill Valley, Calif.

Peter W. Falconer

Peter joined the Weyerhaeuser Co and served first as a production trainee at Longview, Wash., and then as order dept supervisor in the main office in Tacoma. He is now a sales representative with the wood products division of that company at San Jose, Calif.

Harry L. Fayer

Harry is district manager for the Argonaut Insurance Co in Fresno, Calif.

Charles S. Foster

Since 1954, Charles has been an assistant bridge engineer with the Calif. Div. of Highways.

Malcolm M. Furniss

For many years Malcolm has been with the USFS Intermountain F&RES with headquarters at Ogden, Utah. Malcolm is now at the research center at Boise, Idaho. ΞΣΠ.

Robert S. Graham

Since 1952 Bob has been with the Allstate Insurance Co and is now the assistant underwriting manager in their office in Menlo Park, Calif.

Wesley C. Graham, Jr.

Wes is an industrial forester and, for many years, was in the Calif. redwood region with Hammond Lumber Co which later merged with Georgia-Pacific Corp. In 1959 Wes moved to Medford, Ore., where he is forester with Timber Products Co.

James E. Greig

For a number of years, Jim was in the service forester program of the Calif. Div. of For. In 1957 he joined with Harvey Striplin '48 to form Cal-Pacific Forest Consultants. They now have offices in Sacramento and Soquel, Calif. ΞΣΠ.

Robert C. Grieve

In 1962 Bob was a forester and grader for the Wolf Creek Timber Co in Mendocino County. With multiple mergers through the Pacific Coast Co to the present Union Lumber Co ownership, Bob has moved up and is now sales coordinator and office manager at Willits, Calif.

James B. Griffin

Jim was an engineer with the Umpqua Plywood Corp before his present position as engineer with Natl Plywood, Inc., both in Roseburg, Ore.

Robert W. Gustafson

After a number of field assignments, Bob has become a forester in the regional office of the USFS in S.F.

James A. Holderman

In 1956 Jim was a superintendent with the Utah Construction Co in Queensland, Australia.

John R. Host, MF Univ. of Wash. '54

John worked for a while as construction foreman with the Simpson Logging Co in Shelton, Wash., and then as project engineer with the Wash. State Dept of Natural Resources. Since 1958 John has been an assistant professor of forestry at Mont. State Univ. in Missoula.

Richard H. Ingraham

Dick worked for many years as a general foreman and staff assistant for Masonite Corp at Ukiah. In 1962 he became the woodyard superintendent for Fibreboard Paper Products Corp at Antioch, Calif.

Richard R. Kidder

Dick last reported, shortly after graduation, from Cloverdale, Calif., where he was with the Rounds Kilpatrick Lumber Co.

James O. Klemmedson, MS Colo. A. & M. Coll. '53, PhD U.C. '59

Following his master's degree work, Jim worked for a time with the SCS in Colo. as a range conservationist. While working on his doctorate at Berkeley, he also served as a research assistant in the Dept of Soils and Plant Nutrition. Since 1959, Jim has been with the Intermountain F&RES at Boise, Idaho, where he is project leader for range and wildlife habitat research. $\Sigma\Pi$.

John L. Koepf

John worked briefly for Fibreboard Paper Products, Inc. at Antioch, Calif. For the past six years he has been the office manager of the Peerless Lumber Co in Oakland.

F. Wallace Koster

Wally worked for three years with Weyerhaeuser Timber Co at Longview, Wash. in their trainee program. Since 1953 he has been self-employed in the insurance and finance business of Harold Koster, Inc. at Salida, Colo.

Philip G. Langley

For seven years Phil was a forester with Collins Pine Co at Chester, Calif. Since 1958 Phil has been a research forester with the PSWF&RES. Phil is doing advanced degree work at the School of Forestry. $\Sigma\Pi$.

Douglas R. Leisz

With the USFS since graduation, Doug has risen from project sales officer at Mount Shasta to forest supervisor on the Eldorado NF at Placerville.

Wylie R. Macpherson

Wylie went into private industrial forestry in the redwood region of Calif. For a time he was dry kiln operator and later forester for the Arcata Redwood Co and then moved briefly to Medford, Ore., where he was forester for Timber Products Co. In 1962 he returned to Arcata where he is mill superintendent for Calif. Fabricators. $\Sigma\Pi$.

Robert J. Malain

Bob is with the Calif. Div. of For. and was assistant ranger in Mariposa County before assignment as forest technician on the Jackson State Forest at Fort Bragg. Bob is now senior forest technician in the District II office at Redding.

G. Morton May

After a number of positions as forester and engineer in private industry in the Calif. redwood region, Mort, in 1957, took a position as forester with the U.S. Internal Revenue Serv. in S.F.

David P. McClain

Unknown. $\Sigma\Pi$.

Don R. McCluskey

With the varying experience of junior forester with the USFS and credit investigator with Crocker-Anglo Natl Bank, Don is now a distribution clerk with the post office dept in Sacramento. A strong skiing enthusiast, Don is with the Natl Ski Patrol System. From 1956 to 1961, he was patrol leader of the Sierra Club Ski Patrol, and from 1958-63 section chief on the Highway 40 section of the Ski Patrol System. In 1958 Don received the Natl Ski Patrol System Yellow Merit Star for conducting the Far West Divisional Patrol Competitions.

Richard A. Merritt

Dick is in lumber sales and, since 1958, has been with the Twin Harbors Lumber Co in Sacramento and Menlo Park.

Hugo Miller, Jr.

Hugo worked for a number of years as a shipping foreman with the Rounds and Kilpatrick Lumber Co at Cloverdale; then for a number of years he worked for the Rounds Lumber Co as a salesman in their S.F. office. In 1961 he joined the California-Pacific Sales Corp in L.A. as their redwood sales manager.

Brian E. Minter

Brian is with the USFS and was the assistant district ranger at Upper Lake on the Mendocino NF before becoming the district ranger at Mariposa on the Sierra NF. ΞΣΠ.

Jack Mounts

For the past 12 years Jack has been with the USFS in the Pacific Northwest. Jack was fire control officer on the Gifford Pinchot NF in Wash. before his present assignment as district ranger on the Mt. Hood NF in Ore.

Robert S. Naramore

Bob is a serviceman with the Southern Counties Gas Co in the L.A. area. ΞΣΠ.

James F. Nicklos

Jim worked for a time with the USDI Bur. of Indian Affairs in Sacramento as a forester and appraiser. He then joined the firm of Wall and Larson, Foresters (Myron S. Wall, Jr. '42) as a party chief. When that firm was dissolved in 1959, Jim put out his shingle as Jim Nicklos and Assoc., Forester and Appraiser, in Carmichael, Calif.

Kenneth P. Norman, MF U.C. '51

Ken is with the USFS and most of his time has been in Calif. on district ranger and other field assignments. Ken is now a staff forester in the southwest region at Prescott, Ariz. ΞΣΠ.

Robert K. Patee

Bob is a ranger with the USFS in Idaho.

Richard L. Peterson, BS U.C. '59 (Civil Engineering)

Since his U.C. forestry degree, Dick has had two years of service with the U.S. Army in Korea and served as an assistant highway engineer with the Calif. Div. of Highways in San Diego. In 1963, Dick joined Hawke Engineering in S.F. as a civil engineer.

Rupert W. Pole, AB Harvard Univ. '40

In 1953 Bill was on the Angeles NF with the USFS in southern Calif. ΞΣΠ.

James A. Prescott

Jim has had a number of positions with private forest industry in the Calif. redwood region. Before his employment in 1962 as foreman for the Seaside Lumber Co in Willits, he was the resident manager for the Wolf Creek Timber Co at Wheeler, Calif.

Glenn L. Reynolds

Glenn got his general secondary teaching credential at S.F. State Coll. For the past eight years he has taught math at Berkeley High School and is chairman of the dept.

Arthur A. Rich

Unknown.

William M. Sanford, BS U.C. '54 (Business Administration), MBA Univ. of Chicago '61 (Production)

Since 1956 Bill has been with Kaiser Aluminum and is now a senior buyer in their Oakland office.

Richard W. Saukko

Dick worked for some years with the Roddiscraft Corp in the Eureka area as a forest engineer and continues in that position with the succeeding firm, Weyerhaeuser Co. $\Sigma\SII$.

Edward L. Scott

Utilizing some of his background as a machinist mate in the Navy, Ed worked for a time as a machinist with the Dolbeer and Carson Lumber Co in Eureka. He then worked for more than seven years with the Durable Plywood Co in Arcata. Ed has decided to return to school and is presently a student at Humboldt State Coll.

Daniel T. Seamount, MBA U.C. '51 (Business Administration)

Dan has been a high school teacher at Miranda, Calif., and an instructor at Olympic Coll. in Bremerton, Wash. He is now an assistant specialist at U.C., Riverside. $\Sigma\SII$.

William H. Settle

Bill is with the USFS, and after a number of forest assignments in northern Calif., he is now in the timber management section of the regional office in S.F. $\Sigma\SII$.

Raymond Spencer

After a number of positions with private forest industry in Mendocino County and redwood region, Ray, since 1958, has been assistant logging superintendent for the Willits Redwood Products Co in Willits, Calif.

Walter R. Spivey, MS U.C. '52

Walt is with the U.C. Agric. Ext. Serv., and after some assignments in other counties, is now farm advisor in Trinity County.

Robert E. Starrs

Bob is a forester with the Trinity Alps Lumber Co at Hayfork, Calif.

Jack T. Swaner, LLB Univ. of S.F. '62

Rated as one of the five hardest running backs in Cal football history, Jack played with the Cal 1949 and 1950 Rose Bowl squads. An unfortunate knee injury just before his senior football season in the fall of 1949 sidelined Jack for all except the final two games of the season. He managed to run for three touchdowns in the Big Game with Stanford that year. Following graduation, Jack joined his father-in-law in a timber brokerage business in Eureka. In 1958 he decided he really wanted to practice law and entered the law school at the University of S.F. Early in 1963 he opened a law office partnership with Alvin D. McNeil in S.F.

John P. Sweeley

Since graduation Jack has been with Masonite Corp in Ukiah where he is now forestry manager. AZ.

George W. Taylor

George is with the USFS in Calif. on the Tahoe NF.

Donald E. Untereiner

Don worked for a time as a salesman with the Hammond Lumber Co in Pasadena, Calif. before becoming an engineer for Hycon Aerial Surveys, also in Pasadena. Don is now traffic manager with the Pacific Smelting Co in Torrance, Calif. $\Xi\S\P$.

Robert W. Weaver

Bob is an associate forest ranger with the Calif. Div. of For. in the Nevada-Yuba counties.

Henry O. Westcott

Unknown.

Howard J. Wood

Howard worked for ten years with the Intern. Paper Co at Gardiner, Ore., where he was in the quality control dept. Since 1960 he has been with the Borden Chemical Co in Springfield, Ore. as a sales representative.

Tom J. Wood

Unknown.

†Jay V. Woosley

Jay got his teaching credential and taught for a time at the high school in Santa Cruz. He was attending the Stanford Medical School at the time of his death in 1958. $\Xi\S\P$.

Norman E. Wykoff

After a number of short jobs, including compassman and chainman with Pacific Lumber Co at Scotia, Norm joined the USFS in 1955 and is now a ranger district staff forester on the Plumas NF.

Master of Forestry**John R. Castles, BS Mont. State Univ. '38**

Counting his 5½ years of World War II service as lieutenant colonel in the armored corps, John has 27 years of service credit with the USFS. Most of his career has been in the northern Rocky Mountains where he was assistant forest supervisor on the Flathead NF in Mont. and, later, section chief of management plans and inventory in the regional office at Missoula. John is now chief of the branch of access procurement in the Washington office. In 1952 and 1960, he was the recipient of Certificates of Merit from the USFS. $\Xi\S\P$.

José M. De la Puente E., Graduate, Natl. School of Agric., Mexico '48

Jose first served as an ingeniero "A" with the Mexican Forest Serv. in Durango. Later he served as forestry head and sub-director of the Natl School of Agric. at Chapingo, Mexico. Since 1961, Jose has been a technical advisor with the Dept of Agric. in Mexico City. In 1955-57, he was president of the Mexican Professional Foresters Assoc. He has received the "Diploma al Merito" from the Sociedad Forestal Mexicana. He was the representative of Mexico to the Fifth World Forestry Congress in Seattle in 1960 and to the U.N. FAO Congress in Denmark in 1961.

Carl Fiebelkorn, BS Mont. State Univ. '42

Carl is with the USFS in the Rocky Mountain area and last checked in from the San Juan NF in Colo. $\Xi\S\P$.

Carl A. Garey, BS Univ. of N.H. '49

Carl came west to stay and for 13 years has been with the Weyerhaeuser Co in Wash. He is their tree farm manager at Everett. $\Xi\Sigma\Pi$.

James J. Majestic, BS N.Y. State Coll. of Forestry '48

Unknown. $\Xi\Sigma\Pi$.

Merle Peter Meyer, BS '49 and PhD '56 Univ. of Minn.

For the past 12 years Pete has been on the staff at the Univ. of Minnesota School of Forestry as a graduate student, instructor and, now, associate professor. He received a Fulbright Lectureship in Norway in 1961-62.

S. Ross Tocher, BS U.C. '49

Master of Science

Robert H. Blanford, BS U.C. '49

Thesis: The water economy of two species of chaparral growing on two soil types.

Robert Edward Burton, BS U.C. '49

Thesis: A study of the problems related to the peeling of bark from second-growth redwood.

Wilmer L. Colwell, Jr., BSF N.C. State Coll. '38

For most of his career Bill has been with the PSWF&RES in Berkeley. He has worked almost continuously on the Calif. soil-vegetation survey and is now its project leader. He has been awarded the USDA Certificate of Merit with a cash award for this activity. AZ.

Paul E. Packer, BS U.C. '39

Thesis: Development of requirements for effective watershed protection.

Bruce J. Rogers, BS U.C. '49

Thesis: The effect of fire on the germination of seed of *Arctostaphylos viscida* (Parry).

Gilbert H. Schubert, BS W. Va. Univ. '42

Thesis: Viability losses of sugar pine (*Pinus lambertiana* Dougl.) seed infected with certain fungi.

For most of his 18 years in USFS research, Gil was stationed at the CF&RES in Berkeley. His special field is silviculture and forest management research. In February, 1962, Gil moved to the Rocky Mountain F&RES at the Flagstaff, Ariz., branch as research forester. He has received the USFS Certificate of Merit. AZ, $\Xi\Sigma\Pi$.

Doctor of Philosophy

Irwin W. Fischbein, BS '43 and MS '46 N.Y. State Coll. of Forestry

Dissertation: A study of the cell wall of coniferous tracheids by means of the electron microscope. (Biophysics)

Since receipt of his doctorate, Irwin has been with the Gillette Safety Razor Co in Boston, Mass., where he is the assistant director of research. His lab was instrumental in perfecting the Gillette blue blade. $\Xi\Sigma\Pi$.

Stanley P. Gessel, BS Utah State Agric. Coll. '39

Dissertation: A study of the decomposition of organic matter on a southern Sierra transect and in the laboratory, with special reference to forest floor accumulation and total organic matter. (Soil Science).

Since receiving his doctorate, Stan has been with the Coll. of Forestry at the Univ. of Wash. in Seattle where he is professor of soils. AZ, ΞΣΠ.

Henry Hellmers, BS '37 and MS '39 Penn. State Coll.

Dissertation: A study of metabolism in *Pinus ponderosa* Pollen. (Plant Physiology)

Henry is a plant physiologist with the PSWF&RES and assigned to the Erhart Laboratory at Calif. Inst. of Technology where he also has an appointment as a senior research fellow. ΞΣΠ.

Carl B. Koford, BS U.C. '37

Dissertation: A study of sweetgum (*Liquidambar styraciflua* L.) fiber tracheid and *fornianus*). (Zoology)

Allen W. Wiegand, BS '41 and MS '47 N.Y. State Coll. of Forestry

Dissertation: A study of sweetgum (*Liquidambar styraciflua* L.) fiber tracheid and vessel element wall structure by means of the electronic microscope. (Biophysics)

After four years of World War II Army service and the completion of his advanced degrees, Allen returned to active duty with the Army where he continues as a major. After numerous foreign and domestic assignments, he is chief of the programs div. of the Research Development Directorate of the U.S. Army Electronics Command at Fort Monmouth, N.J. ΞΣΠ.

Hugh E. Wilcox, BS U.C. '38, MS '40 N.Y. State Coll. of Forestry

Dissertation: The regeneration of injured root systems in noble fir, *Abies procera* Rehd. (Plant Physiology)

Other Alumni

William A. Biehler, BS Rutgers Univ. '48

After his forestry work at Cal, Bill took some personnel courses at Sacramento State Coll. Staying in the Sacramento area, he has been a personnel technician with the U.S. Air Force at the Sacramento Air Material Area, a personnel analyst for the Calif. Div. of Highways, and is now a personnel examiner with the Calif. State Personnel Board.

Duncan W. Brinkerhoff

Duncan is employed by Hammon, Jensen and Wallen, consulting foresters in Oakland, and serves as resident forester on the Hearst Wynton Tree Farm near McCloud, Calif.

Billy D. Lunsford

Bill is with the USFS in Calif. as a district ranger on the Stanislaus NF.

1 9 5 1

Bachelor of Science

Carl L. Abarr, MF Yale Univ. '58

After finishing at Berkeley, Carl had four years of duty with the U.S. Air Force. He then got his master's degree and worked for a few years with the Calif. Div. of For. in the north coast area. In 1962 he joined the USDI Bur. of Indian Affairs as a forest technician on the Hoopa Reservation in northwestern Calif. ΞΣΠ.

Harvey R. Acker

Following his Army service, Harvey worked as a mill sales clerk for the Holmes-Eureka Lumber Co in Eureka. In 1961 he moved to Enumclaw, Wash., where he is a lumber shipment scheduler for the Weyerhaeuser Co.

Robert D. Baker, MF U.C. '52, PhD N.Y. State Coll. of Forestry '57

Since completing his advanced degrees, Bob has been with the Stephen F. Austin State Coll. at Nacogdoches, Texas where he is associate professor of forestry. AZ, $\Sigma\Sigma\Pi$.

William S. Barnes

Bill is with the USFS and had a number of assignments in the Calif. region before becoming a district ranger on the Toiyabe NF in Nev. AZ, $\Sigma\Sigma\Pi$.

Lynn R. Biddison

With time out for his degree, Lynn has 16 years of service with the USFS in southern Calif. and is now the fire control officer on the Cleveland NF. AZ.

Edward F. Blunt

Shortly after graduation Ed joined the Elk Lumber Co in Mendocino County.

Donald W. Bright

Don worked for four years with the USFS on the Angeles NF. In 1955 Don joined the L.A. County Fire Dept and is now a captain. AZ, $\Sigma\Sigma\Pi$.

Stanley Brovarney

Stan's principal address is in Old Forge, Penn. and reports that his summer address is Fairbanks, Alaska.

George W. Burtchett

For a number of years George was an assistant forester with the Simpson Redwood Co at Klamath, Calif. Since 1956 he has taught forestry in the Arcata High School. AZ, $\Sigma\Sigma\Pi$.

Frederick J. Carlson, Jr.

After graduation, Fred had two years with the U.S. Army Engineers as an operations officer. He then served a number of years as a field forester for the Pickering Lumber Corp. In 1958 he joined the planning dept of the City of Santa Clara, Calif., as an assistant planner.

Craig C. Chandler, MS U.C. '55

Shortly after graduation, Craig joined the CF&RES. An active member of the fire research div., Craig worked on Operation Firestop in San Diego County in 1954 and taught the forest fire course in the School of Forestry in 1955 and 1957. In 1963 Craig transferred to the Wash. office of fire research where his activities include liaison with other fire defense agencies. $\Sigma\Sigma\Pi$.

Robert Cheney

Bob is a foreman with the Masonite Corp at Ukiah, Calif.

D. Irving Cobb

Irv worked as assistant forester with the Fruit Growers Supply Co at Susanville before hanging out his shingle as a consulting forester in Willows, Calif. In 1959 Irv joined Firco, Inc., a stud mill at Willits, Calif., as a forester. AZ.

Frank E. Crossfield

Frank's entire career has been with the Calif. Div. of For. as assistant and associate ranger in the central Sierra, and is now a ranger in southern Calif. AZ.

Clarence G. Dake

Clarence worked for a time with the Setzer Lumber Co in Marysville, Calif. as a forester. Since 1958 he has been a civil engineer assistant with the Monterey County Surveyor in Salinas.

Warren E. Dick, Jr.

Warren worked for a time with Charles H. Bunting '40, consulting forester in Redding, and then joined the Ralph L. Smith Lumber Co in Anderson as a forester. In 1958 Warren formed a partnership, Dick and Knerr Logging, of Redding.

Peter A. Evans, AB U.C. '59 (English), MA S.F. State Coll. '61 (English)

Pete's interest in aerial photography led to his naval career as a teacher of photo interpretation. This in turn led him to his interest in teaching as a career. Since finishing his graduate work, he has been teaching at Yuba Coll. in Marysville, Calif.

Roy W. Feuchter

For the past 13 years Roy has been with the USFS in Calif., and is now a resource staff officer on the Inyo NF at Bishop. $\Sigma\SII$.

Robert L. Fisher

Bob started as a choker setter with the Ralph L. Smith Lumber Co and continues with the successor company, Kimberly-Clark Corp as a forest engineer.

James L. Gayner, BS U.C. '55 (Business Administration)

Jim was with the U.S. Army for two years and then, after receiving his business degree, worked part-time as a bus driver in the Berkeley area. Since 1958, he has been a teacher with the Berkeley Unified School District.

Hatch Graham, Jr.

Since his two years with the Army in Korea, Hatch has been with the USFS in Calif. and is now a resource staff officer on the Inyo NF.

Edwin H. Gregg, Jr.

Ed joined the USFS after his Army service and is now district ranger of the Minarets district on the Sierra NF. $\Sigma\SII$.

Dale O. Hall, MF U.C. '58

Since receiving his bachelor's degree, Dale has had one year additional duty with the U.S. Army Transportation Corp, taught forestry at the Arcata High School, taken education courses at Humboldt State Coll., served as senior lab assistant in the U.C. School of Forestry and received his master's degree at Berkeley. In 1960, Dale joined the PSWF&RES and is the resident forester on the Challenge Exp. Forest. $\Sigma\SII$.

Guy H. Hall, Jr.

For nine years Guy was with the Diamond Natl Corp and its predecessors, serving as a forester and finally as a timber and land buyer for the Calif. div. In 1960 Guy resigned to become forester and president of his own forestry consulting firm, Forest Management, Inc. AZ, $\Sigma\SII$.

Albert F. E. Hallett, Jr.

Until 1953 Al served with the U.S. Army in Korea and then became a forestry instructor in the Eureka City Schools. In 1961-62 Al returned to military service and since then has returned as forestry instructor in Eureka.

Raymond E. Helm

Ray worked for a number of years as a forester, cruiser, and party chief with Wall and Larson, consulting foresters in Sacramento. Since 1959 Ray has been a partner in the Mother Lode General Store at Placerville, Calif. AZ.

Robert E. Heyden, Jr.

For the past 12 years Bob has been with the Pacific Gas and Electric Co in S.F. as a forester. He served as president of the Calif. Alumni Foresters in 1959. AZ.

David G. Hope

In 1954 David was teaching forestry in the Willits High School in Mendocino County.

William C. Hughes

Unknown. EZII.

Harold B. Jope

Harold worked for a time as a cartographer with the U.S. Geological Survey in Sacramento and, since 1958, has been a photogrammetrist with the Calif. Div. of Highways. EZII.

Edward E. Kellogg

Ed has been with the Simpson Redwood Co at Klamath, Calif. EZII.

Robert G. Lancaster

After two years of service with the U.S. Army, Corps of Engineers, Bob joined the USFS in Calif. He was assistant ranger on the Angeles NF, and is now district ranger at Hayfork on the Shasta-Trinity NF.

Thomas A. Links (Linkecs)

When Tom last reported, he was with the Brooks-Scanlon Lumber Co at Bend, Ore. Earlier he was with Scott Paper Co at Coos Bay, Ore. EZII.

John O. Lofgren

Unknown.

Robert L. Maben

Bob is forester for the Winton Lumber Co at Martell, Calif.

Edward F. Martin

Ed, until 1964, was a forest technician and forest practice inspector for the Calif. Div. of For. in Humboldt County. He is now in the Riverside district office. EZII.

George E. McCluskey

After his Army service, George joined the USFS in Calif. and is on the Klamath NF.

Donald McDonald

Since graduation, Don has been a salesman with the Strable Lumber Co in Oakland, Calif. EZII.

Norman McLean, Jr.

Norm is at U.C., Berkeley and is well along toward his PhD in vertebrate zoology. AZ, $\Sigma\Sigma\Pi$.

Richard O. Meeuwig, MS U.C. '60

For 13 years Dick has been a research forester with the Intermountain F&RES at Logan, Utah. $\Sigma\Sigma\Pi$.

Gerhard F. Muerle

Gerhard has done graduate work in business at the Univ. of Ore and U.C.L.A. and worked for a time as a forestry aide with the USDA, Bur. of Entomology and Plant Quarantine in Berkeley. Since 1955 he has served as an administrative assistant on the Shasta-Trinity NF and for the PSWF&RES in Glendora, Calif. He is a recipient of the USFS Superior Service Award. $\Sigma\Sigma\Pi$.

Donald H. Neudeck

Don is an associate engineer with the Calif. Dept of Water Resources in Sacramento.

Edward A. Paul

Ed joined the U.S. Plywood Corp in Oakland as a salesman. Continuing with that company, he is an architects' service representative in their L.A. office.

Charles R. Poppe, Jr., MBA George Washington Univ. '60 (Comptrollership)

Charles joined the U.S. Marine Corps immediately after graduation, and now is a major. His entire service has been with its engineering branch in operations, teaching, and planning. Charles is now the assistant liaison officer for permanent construction on Okinawa.

Frank E. Quadro

Frank is with the Calif. Div. of For. at Monterey. AZ.

Donald A. Rehbein

After a number of other assignments, Don was for a time with the USDI, Bur. of Indian Affairs in Sacramento as a forester. Since 1956, Don has been the manager of administration and plant engineering for Aerojet-General Corp at Sacramento.

Richard D. Reynolds, MA U.C. '59 (Geography)

Following his graduate work, Dick worked for a time as assistant city planner for the S.F. City Planning Dept. Since early 1962 Dick has been with the Lawrence Halprin and Assoc. firm in S.F. AZ, $\Sigma\Sigma\Pi$.

Bert H. Rice

A 1952 report from Bert indicated that he was studying for the ministry in Conn.

Gilbert L. Ross

Gil's first four years out of school were devoted to communications work with the U.S. Air Force in Fla. and Japan. Following his discharge in 1955, he worked another four years as a driver for the Union Oil Co in Sacramento. Since 1959 Gil has been an assistant forester with the Winton Lumber Co. at Martell, Calif.

Ellis F. Smart

Ellis joined the USFS and most of his tour has been on the Shasta-Trinity NF. He is now the district ranger at Gasquet on the Six Rivers NF.

Geoffrey H. Snow

Jeff is a forest technician with the Calif. Div. of For. and is located in the north coast district office.

Robert P. Sorber

Bob joined the USFS in the Pacific Northwest and, after a number of other assignments in Ore., is now on the Mt. Hood NF. AZ, ΞΣΠ.

Richard C. Spies

Since 1953, Dick has been with the Wilson and George Meyer and Co, marketers of agric. chemicals on assignments from S.F. to Phoenix, Ariz. He is now a salesman in the L.A. office.

Joseph C. Springer

"Jim" is with the Calif. Div. of For. and, after an assignment as assistant state forest ranger at Paradise, was made forest technician at Riverside. He is now the state forester ranger for Humboldt County, at Fortuna.

Keith S. Stark

Keith joined the Calif. Div. of Highways and is assistant highway engineer in the L.A. area.

Allen D. Taplin

Unknown. ΞΣΠ.

James W. Timmons

Since graduation Jim has worked on his father's ranch in Humboldt County and is now in charge of it. He is a member of the Humboldt County Forestry Committee.

James R. S. Toland

Jim joined the USFS and was for many years on assignment on the Plumas NF and later as district ranger at Bakersfield on the Sequoia NF. He is now in the regional personnel office in S.F.

Morton S. Wood

Morton last reported from Camp Denali at Mt. McKinley Natl Park in Alaska.

Master of Forestry

Dean T. Callahan, BCE Georgia Inst. of Tech. '47, BS U.C. '50

John C. Crupper, Jr., BS Colo. A. & M. Coll. '39

John joined the USFS in the northern Rocky Mountains and was on the Lolo NF in Missoula. In 1963 he moved to the Alaska regional forester's staff in land use management.

†**Ralph H. Hansen**, BS Mont. State Univ. '38

Ralph started out as a CCC foreman in the northern Rocky Mountains. He held a number of assistant ranger and ranger assignments on NF's in that region. Following his graduate work at U.C., he returned to Mont. where he was made district ranger on the Lolo NF at Plains, Mont. Ralph died in July, 1958. ΞΣΠ.

William T. Hartman, BS U.C. '39

Kenneth P. Norman, BS U.C. '50

Alan L. Orr-Ewing, BS Univ. of Edinburgh '39, PhD Univ. of B.C. '56 (Forest Genetics)

Alan is a forester in the research div. of the B.C. Forest Serv. at Victoria, B.C. In 1962, he received the Canadian-Scandinavian Traveling Scholarship. In 1963 he was vice-chairman of the Western Genetic Assoc. ΞΣΠ.

Master of Science

George C. Edmunson, BS U.C. '41

Thesis: Mulch as a criterion of range condition classification.

Doctor of Philosophy

John W. Duffield, BS Cornell Univ. '34, MF Harvard Univ. '35

Dissertation: Interrelationships of the California closed-cone pines with special reference to *Pinus muricata* D. Don. (Genetics)

Following receipt of his doctorate, Jack was assistant professor at the Univ. of Wash. in Seattle. Later he became the technical director of the Industrial Forestry Assoc. nursery at Nisqually, Wash. In 1962 Jack accepted appointment as professor in the School of Forestry at N.C. State Coll. in Raleigh. In 1963 he took a leave of absence to join the U.S. Agency for Intern. Development program in Yugoslavia. ΞΣΠ.

Verl L. House, AB U.C. '41, MA U.C. '48 (Zoology)

Dissertation: The interaction of three mutants affecting the vein pattern in *Broso-phila melanogaster*. (Zoology)

Verl started in forestry and found his true interest in zoology and graduated in that subject. He is now in the dept of biology at Johns Hopkins Univ. in Baltimore, Md. AZ, ΞΣΠ.

Bruce J. Zobel, BS U.C. '43, MF U.C. '49

Dissertation: The natural hybrid between Coulter and Jeffery pines. (Botany)

Other Alumni

Holt M. Alden, BS Stanford Univ. '49 (Biology)

Holt has been with the Monsanto (Chemical) Co since 1953. He is now in Seattle, Wash., where he is in charge of the development of adhesives and processes with particle board and hardboard.

James M. Crawford, BSF Univ. of Georgia '49

Jim worked for many years with the PSWF&RES on the soil-vegetation survey. He has returned to college for graduate work in languages.

Norman E. Fredericksen

In 1954 Norm was a sixth-grade school teacher and playground director in Bakersfield, Calif.

Joseph W. Frescoln, BS Colo. A. & M. Coll. '34

Joe worked for a time as a farm forester with the Ohio Div. of Forestry and then joined the Bauer Bros. Mfg. Co (pulp machinery) of Springfield, Ohio, as a forestry consultant. Since 1962 Joe has been a forestry teacher in the Parsons, W.Va. high school.

Max Horn

Since 1957 Max has been an expeditor with the Dinwiddie Const. Co in S.F.

Gerald L. Partain, BS (Naval Science) Univ. of S. C. '45, BS Ore. State Univ. '49

Gerry is on the staff of the School of Forestry at Humboldt State Coll. at Arcata. He served as teaching assistant at the U.C. summer camp in 1960. Gerry is working on his doctorate in forest economics from the N.Y. State Coll. of Forestry.

William A. Tyler, Jr., BS Virginia Polytechnic Inst. '50

Bill last checked in from Waverly, Va., where he was an assistant district forester with the Va. Div. of For. $\Sigma\Sigma\Pi$.

1952

Bachelor of Science

†**Robert S. Alexander, Jr.**

Bob was forester for the McCloud River Lumber Co until his death after a lengthy illness in October, 1961.

John D. Andrews, BS U.C. '57 (Pomology)

For a time John was a cost estimator for the Western Machinery Co in S.F., and since 1957 has been a real estate appraiser for the E. R. Holabird Co in Oakland.

†**William B. Andrews, Jr.**

Bill was an assistant district forester with the Southern Pacific Land Co at Grass Valley, Calif. until his unfortunate death in a deer hunting accident in September, 1957.

Donald R. Bash

Since graduation Don has been with the engineering dept of the Southern Pacific Railroad Co and is now an engineering inspector out of their Oakland office.

Lester D. Bergman

Les is an assistant highway engineer with the Calif. Div. of Highways in the Bay Area.

Roy D. Berridge

Roy had two years with the U.S. Army in Korea before joining the Diamond Natl Corp. He is now land manager in the timber and lands dept of that company in Red Bluff, Calif.

Walter R. Bolster

Walt has 19 years of service with the Calif. Div. of For. with interruptions of Army service in the paratroopers and time out to get his degree in forestry. He is now an assistant ranger in the Fresno district office.

Francis M. Busby III

Francis moved to the redwood region and worked for a time with the Hammond Lumber Co at Trinidad. Later he had a brief period of service with the USFS on the Shasta-Trinity NF in Redding. When he last checked in, he was with his former forest industry affiliation which had changed its name, through merger, to the Georgia-Pacific Lumber Co.

James T. Cheshire

Following graduation Jim had more than three years of duty with the Seventh Fleet on destroyer assignment. Since 1956 he has been with the Calif. Div. of Highways in San Diego where he is an associate right-of-way agent. $\Sigma\Sigma\Pi$.

Paul E. Crebbin, MS U.C. '53

For four years Paul worked with the BLM as forester and assistant district forester in the S.F. and Sacramento offices. Since 1957, he has been with the Calif. Board of Equalization in Sacramento as a senior timber appraiser. AZ, ΞΣΠ.

Maurice A. Dunham

Maury worked for many years as a resident forester with the Diamond Natl Corp out of Red Bluff, Calif. before becoming the company forester with the J. F. Sharp Lumber Co in Yreka in 1961.

Allen E. Dunlap

Allen first worked for the U.S. Steel Corp as an industrial engineer at Pittsburg, Calif. and later as dept industrial engineer of that corporation's Torrance Works in southern Calif. Since 1962 Al has been an industrial engineer with the Hughes Aircraft Co in L.A.

Will B. Ellington, Jr.

Will joined the Ralph L. Smith Lumber Co as a district forester in the Mt. Shasta area and continues his work with the succeeding corporation, Kimberly-Clark Corp. ΞΣΠ.

Walter H. Gavin

Walt joined the BLM in the Ore. area and is now the assistant district manager at Salem. ΞΣΠ.

James R. Griffin, MS U.C. '58, PhD U.C. '62 (Botany)

Since receiving his doctorate, Jim has been a research forester with the PSWF&RES at Redding. ΞΣΠ.

John P. Griffin

John put in a couple of years with the Navy on destroyer duty and last reported from the Walnut Creek area, with activities unknown.

Donald G. Halsey

Don is a forester with the BLM in Calif. After a number of field assignments, Don is now in administration at Sacramento.

Francis E. Hamilton

In 1956 Francis was with the USFS in Missoula, Mont.

James R. Harmon

Jim is in chemical sales work in the L.A. area and since 1961 has been with the Quad Chemical Corp.

James E. Hart

Jim joined the BLM in the Ore. area as a forester and is now a timber sales specialist in the Portland office. ΞΣΠ.

W. Loren Heasley

Loren last reported from the Pacific Ocean area where he was on assignment to the USS March, a destroyer escort vessel.

Robert E. Helsing, MBA Stanford Univ. '56

Between his Cal and Stanford degree work, Bob had a couple of years with the U.S. Army. Following his work at Stanford, he joined the Stern, Frank, Meyer and

Fox Co of L.A. as a security analyst. Since 1960 Bob has been a financial administrator with Autonetics, a div. of the North American Aviation Corp in southern Calif.

Raymond V. Hurd

After two years in the U.S. Marine Corps, "Pete" joined the Western Pine Supply Co in Emeryville as a salesman. Pete now operates out of his own home as salesman-manager for the Standard Lumber Co.

Charles M. Jasper

Charles moved to the heart of the redwood region as a scaler for Hammond Lumber Co and later as a head rigger for its successor, Georgia-Pacific Corp. Since 1960 Charles has been a hook tender with the Simpson Timber Co at Korb. Σ II.

Willis A. Jensen

Willis completed his military service with two years as a medical clerk in Alaska with the U.S. Army. Since 1955 he has been with the USFS as a forester in the McCloud area. AZ.

Donald D. Johnson, Jr.

Don was in the first group to graduate from U.C. in the U.S. Air Force ROTC program. When last heard from he was a pilot at the Mather Air Force Base at Sacramento.

John T. Keane, MF U.C. '54

Following his master's degree, Jack served as an instructor in the Air Force Survival School at Stead Air Force Base in Nev. Following this Jack became a general partner in Johnson and Keane, Ltd., a diamond and other mineral exploration organization in Venezuela. After some other South American entrepreneur-ship adventures, he joined, in 1961, the Calif. Redwood Assoc. in S.F. Σ II.

Paul G. Kirkendall

After three years of Army duty and since 1958, Paul has been a forester with Hammon, Jensen and Wallen, consulting foresters in Oakland.

John R. Kling

John is an elementary school teacher in the San Joaquin Valley, and since 1959 has been at Turlock, Calif.

John Laush

John joined the BLM in Ore. and is now a forester for timber appraisal in its Salem office.

Jesse R. Lowe

Jesse is a range manager with the BLM in Nev.

William H. Lowe

Bill served for a time with the USDI at Eugene, Ore. as a forester before becoming a yard clerk with the Truitt and White Lumber Co in Berkeley. Since 1962 he's been a salesman with the K/D Cedar Supply Co in Hayward.

C. Bentley Lyon

Following graduation Bent had more than two years of Korean service with the U.S. Marine Corps. In 1955 he returned to the USFS in Calif. and is now a district ranger on the Angeles NF in southern Calif.

Kenneth R. Mak

Ken joined the BLM in Ore. as a forester and later became a unit engineer at Roseburg. He recently moved to Ukiah, Calif. where he is the district engineer for BLM. $\Xi\S\P$.

Luther W. Marsh, Jr.

Luther joined the USFS on the Tahoe NF where he is an assistant ranger.

Grant E. McClellan

Grant joined the Calif. Div. of For. at Santa Rosa as a trainee. After associate ranger positions in Riverside and San Diego counties, Grant moved, in 1964, to the State Forester's office in Sacramento.

William D. McGregor

Unknown.

Ray W. Miner

Ray joined the USFS in Ida. and is its highway engineer at Grangeville.

Kurt A. C. Munnich

Kurt joined the Scott Paper Co at Everett, Wash. His most recent assignment there is special projects forester. AZ, $\Xi\S\P$.

Gregg H. Munster

Gregg is a building inspector for San Mateo County.

A. Kurt Nelson

Kurt is self-employed as a commercial builder in San Mateo, Calif.

James B. Nile

Jim is an assistant district forester for the Southern Pacific Land Co at Mt. Shasta, Calif. AZ, $\Xi\S\P$.

Thomas J. O'Kelly

Tom joined the BLM in Ore. as a forester before taking his military leave, for two years, with the U.S. Army. He returned to his work with the BLM in Ore. as a forester and timber appraiser and is now a lands specialist at Lakeview, Ore. $\Xi\S\P$.

Verne R. Osburn, MF U.C. '53

Verne is with the Calif. Div. of For. at Redding as a service forester. AZ, $\Xi\S\P$.

Harry B. Owens

Harry worked for three years as a forester with Hammon, Jensen and Wallen, consulting foresters in Oakland. In 1955 he joined Safeway Stores, Inc. in Oakland as a staff member in the real estate div. $\Xi\S\P$.

Frank Oyung

Frank had two years of Army service in Germany before joining the USFS in late 1954. He is now a district ranger on the Eldorado NF.

Fred L. Payne

After leaving Berkeley, Fred entered the Hastings Coll. of Law in S.F. for one semester. He is now with the Liberty Mutual Insurance Co in Sacramento.

James L. Perry

Jim is a district ranger with the USFS in N.M.

Richard H. Pland

Dick worked for a time with Wall and Larson, consulting foresters in Sacramento and when that partnership was dissolved, became a forester for the Placerville Lumber Co. Since 1957 Dick has been forester for the Pickering Lumber Corp at Standard, Calif. $\Sigma\SII$.

W. Robert Powell

Since 1958 Bob has been an assistant specialist in agronomy with U.C. at Davis where he works on a university contract with the Calif. Div. of For. on a Calif. soil-vegetation survey.

Luther S. Price

Since 1955 Lute has been with the USFS in Calif. and is now forester on the Stanislaus NF. AZ.

Vincent R. Price

Vince joined the USFS, and after two years out for military duty with the Army Military Police, he returned to the USFS as a district ranger in N.M. While on that post, he received a cash award for outstanding performance. Vince is now a staff assistant forester with the Div. of Land Adjustments in the Washington office. AZ.

Robert E. Rice

After four years with the U.S. Air Force, Bob joined the U.S. Plywood Corp in Redding as a forester. AZ, $\Sigma\SII$.

T. Donald Robertson

Don joined the USFS in Calif. and started as a junior forester on the Shasta-Trinity NF. From this point he moved south and up to the Sequoia NF as district ranger. He is now assistant supervisor on the Angeles NF.

Gene P. Robinson

After a number of full-time and part-time jobs from assistant forester with Stockton Box Co to shop clerk with the West Coast Engine and Equipment Co, Gene, since 1960, has been with the City of Berkeley Recreations and Parks Dept as a parks administration assistant. $\Sigma\SII$.

Hugh R. Shera

Hugh worked for a number of years as a junior forester for the USFS on the Angeles NF in southern Calif. In 1957 he joined the BLM in Medford, Ore. where he is forester for timber management.

George Steed

George joined the USFS and started as a fire control aid on the Angeles NF. George moved north to the Stanislaus NF where he became an administrative forester and is now on the Tahoe NF as district ranger at Truckee.

James E. Steinhouse

With 29 years with the USFS, Jim has more service than most of his classmates. Most of it has been in the northern Rocky Mountains in western Mont. and northern Idaho where he presently is forester at Sandpoint.

Hugh I. Stroupe

Hugh was most recently reported to be in the lumber business at Vallejo, Calif.

Richard L. Thompson

Dick joined the BLM and was, for many years, forester in the Roseburg, Ore. area. He is now the state training officer for the Bur. at Anchorage, Alaska.

Ronald S. Thomson

After his two years of Army service, Ron joined the Anawalt Lumber Co in L.A. as a salesman. In 1962 he became an architectural representative for Weyerhaeuser Co in L.A.

Thomas A. Tutton

Tom had five years of Air Force duty before joining U.S. Plywood Corp in Redding as a forester in 1957. In 1962 Tom joined the Bank of America in Redding as a loan officer. AZ.

William J. Walker

Bill started as a forester with the McCloud River Lumber Co. Since 1955 he has been with divisions of the American Forest Products Industry. First he was with Tarter, Webster and Johnson at Fresno, Calif. as sales manager. He is now manager of the lumber div. of the Ariz. Box Co at Phoenix.

Charles L. Williams

When Charles last reported, he was with the Beaver Lumber Co in Lafayette. ESI.

Robert F. Wood

Bob first worked as an assistant editor for *Western Industry*, a monthly publication printed in S.F. In 1958 he was with the Calif. Alumni Assoc. as assistant editor for *California Monthly*. Bob is now a *Life* magazine correspondent in S.F.

Master of Forestry

Robert D. Baker, BS U.C. '51, PhD N.Y. State Coll. of Forestry '57

James B. Davis, BS U.C. '50

Joseph E. Fielding, BSF Utah State Agric. Coll. '51

In 1959 Joe checked in from Rio Vista, Calif., where he is a school teacher.

Master of Science

Walter R. Spivey, BS U.C. '50

Thesis: The role of miner's lettuce, *Montia perfoliata* (Donn.) Howell, in California burned brushlands.

David Tackle, BS U.C. '46

Thesis: The value of site preparation as related to ground-cover density in natural regeneration of ponderosa pine.

Paul J. Zinke, BS U.C. '42, PhD U.C. '56

Thesis: Factors useful in the determination of site quality of unstocked timberlands.

Doctor of Philosophy

Philip C. Habib, BS Univ. of Ida. '42

Dissertation: Some economic aspects of the California lumber industry and the relation to forest use. (Agric. Economics)

Philip has worked on a number of foreign assignments with the U.S. State Dept, including Canada, New Zealand and Korea.

Other Alumni

Harold H. Cochran, BS U.C. '52 (Agric.), MHA Baylor Univ. '55

A lieutenant colonel in the U.S. Air Force, Harold became a hospital administrator and was executive officer of the Ladd AFB hospital in Fairbanks, Alaska. He is now director of the technical writing div. of the Air Force Medical Service School in Ala.

1 9 5 3

Bachelor of Science

Vernon W. Ashby

Vernon is a technician with the Calif. Div. of For. in the north coast district office in Santa Rosa.

Alan Lee Bellon

Alan is a forester with the BLM at Ukiah, Calif.

Paul A. Bourgeois

Paul worked with Glenco Forest Products Co of Sacramento as a forester for five years. Since 1958 he has been a forester with the BLM in Sacramento. He received a Superior Performance Award from the Bur. in 1962.

Otto J. Brichacek

Otto has 21 years of service with the USFS in the three natl forests across the north border of Calif. He is now a land utilization forester in the Klamath NF supervisor's office in Yreka. ☞ΣΠ.

George S. Briggs, MEd Tufts Univ. '58 (Education-Biology)

Since receiving his master's degree, George has been a park forester with the USNPS at Yosemite.

Robert L. Brown

When Bob checked in, 1960, he was a captain with the U.S. Army Corps of Engineers. AZ.

Raymond C. Carrington

Unknown.

Wilbur G. Charter, MF U.C. '56

Since receipt of his master's degree, Will has been a forester in the regional office of the USFS in S.F. ☞ΣΠ.

Morris G. Cline, MS Brigham Young Univ. '60 (Botany)

After his bachelor's degree at Berkeley, Morris was with the U.S. Marine Corps for two years. The next three years were devoted to Mormon Church missionary

service in the Samoan Islands. Morris then obtained his master's degree and since 1960, has been at the Univ. of Mich. where he expects to receive his PhD in Botany, 1964.

Robert J. Conners

Bob is a forester with the Southern Pacific Land Co at Mt. Shasta, Calif. ΞΣΠ.

Bruce B. Coombs

Bruce is a surveyor and logging engineer with the Simpson Redwood Co at Korb, Calif.

William J. Emrie

Bill worked for a time with the Calif. Dept of Water Resources. He is now a recreational planner with the Calif. Dept of Parks and Recreation.

Dean W. Everett

Dean joined the USFS and, after service on the Klamath NF, is now with the Shasta-Trinity NF as a forester for lands. AZ.

David S. Gearhart

David worked for a time with Charles H. Bunting '40, consulting forester in Redding. In 1962 he joined the Calif. Div. of For. as a forest technician and located in Fort Bragg.

George I. Gentry

George worked for a time as forest technician for the Pacific Lumber Co at Scotia and later as resident forester for Sage Land and Lumber Co in Garberville. Since 1960 he has been self-employed as a consulting forester in Eureka.

Edward N. Gladish

After brief Army service, Ed joined the Calif. Div. of For. as assistant technician. Much of Ed's assignment has been with the Calif. soil-vegetation survey.

Edward J. Hall

Ed had five years of active service with the U.S. Army. Since 1959 he has been a partner in E. J. Hall and Son, grain and hay, in Beaumont, Calif.

Jack H. Hansen, MF U.C. '54

Jack worked for a number of years as a rehabilitation forester for the BLM in its Salem, Ore., office. Since 1958, Jack has been an associate specialist on the staff of the School of Forestry at Berkeley, assisting with silviculture research. ΞΣΠ.

Burgess L. Kay

Burgess worked briefly as a forestry aid with the USFS in Calif. Since 1954 Burgess has been with the Dept of Agronomy of U.C. at Davis and is an associate specialist.

Robert F. Krohn, MF Yale Univ. '54

Bob worked for 11 years with Fibreboard Paper Products Corp of S.F. He was forest superintendent of their major land holding in the Truckee, Calif., area. In April 1964, Bob became the first U.C. farm advisor forester, located in Eureka, Calif. ΞΣΠ.

George Kyer, Jr.

George joined the U.S. Air Force and last reported from the Loring Air Force Base in Maine. AZ.

Robert B. Mace

Son of James K. Mace '37, Bob's entire career has been with the USFS in Calif. He began as a forester on the Plumas NF, became an assistant ranger on the Shasta-Trinity NF, and is now a recreation planner in the regional office in S.F.

William B. McCallum

Will worked for nearly seven years with Giustina Brothers Lumber Co in Eugene, Ore., as a forester. Since 1960 he has been a logging engineer and forester with the U.S. Plywood Corp at Mapleton, Ore.

†Floyd E. McFarland, Jr.

Floyd first joined the Hammond Lumber Co at Big Lagoon and then did two years of Army service in Germany. In the fall of 1955 Floyd joined Frank and Dean Solinsky as a timber cruiser in the redwood region. While flying home on a Christmas holiday, Floyd was killed in a crash of his own plane near Fort Bragg on December 22, 1960.

Harvey E. Menkens

Harvey worked for a time as drying supervisor for Arcata Redwood Co at Arcata. In 1958 he joined the Weyerhaeuser Co at Tacoma, Wash., where he is a cost and product analyst.

Allen R. Miller

Shortly after graduation Allen joined the U.S. Army Ordinance Corps. His recent activities are unknown.

Robert J. Muir

In 1955 after his military service, Bob joined the Southern Pacific Land Co as a forest assistant at Weaverville in Trinity County. He continues there as assistant district forester.

James E. Nicholson

Since 1956, Jim has been a forester with the Michigan-California Lumber Co.

Abdul K. Nouri

Abdul is with the Directorate General of Forestry at Baghdad, Iraq. ΞΣΠ.

Neil B. Opsal, MF U.C. '56

Neil joined the USFS and worked briefly in the regional office in S.F. For many years he has been in the regional office at Atlanta, Ga., where he is supervisory placement specialist. ΞΣΠ.

Thomas J. Orr, III, MF U.C. '54

Son and namesake of a member of the class of 1928, Tom is also with Weyerhaeuser Co. He started on the company's Cosmopolis, Wash., operation as an inventory forester and is now assistant branch forester at Springfield, Ore. ΞΣΠ.

Walter E. Pease

For eight years Walt was with the Calif. Div. of For. in Sacramento as a forest technician. In 1961 he resigned to teach in the winter time and serve as a consulting forester during the summer.

Wee Yucy Pong, MF Yale Univ. '55

Most of Gene's service has been with the USFS, PSWF&RES in Berkeley as a

research forester in the fire laboratory. He is now a part-time forest products technician and working on his doctorate in wood technology at U.C. $\Sigma\Pi$.

Ray H. Reinecke

Ray worked for a time with the Hammond Lumber Co at Big Lagoon as a time keeper. Since 1956 he has been with the Calif. Div. of Highways in the S.F. office as an engineering technician.

Donald L. Reukema, MF '57 and PhD '62 Univ. of Wash.

Since receiving his master's degree, Don has been with the USFS, PNWF&RES at Olympia, Wash. as a research forester. AZ, $\Sigma\Pi$.

Jack A. Rose, MF Yale Univ. '56, LLB U.C.L.A. '61

Jack first worked for the USFS on the Sierra NF before doing his master's work at Yale. He again returned to Calif. where he served as a forester with the BLM in Sacramento. Since receipt of his law degree at U.C.L.A. he has been a deputy district attorney for criminal prosecutions in L.A. County. $\Sigma\Pi$.

Ami Y. Shachori, MF U.C. '54

Since receiving his master's degree, Ami has been the director of the Soil Erosion Research Sta. of the Rupin Inst. of Agric. at Emek-Hefer, Israel. When he reported in, he was hard at work on his doctoral dissertation entitled "Evapo-transpiration of pine, Maguie shrub, and grass covers in the Carmel Mountains, Israel." This work is under the guidance of the Botany Dept of the Hebrew Univ. in Jerusalem. In November 1954, while enroute back to Israel from Calif., Ami participated in a radio program in N.Y. City and received a 20-volume encyclopedia of "American People." He donated this prize to the U.C. library.

Vernon E. Smith

Most of Vern's career has been with the USFS and he was, for a number of years, in the southern Ore. area. More recently he became the district ranger at Idyllwild on the San Bernardino NF in southern Calif. $\Sigma\Pi$.

John W. Steely, Jr.

Unknown. $\Sigma\Pi$.

Robert R. Stephens

Bob moved to the redwood region and worked for a time as a lumber grader with the Homes-Eureka Lumber Co at Eureka. He continues with the succeeding company, the Pacific Lumber Co at Scotia, Calif., as a senior forest technician.

Melgar L. Trammell

Mel last checked in from The Dalles, Ore.

Delbert N. Wade

Del is a forester with the Union Lumber Co at Fort Bragg. $\Sigma\Pi$.

Forrest B. Wilde

Forrest first joined the U.S. Army and saw service for two years in Korea. In June 1955 he joined the Winton Lumber Co at Martell, Calif. as second assistant forester. At the end of the second summer, in August 1956, Forrest returned to the Army as a combat engineer and later had three years of service in Germany. He is now a captain in the Army Transportation Corps and stationed in Mich. $\Sigma\Pi$.

Master of Forestry

Francis R. Davis, BS U.C. '49

George A. James, BS Univ. of Mich. '48

George is a research forester with the Southeastern FES of the USFS at Asheville, N.C. $\Sigma\Sigma$.

Verne R. Osburn, BS U.C. '52

Master of Science

Paul E. Crebbin, BS U.C. '52

Thesis: Analysis of volume tables for application to Douglas-fir in the California coast ranges.

Johann Jakob Oertli, Grad. Swiss Federal Institute of Technology, Zürich '51, PhD U.C. '56

Thesis: Studies on the mineral nutrition of coniferous seedlings through the use of radioactive tracer elements.

Jacob is an assistant professor in the Dept of Irrigation and Soils at U.C.L.A. $\Sigma\Sigma$.

Doctor of Philosophy

G. Robinson Gregory, BS Central State Teachers Coll. of Mich. '38, BSF and MF Univ. of Mich. '40

Dissertation: Developing economic growth goals for forestry production. (Agric. Economics)

Bob has been continuously at the Univ. of Mich. in Ann Arbor where he is the George Willis Pack Professor of Resource Economics. $\Sigma\Sigma$.

Joseph A. Sacher, BS N.Y. State Coll. of Forestry '41

Dissertation: Structure and histogenesis of the buds of *Pinus lambertiana*. (Botany)

Joseph went to the Univ. of Ill. at Urbana for two years before joining L.A. State Coll. in southern Calif. $\Sigma\Sigma$.

Other Alumni

Bernard Z. Agrons

Bernie has been in industrial forestry from the start. He was, for a time, assistant forester with Glenco Forest Products. Since 1956, when he joined the Rockport Redwood Co as a forester, Bernie has risen to the position of vice-president and general manager of that company. Bernie completed requirements for and received his BS degree in 1965. $\Sigma\Sigma$.

Robert H. Best

Bob is a project engineer with the Ariz. State Highway Dept in the Flagstaff area.

Robert T. Brown, BSF W. Va. Univ. '49

There is no recent word from Bob, whose home is in Romney, W.Va.

Harry A. Fowells, BS '32 and MS '33, Ore. State Univ., PhD Univ. of Md. '58

During his lengthy stay with the USFS at the CF&RES in Berkeley, Harry did considerable graduate work in the field of plant physiology. This work culminated in

his doctorate at the Univ. of Md. after Harry was transferred to the Wash. office. Harry continues there as a staff specialist.

1954

Bachelor of Science

Robert J. Bedow

In 1959 Bob was with the U.S. Navy at the Mare Island Naval Yard in Vallejo, Calif.

Allan W. Beeson

Allan worked for a number of years with Hammon, Jensen and Wallen, consulting foresters in Oakland. Since 1960, he has been with J. F. Siegfried, Mining Engineer-Surveyor at Nevada City, Calif.

Donald L. Binninger

Don joined the Weyerhaeuser Co at Klamath Falls, Ore. as staff forester and is now a logging foreman there. AZ.

†Thomas R. Brock, BS Univ. of Mich. '58 (Aeronautical Engineering)

Except for some time out for school, Tom served almost continuously with the U.S. Air Force, first as an instructor-pilot in Texas, then as a project engineer in N.M. His last assignment was as an exchange pilot with the U.S. Navy, based at China Lake, Calif. In April, 1964, while on a mission from this base, east of the Sierra Nevada mountains, Tom was killed when his plane crashed in the vicinity of Mt. Whitney. ΞΣΠ.

Paul B. Caster

For many years Paul was forester with the Scott Lumber Co Inc. of Burney, Calif. In March 1963 he joined the U.S. Plywood Corp at Anderson, Calif., as a staff forester.

Robert H. Cope

Bob is with the USFS on the Shasta-Trinity NF in Calif.

James F. D'Amelio

Jim is on the Prescott NF in Ariz.

Glenn R. Davies, MF U.C. '59

Between his two degrees at Berkeley, Glenn served as a forester on the N.C. NF. Since receiving his master's degree, he returned to the USFS and has been a timber management assistant on the Modoc NF in Calif.

Howard S. Fish

After a number of positions including that of forester with the BLM at Sacramento, Bud joined the Fibreboard Paper Products Corp in 1962. He serves as forester in the timber dept at that company's Truckee, Calif., operations.

Glenn D. Gallison

Originally associated with the class of 1947, Glenn has been for 17 years with the USNPS. For some years he was park ranger at Yosemite Natl Park and is now the chief park naturalist at Olympic Natl Park in Wash. AZ, ΞΣΠ.

Robert C. Hoerr, MS U.C. '57

In 1960, Bob was a buyer with Fibreboard Paper Products Co in S.F. ΞΣΠ.

Fred W. Isbell

Fred joined the USFS and was located in Calif. for a number of years. He is now the district ranger on the Toiyabe NF at Las Vegas, Nev.

Amram Kadish, MS U.C. '59

Amram is with the Inst. for Arid Zone Research at Beer Scheba, Israel, where he works on forage plant introductions. ΞΣΠ.

Robert M. Lavell

Bob is with the Calif. Div. of State Lands at Sacramento where he is principal land agent.

James S. Lavender

Jim worked for a time with the Ketchikan Pulp Co at Ketchikan, Alaska, as a lab technician. Since 1962 he has been a forester with the BLM at Ukiah, Calif. ΞΣΠ.

Thomas L. Neil

Tom is an associate state forest ranger in the Calif. Div. of For. at Sacramento.

Ted W. Nelson, MF Univ. of Mich. '57

From 1957 to 1964 Ted was a resident forester with the Diamond Natl Corp of Red Bluff, Calif. In 1964, he joined Weyerhaeuser Co in Tacoma, Wash. Ted is the son of DeWitt Nelson, former Calif. state forester and now, Calif. Director of Conservation. ΞΣΠ.

William C. Peakes

Unknown.

Martin A. Rotto

Since graduation Martin has been with the Koppers Co, Inc. He served as a field buyer with the company at Everett, Wash. and is now procurement manager of their operation at Eureka, Calif. ΞΣΠ.

Henry C. Schwarz

Until that partnership dissolved, Hank worked for five years with Wall and Larson, consultants in Sacramento, as a forester and surveyor. In 1960 Hank joined Fibreboard Paper Products Corp at Truckee, Calif. as forest engineer. He is a licensed surveyor in Calif. and Nev.

Emily Anna Shideler (DeBano), MF U.C. '55

The seventh lady forester to receive a degree from U.C., Ann was the first girl to attend summer camp. Following receipt of her master's degree, Ann served as a part-time research assistant with the School while in pursuit of her doctorate in Agric. Economics. In July, 1960, Ann married her fellow graduate student Leonard F. DeBano, who is working toward his doctorate. He works for the PSWF&RES in Glendora, Calif. ΞΣΠ.

Leslie V. Smith, MS U.C. '59

Les is an assistant specialist and forest products chemist at the U.C. Forest Products Laboratory. ΞΣΠ.

Richard W. Steyer

After graduation Dick worked for a short time with the USFS. He then joined the Walter R. Steyer Co of L.A. as a sales engineer. Since 1960 he has been the owner of the Franciscan Landscape Co in Temple City, Calif.

Ze'ev Vered, MS U.C. '57

While working on his master's degree, Ze'ev worked part-time as a research aid with the PSWF&RES in Berkeley. Since 1958, he has been a special agent with the Prudential Insurance Co in Oakland, Calif.

Richard B. Wasson

Unknown. ΞΣΠ.

Herbert M. Webber

Since graduation "Moose" has been with the U.S. Army Signal Corps. He has served as an aviator at Fort Huachuca, Ariz., and is now a captain and aviation officer at the Sacramento, Calif., Army depot.

Joe B. Zaerr, PhD U.C. '64

Upon completion of his doctorate in mid-1964, Joe took a post-doctoral appointment as a research associate with the crops division at the USDA Research Laboratory in Beltsville, Md. The appointment is sponsored by the Natl Research Council—Natl Academy of Sciences. ΞΣΠ.

Master of Forestry**Jack H. Hansen, BS U.C. '53****John T. Keane, BS U.C. '52****Thomas J. Orr, III, BS U.C. '53****Ami Y. Shachori, BS U.C. '53****Master of Science****Johannes P. van Buijtensen, Graduate, State Agric. Univ., Wageningen, Netherlands '52**

Thesis: Identification of pine pollens by chromatography of their free amino acids.

John worked for a time at the Inst. of Paper Chemistry at Appleton, Wisc. Since 1961 he has been with the Forest Genetics Laboratory of the Texas Forest Serv., Coll. Sta., Texas.

Doctor of Philosophy**George W. Gillett, BS Iowa State Coll. '40, MF U.C. '49**

Dissertation: Variation and genetic relationships in the *Whitlavia* and *Gymnobythus* Phacelias. (Botany)

Joe O. Lammi, BS '34 and MS '37, Oregon State Univ.

Dissertation: Primary money income from range watersheds. (Agric. Economics.)

Joe worked for a time as a forest economist with the Intermountain F&RES of the USFS at Ogden, Utah. For approximately six years he was forestry officer with the U.N. FAO at Geneva, Switzerland. In 1961, Joe was appointed professor at the School

of Forestry, N.C. State Coll. at Raleigh and, in 1962, was recognized as the Outstanding Classroom Teacher of the year.

Mendel Mazelis, BS U.C. '43

Dissertation: The biosynthesis of phospholipids in higher plants. (Plants Physiology)

Hudson G. Reynolds, BS U.C. '39, MS U.C. '41

Dissertation: Merriam's kangaroo rat in relation to grazing lands of southern Arizona. (Zoology)

Other Alumni

Ben M. Huey, AB Univ. of Kansas '39, BS Colo. A. & M. Coll. '42, MS Mont. State Univ. '51

Ben is an associate professor of forestry at Colo. State Univ.

Stanley W. Meso, Jr., BSF Purdue Univ. '52

Stan is in the USFS and is a pest control specialist in the timber management div. of the regional office at Denver.

Paivio Rühinen, MF Univ. of Helsinki '51

Paivio returned to his native Finland. $\Sigma\Pi$.

James W. Sizer

Since 1956 Bill has been with the Ariz. Game and Fish Dept at Phoenix where he is the assistant chief of the information and education div. He has served as president and secretary of the Ariz. Outdoor Writers Assoc. and has received three natl awards from the American Assoc. for Conservation Information.

1955

Bachelor of Science

Philip G. Annand, MF Yale Univ. '56

Following graduation, Phil had a number of jobs, including that of assistant forester with the Diamond Match Co at Stirling City, Calif. In 1962, he joined the forestry staff at Humboldt State Coll. as an assistant professor. $\Sigma\Pi$.

William A. Atkinson, MS U.C. '56

Bill is a forester for the Soper-Wheeler Co at Strawberry Valley, Calif. $\Sigma\Pi$.

Donald L. Biddison

Don joined the USFS in Calif. and has moved up to the district ranger at McCloud. In 1961-62 Don was secretary of the Calif. Alumni Foresters. AZ, $\Sigma\Pi$.

Larry R. Burton, MA S.F. State Coll. '62

Larry had a number of jobs before getting his master's degree in creative writing, and is now a writer-editor with the USFS at the Riverside Forest Fire Laboratory of the PSWF&RES.

Kenton P. Clark

Ken cast his lot with the USFS and has been on the San Bernardino NF since graduation. He is now district ranger at Cajon, Calif.

Jerrold G. Colby

Unknown.

Richard J. Day

Since 1957 Dick has been with the Calif. Div. of For. and is a forest technician at Redding.

Warren M. Emlen, BS Penn. State Univ. '63 (Electrical Engineering)

Shortly after leaving Berkeley, Warren joined the U.S. Air Force and is now a captain. AZ.

Richard W. Gardner

Dick got into lumber products sales and was with Woodall, Inc. in El Monte, Calif. Since 1961, he has been a technical representative with Natl Lumber Manufacturer's Assoc. in L.A.

Arland S. Harris

Arland is with the USFS in forest management research at the Juneau, Alaska, branch of the PNWF&RES. $\Sigma\Pi$.

James W. Harrison

Jim worked for a time with the J. A. Baxter and Co in S.F. and is now with the Calif. Div. of For. in Lake County.

Daniel W. Holden, LLB Loyola Univ. of L.A. '58

Since receiving his law degree, Dan has been associated with the firm Kindel and Anderson, attorneys, in southern Calif. $\Sigma\Pi$.

Genaro Ingco, Jr.

Genaro is a forester with the USFS in Calif. $\Sigma\Pi$.

Paul R. Kevin, Jr., BS Univ. of Santa Clara '50 (Political Science)

Paul is a forester with Hammon, Jensen and Wallen, consulting foresters in Oakland, Calif. AZ, $\Sigma\Pi$.

Verner R. Laursen

Verne worked for a time as assistant forester with the Simpson Timber Co at Arcata. Since 1961 he has been a right-of-way agent with the Pacific Gas and Electric Co of S.F.

Harry R. Miller, Jr.

Harry joined the USFS and worked for a number of years in fire research with the PSWF&RES in Berkeley. He is now the district ranger at Goose Lake on the Modoc NF.

William G. Munro, MA U.C. '64 (Public Administration)

Bill is with the USFS on the Malheur NF in Ore. $\Sigma\Pi$.

Burton M. Rowe

Burt is with the USFS on the Shasta-Trinity NF in Calif. $\Sigma\Pi$.

John Rusk, Jr.

John is a district ranger on the Klamath NF in northern Calif.

David J. Sanguinetti

David was the lumber dept. head for the Progress Lumber Co at Redwood City, Calif. In 1962 he became the assistant manager for the Lumbermen's Mercantile at Fremont, Calif.

James H. Shiro

Jim joined the USFS in 1957 and is now district ranger at Mt. Shasta. AZ.

Lon E. Spharler

Lon first worked for the Calif. Div. of For. in the redwood region as an assistant forest technician. He is now a recreation planner with the Calif. Dept of Parks and Recreation in the Santa Barbara area. AZ, $\Sigma\Sigma\Pi$.

Darroll L. Webb, MF U.C. '59

Lee is a forester on the Olympic NF in Wash. $\Sigma\Sigma\Pi$.

Robin I. Welch, MS U.C. '56

With a real love of flying developed during a tour in Korea with the U.S. Air Force, Robin organized his own aerial photographic company upon his return to the U.S. For nine years, Robin was president and chief pilot for Airview Specialists Corp. He is now with Mark Systems, Inc. in Santa Clara, Calif. $\Sigma\Sigma\Pi$.

Robert E. Wickman

Bob is a technical salesman with the Shell Chemical Co in Yakima, Wash. where he has been since 1957. AZ, $\Sigma\Sigma\Pi$.

Master of Forestry

Emily Anna Shideler (DeBano), BS U.C. '54

Master of Science

Craig C. Chandler, BS U.C. '51

Thesis: The classification of forest fuels for wild-land fire control purposes.

Geoffrey E. Greene, BS Colo. A. & M. Coll. '41

Thesis: The relation between stream and air temperatures. Jeff has more than 17 years with the USFS and before doing his master's degree work, was with the Southeastern FES in soils research in S.C. Since 1955, Jeff has been in Region 1 in Mont. as a ranger and now as assistant supervisor of the Lewis and Clark NF.

Paul M. G. Paelinck, Engineer, State Coll. of Agric., Ghent, Belgium, '52

Thesis: Effects of excessively high temperatures on ponderosa pine seedlings.

For a number of years Paul worked as principal forest engineer with the Belgium Congo govt. In 1961 he joined the De Coene Brothers, manufacturers and processors of wood products at Kortrijk, Belgium, as the assistant manager.

Doctor of Philosophy

Robert Z. Callaham, BS U.C. '49

Dissertation: Oleoresin production in the resistance of ponderosa pine to bark beetles. (Botany)

I. Irving Holland, BS U.C. '40, MS U.C. '41

Dissertation: Some factors affecting the consumption of lumber in the United States with emphasis on demand. (Agric. Economics)

David A. Wilson, AB '47 and BS '48 Univ. of B.C.

Dissertation: An analysis of lumber exports from the coast region of British Columbia to the United States and United Kingdom, 1920-1952. (Agric. Economics)

David is with the economics div. of the Dept of Forestry at Ottawa, Canada. ΞΣΠ.

Other Alumni

Charles C. Stroud, BS U.C. '55 (Agric.)

Charles is a technician with the U.S. Geological Survey at Menlo Park, Calif.

1956

Bachelor of Science

Don R. Banks

Don is with the Crown Zellerbach Corp at Seaside, Ore.

Thomas M. Bouse

After two years of service with the U.S. Army in France, Tom joined the USFS and is a forester on the Modoc NF.

Woodbury Lee Bunnell, Jr., MF U.C. '59

Lee is a timber management assistant on the Six Rivers NF in Calif. AZ, ΞΣΠ.

Richard W. Clabaugh

Dick worked briefly as a cost analyst with the U.S. Steel Corp in S.F. Since 1961 he has been with the USFS on the Lassen NF.

James E. Cox

After a number of years as agric. inspector in Santa Clara County, Jim is now the deputy county agric. commissioner for Sacramento County, Calif.

Peter A. Crebbin

After three and one-half years with the U.S. Marine Corps, Pete is now a logging superintendent with the Weyerhaeuser Co at Klamath Falls, Ore. Pete's father, Alfred, was a member of the class of 1928.

David S. Dealey, MF U.C. '57

Until 1964, David was a forester with the Diamond Natl Corp at Red Bluff, Calif. He is now with Kimberly-Clark Corp at Anderson. AZ, ΞΣΠ.

Charles S. Dickinson, MBA U.C. '58 (Business Administration)

Following his graduate work, Chuck joined the Calif. Redwood Assoc. in S.F. where he is the promotion manager. AZ, ΞΣΠ.

Mark Foster

Mark worked for a time as cruiser for the Winton Lumber Co, and in 1959 joined the Interstate Container Corp at Red Bluff, Calif. as industrial engineer and personnel manager. In 1964 he resigned to take a position with Kimberly-Clark Corp at Anderson, Calif.

Henry H. Haight, IV, MBA Harvard Univ. '59

Tony worked briefly as an industrial economist for Stanford Research Inst. in Menlo Park. Since 1960 he has been the president of the Tuolumne Corp in S.F. Tony

is the great grandson and namesake of the governor of Calif. who signed the charter creating the Univ. of Calif. in 1868.

Robert W. Jessen, AB U.C. '55 (Wildlife Conservation)

After nearly two years of Army service in Germany, Bob joined the USFS and is assistant district ranger at Sierraville on the Tahoe NF. AZ, ΞΣΠ.

Eldon R. Knauf, Jr.

"Tobe" is a forester with Firco Lumber Co in Willits, Calif.

Martin W. Ladd

For a time Martin taught seventh and eighth grades in the Seventh-Day Adventist Church School in Yuba City, Calif. In the summer of 1958 he joined the Harris Pine Mills in Pendleton, Ore. as chief forester.

Phillip G. Lowell

Phil joined the Calif. Div. of For. as a forest technician and service forester in Mendocino County.

Robert J. McDonald

Bob is a forester with the USFS at the Northern Calif. Supply Center in Redding, Calif.

David S. Meyer

Dave is a forester with Western Timber Services, Inc in Arcata, Calif. ΞΣΠ.

James R. Moorhead

Jim joined the USFS in the Intermountain Region and is now district ranger on the Bridger NF in Pinedale, Wyo.

John H. Razzeto

Jack worked for a time as a timber cruiser with Frank and Dean Solinsky, consulting foresters, S.F.; as a salesman for the Rounds Lumber Co, Cloverdale; as a timber and log buyer for Twin Harbors Lumber Co, Arcata; and is now assistant sales production coordinator for Georgia-Pacific Corp in Samoa, Calif.

Karl F. Remmy

Karl joined the BLM in Ore. as a forester and is now its timber manager at Coos Bay.

Roy W. Scott

Originally with the class of '51, Roy worked briefly as a lab technician with the Dow Chemical Co at Pittsburg, Calif. Since 1954 he has been a teacher in the Fort Bragg schools at Fort Bragg, Calif.

Lee A. Shugart

After two years with the U.S. Army and having received his general secondary teaching credential from San Jose State Coll. in 1960, Lee has been with the Pomona Unified School District in southern Calif. as a science teacher.

David N. Turner

Dave is an industrial engineer with Fluor Products Co, manufacturers of redwood cooling towers and glue-lam beams, at Santa Rosa, Calif.

Harold E. Waksdal

Hal joined the USFS in Calif. and is now assistant district ranger at Big Creek on the Sierra NF.

Bruce A. Waldron

Bruce is with the USFS in Calif. and, after duty on the Modoc NF, he is a timber management officer on the Sierra NF. AZ, ΞΣΠ.

Allan J. West, MF U.C. '57

Al joined the PSWF&RES of the USFS and was for many years with snow management research at the Central Sierra Snow Laboratory at Soda Springs. In 1964, he transferred to administration and was assigned to the Inyo NF. AZ, ΞΣΠ.

Master of Forestry

Wilbur G. Charter, BS U.C. '53

Neil B. Opsal, BS U.C. '53

Master of Science

William A. Atkinson, BS U.C. '55

Thesis: A method for the recreational evaluation of forest land.

Roger W. C. Clemens, BS U.C. '41

Thesis: Development of forestry courses in the secondary schools in the redwood region.

F. Roger Gartner, BS Univ. of Wyo. '50

Thesis: Competition between *Lolium multiflorum* and *Ceanothus cuneatus* for nitrogen on two different soil types. (Range Management)

Bob is assistant professor in the Dept of Animal Science in the S.D. State Coll., Brookings.

Charles A. Graham, BS U.C. '49

Thesis: Some reactions of annual vegetation to fire on Sierra Nevada foothill range land.

Stanley L. Krugman, BS Univ. of Mo. '55, PhD U.C. '61

Thesis: The anthocyanin and leuco-anthocyanins of sugar pine (*Pinus lambertiana* Dougl.) seedlings.

Since completing his doctorate Stan has been with the PSWF&RES of the USFS in Berkeley as a plant physiologist.

Robin I. Welch, BS U.C. '55

Thesis: Procurement of aerial photography for forestry purposes.

Doctor of Philosophy

Levi T. Burcham, BS U.C. '41, MS Univ. of Neb. '50

Dissertation: Historical geography of the range livestock industry of California. (Geography)

William B. Critchfield, BS U.C. '49

Dissertation: Morphological and physiological variation in *Pinus contorta* Dougl. (Botany)

Peter Lim, BS U.C. '51 (Chemistry)

Dissertation: A sesquiterpene alcohol of *Pinus armandi*. (Agric. Chemistry)

Pete has been associated with Stanford Research Inst. since he completed his doctorate.

Arthur D. Moore, BS '49 and MS '50, N.Y. State Coll. of Forestry

Dissertation: Studies on the toxicity of residual-type, organic insecticides to bark beetles, with specific emphasis on *Ips confusus* (Lec.). (Entomology)

Art taught forest entomology for one year at Berkeley before going to the USDA Agric. Research Center at Beltsville, Md. In 1964, Art returned to Berkeley and insecticide research with the PSWF&RES. ΞΣΠ.

Furness David Morgan, BS '50 and MS '52, Univ. of New Zealand

Dissertation: Factors influencing the abundance of *Recurbaria milleri* Busck (Lepidoptra Gelechiidae). (Entomology)

Dave is a professor of forest entomology at the Waite Agric. Inst. at Adelaide, Australia.

J. Jacob Oertli, Graduate Swiss Federal Inst. of Technology, Zürich '51, MS U.C. '53

Dissertation: Studies on the uptake of iron by higher plants. (Soil Science)

Robert G. Stanley, BS Mich. State Coll. '48

Dissertation: Respiratory patterns in germinating seeds of sugar pine (*Pinus lambertiana*, Dougl.). (Plant Physiology)

Bob was, for several years, a plant physiologist with the PSWF&RES in Berkeley. He worked at Harvard Univ. during the year 1962-63 on a post-doctoral fellowship. In March, 1965, Bob joined the staff at the School of Forestry, Univ. of Fla., Gainesville, Fla. to teach and continue his work in pollen biochemistry.

Paul J. Zinke, BS U.C. '42, MS U.C. '52

Dissertation: The magnitude and variation of certain soil properties associated with three forest tree species in California. (Soil Science)

1957

Bachelor of Science

Walter P. Bemis

A Calif. Div. of For. man before, during, and after college, Walt is now forest technician in Sacramento. ΞΣΠ.

John B. Benediktson, Jr., MF U.C. '59

With the USFS since his master's work, John was assistant ranger on the Angeles NF and is now ranger on the Descanso district of the Cleveland NF in southern Calif. AZ, ΞΣΠ.

Rolf W. Benseler, MF Yale Univ. '58

Rolf taught for a time at the Modesto (Calif.) Junior Coll. but is now back in Berkeley working toward his doctorate. AZ, ΞΣΠ.

Richard L. Bruni

Dick is a U.S. Naval aviator.

Robert A. Cline

Bob worked for the Southern Pacific Land Co as forest assistant in Mt. Shasta, Calif. for about one year. In 1958 he became resident forester for the Intern. Paper Co at Weed, Calif.

John N. Coburn

John was a district ranger on the Shasta-Trinity NF in northern Calif. and is now at Challenge on the Plumas N.F. AZ, $\Xi\SII$.

George D. Cooper

Doug is a captain and pilot with the U.S. Air Force and based in Texas.

David S. Doyle

For a time Dave was part owner, with Robin I. Welch '55 of Airview Specialists Corp. In 1960 Dave moved to Wash., D.C. where he is an intelligence analyst.

Devere L. Ferrin

Devere is with the Simpson Timber Co in Arcata, Calif., as production planner.

Richard B. Fores

Dick joined the USFS in Calif. and, after a number of assignments, is now a district ranger on the Mendocino NF. AZ.

Douglas W. Hayden

Doug had a short reserve duty hitch in the Army, and since 1958 has been with the USFS on the Stanislaus NF.

Dale E. Hosler

Dale is district ranger for the USFS at Red Bluff, Calif. His father-in-law, Paul Stathem '34, is supervisor of the Shasta-Trinity NF. $\Xi\SII$.

James L. Jenkinson

Since receiving his BS degree, Jim has been an assistant specialist and part-time student at Berkeley. In May, 1964 he completed the qualifying examinations for his PhD. $\Xi\SII$.

David E. Johnson

Dave is an assistant district ranger on the Shasta-Trinity NF of the USFS.

Curtiss W. Kennon

After two years of active duty with the Navy, Curt joined the Calif. Div. of For. in Riverside as a fire fighter foreman. In 1964, he moved to Fort Bragg where he is a forest technician on the Jackson State Forest.

Richard H. Kingdon, Jr.

Dick last reported from the La.-Miss. area where he is associated with the Hercules Powder Co. His powder experience began in the Klamath Falls, Ore., area where his company was distilling pine stumps.

Oliver J. Kolkman

Ollie worked briefly with the USFS and then had two years of U.S. Army duty. Since 1961 he has been with Hammon, Jensen and Wallen, consulting foresters in Oakland, Calif. AZ, $\Xi\SII$.

Richard T. Lewis

Dick was a deputy forester with the L.A. County Fire Dept. Forestry Div., but is now back in Berkeley working toward a degree in oriental languages.

Robert M. Martin

Bob is with the USFS on the Mendocino NF. ΣΞΠ.

Carl W. Maxey, MS U.C. '62 (Wood Technology)

Following his master's work, Carl worked with the McDade Timber Laboratory at Santa Rosa, Calif. as a wood technologist. In October, 1963 he joined the Black-Clawson Co at Everett, Wash., where he works with Eugene Bryan, MS '59. AZ.

Donis W. Owen

Since graduation, Donis has been with the USFS in Idaho.

John Petersen

Before his two years of Army service, John taught briefly at Chattahoochee County Schools at Cusseta, Ga. Since 1962 John has been a teacher in the Oakland Unified Schools at Oakland, Calif.

Gary W. Plisco

In 1961 Gary was with the USFS on the Los Padres NF in Calif.

Hasan K. Qashú, MS U.C. '57

A native of Jordan, Hasan worked for a number of years toward his doctorate at Berkeley. In 1963 he joined the PSWF&RES at Glendora, Calif. In the fall of 1963 Hasan moved to Tucson, Ariz. where he is with the Dept of Watershed Management of the Univ. of Ariz. ΣΞΠ.

Walter E. Schlumpf

Walt is an assistant district ranger with the USFS on the Tahoe NF at Downieville, Calif. ΞΣΠ.

Donald W. Sprague

Don is with the Pacific Fire Rating Bur. of S.F., Calif.

John C. Tappeiner II, MS U.C. '61

With two years of Navy duty after his bachelor's degree, John is a research assistant at the School of Forestry working towards his doctorate.

Peter A. Twight

After nearly three years of service with the Army, Pete joined the USFS and is now a recreation assistant on the Valyermo district of the Angeles NF in southern Calif. Pete is the son-in-law of Horace Jones '36 and Alice Goen Jones '37.

Samuel M. Van Wyck

Sam worked for a time with the USDI, Bur. of Indian Affairs in Idaho. Since 1961 he has been the owner and president of Electro Marine of Puerto Rico, Inc and located in Santurce, Puerto Rico.

John M. Van Zander, BS Sacramento State Coll. '62 (Civil Engineering)

John is a civil engineer with the Eldorado NF at Placerville, Calif.

Raymond G. Weinmann

After three years of Navy duty, Ray is with the USFS on the Sierra NF at Big Creek, Calif. AZ, ΞΣΠ.

James E. Whitacre, AB U.C.L.A. '52 (Political Science)

Jim is a forester with the Pacific Gas and Electric Co in S.F. AZ, ΞΣΠ.

Lawson L. Winton

The first recipient of the Walter Mulford Scholarship, Lawson has moved on to the Univ. of Minn. for advanced degrees in forest genetics. AZ, ΞΣΠ.

John D. Zachry

John is with the USFS and, after a position of assistant ranger on the Inyo NF, is now a recreation planner on the Sierra NF.

Master of Forestry

David S. Dealey, BS U.C. '56

Keith M. Gray, BS Univ. of Sidney (Australia) '50

For many years, with the exception of his stay in Berkeley, Keith was with the Forestry Commission of New South Wales. He is now with the U.N. FAO in Jordan. ΞΣΠ.

William G. Herbolzheimer, BS Mont. State Univ. '51

Bill has more than 12 years with the USFS in Calif. and is now a district ranger on the Sierra NF. ΞΣΠ.

Allan J. West, BS U.C. '56

Master of Science

Thomas E. Bedell, BS Calif. State Polytechnic Coll. '53 (Animal Husbandry)

Thesis: Weight of twig elongation and techniques of measuring browse production of *Adenostoma fasciculatum*. (Range Management)

Tom was a farm advisor with the U.C. Agric. Ext. Serv. in Modoc County. He is now working toward his doctorate at Ore. State Univ.

Joseph W. Gorrell, BS Purdue Univ. '54, MF Yale Univ. '63

Thesis: The rate of moisture loss or gain in some common forest fuels following changes in relative humidity.

After a number of assignments, including that of district ranger on the Mendocino NF, Calif., Joe got his second master's degree and is now in the fire control section of the USFS in the Wash. office. AZ.

Robert C. Hoerr, BS U.C. '54

Thesis: Consumption of paperboard in the western region of the United States, 1929-1965.

Robert A. Merriam, BS Iowa State Coll. '51

Thesis: Effect of fire on streamflow from small watersheds in the Sierra Nevada foothills.

Bob is a research forester with the USFS and has been stationed at Berkeley and Glendora, Calif. with the PSWF&RES, and is now at Provo, Utah, with the Inter-mountain F&RES. ΞΣΠ.

Hasan K. Qashú, BS U.C. '57

Thesis: Response of Jeffrey pine seedlings to some properties of serpentine soils.

Robert F. Scharpf, BS Univ. of Mo. '54, PhD U.C. '63

Thesis: Growth and extension of the endophytic system of the dwarf mistletoe (*Arceuthobium campylopodum* Dougl.).

Bob is a plant pathologist with the PSWF&RES in Berkeley. ΞΣΠ.

Ze'ev Vered, BS U.C. '54

Thesis: Auxin in long shoots of Coulter pine (*Pinus coulteri*).

Doctor of Philosophy

Frank J. Baron, BS U.C. '49

Dissertation: Observations of some factors associated with the germination of seed of sugar pine (*Pinus lambertiana* Dougl.). (Plant Physiology)

Other Alumni

James D. Ruth

Jim worked for a number of years as a field representative for the Redwood Region Conservation Council at Eureka, Calif. In early 1963 Jim joined the Standard Oil Co of Calif. as a management trainee. In late 1964 Jim completed his BS degree requirements and received it in 1965.

1 9 5 8

Bachelor of Science

James R. Batchelder

Jim is general plant foreman for Koppers Co Inc at Oroville, Calif.

James C. Bates

Jim is an assistant ranger with the USFS on the San Bernardino NF.

Frank W. Beard, Jr.

Frank is with the USFS on the Shasta-Trinity NF. AZ.

Prasert Bhodthipuks, MF U.C. '60

A native of Thailand, Prasert is continuing his education at Duke Univ. in Durham, N.C. ΞΣΠ.

Richard D. Carson

Dick is a forester on the Eldorado NF.

Richard E. Dresser

Dick is a forest technician with the Calif. Div. of For. on the Jackson State Forest at Fort Bragg. ΞΣΠ.

John H. Hammitt

After nearly four years of active duty with the U.S. Air Force, John is a research forester with the PSWF&RES in Berkeley.

†**Eric N. Housden**

Eric joined the U.S. Navy and served as an air intelligence officer at Alameda. He was killed in a mountaineering accident on September 18, 1960.

Jon L. Isberg

Jon had two years of active duty with the Navy and then worked as a forester with the Ore. State Dept of Forestry. In March 1964 he resigned to become full-time operator of his own tree farm at Molalla, Ore. Jon sells Christmas trees and runs his forest thinnings through a portable mill. AZ, $\Sigma\Pi$.

Richard E. Johnson

Dick did one year of graduate work in zoology and then attended the Fuller Theological Seminary for two years. For four summers he worked as a ranger naturalist at Glacier Natl Park in Mont. From 1961 to 1963 Dick was in the Army. $\Sigma\Pi$.

Richard G. Krebill, PhD Univ. of Wisc. '62

Dick is a forest pathologist with the Intermountain F&RES of the USFS at Logan, Utah. $\Sigma\Pi$.

Bernhard J. Krohn

Ben worked for a time with North American Aviation Corp in southern Calif. and was last reported to be working on an MS in psychology at S.F. State Coll.

Larry J. Larson

After a number of district staff positions on the Shasta-Trinity NF, Larry is now a district ranger on the Eldorado NF. AZ, $\Sigma\Pi$.

Richard E. Lund

Dick is a timber management assistant with the USFS on the Tahoe NF at Downieville, Calif.

RobRoy A. MacGregor

RobRoy is an assistant ranger on the Lassen NF.

Daniel D. Oswald

Dan is a forest survey research forester with the PSWF&RES. $\Sigma\Pi$.

Nicholas J. Poppin

Nick worked for a year and a half with the USFS and in 1960 hung out his shingle as a building contractor in Hayward, Calif.

Donald K. Rodgers

Until September 1963, Don served as a naval aviator in the Pacific. He returned to school for one semester and was a 1964 summer camp teaching assistant. Immediately after camp, Don joined the Collins Pine Co as a forester. AZ, $\Sigma\Pi$.

Larry S. Rodick

Larry is with the Peace Corps in the Dominican Republic.

Charles H. Schaefer, PhD U.C. '62

Following his doctorate work, Charlie joined the Beltsville, Md. laboratory of the USDA as an entomologist. In early 1964 he resigned to take a position with the Shell Development Co in Modesto, Calif. $\Sigma\Pi$.

Harold F. Sebring, Jr., AB San Jose State Coll. '53 (Biological Sciences)

Hal is a district ranger on the Shasta-Trinity NF. $\Sigma\Pi$.

John H. Seyden, Jr.

John is with the USFS on the Sequoia NF. $\Sigma\Pi$.

Roger G. Skolmen, MS U.C. '59

Roger is a research forester with the PSWF&RES in Hawaii. ΞΣΠ.

Cleburne O. Smith

Clay is a forester with the USFS at Groverton, Texas. ΞΣΠ.

Alan D. Stanchfield

Al has traveled, studied, and lived in Europe since graduation.

Jack E. Throop

Jack had two years of active duty in naval intelligence and is now a photographic engineer with Itek Corp in Palo Alto, Calif. ΞΣΠ.

Edward A. Tunheim

Ed is a forester with Cal-Pacific Forest Consultants at Soquel, Santa Cruz County, Calif. ΞΣΠ.

John D. Warnock

John joined the USFS and, after assignments on the Sierra NF, is now a ranger on the Shasta-Trinity NF.

Herman F. Zittel

Herm is a forester on the Eldorado NF.

Master of Forestry

Paul Casamajor, BS U.C. '41

Dale O. Hall, BS U.C. '51

Dennis E. Teeguarden, BS Mich. Coll. of Mining and Technology '53, PhD U.C. '64. ΞΣΠ.

(See Chapter 5—The Staff)

Master of Science

James R. Griffin, BS U.C. '52, PhD U.C. '62

Thesis: A study of the distribution of *Pinus ponderosa* Laws. and *Pinus attenuata* Lemm. on sandy soils in Santa Cruz County, California.

Wayne C. Hickey, Jr., BS N.M. Coll. of Agric. and Mechanical Arts '51

Thesis: Yield prediction equations for crested wheatgrass grown under varying climate and varying intensity of use. (Range Management)

Wayne is a research range conservationist with the USFS at Albuquerque, N.M. AZ.

Doctor of Philosophy

Robert F. Wagle, BS Univ. of Minn. '46, MF Univ. of Wash. '55

Dissertation: Early growth variations in bitter brush and its relation to environment. (Botany)

Bob is an associate professor at the Univ. of Ariz. in Tucson.

Other Alumni

Robert R. Mead

Unknown.

1959

Bachelor of Science

David M. Burns

Dave is a forest technician with the Calif. Div. of For. on the Jackson State Forest, Fort Bragg. AZ, ΞΣΠ.

William E. Butler

Bill is with the USFS at Medford, Ore.

David R. Campbell

After two years on active duty with the U.S. Army and nearly two years with the USFS, Dave is now a consulting forester at Battleground, Wash.

William M. Cannon

Bill is an assistant district ranger with the USFS on the Stanislaus NF. ΞΣΠ.

Norden H. Cheatham

Dan is a forester with the Hawaii Div. of For. on the island of Maui. He has completed some of the work toward a master's degree in watershed management at the Univ. of Ariz. AZ.

William N. Dennison

Bill is a forest engineer with the Diamond Natl Corp at Red Bluff, Calif. ΞΣΠ.

Joseph S. Drake

Joe is an electrical contractor in the L.A. area.

Norman A. Farrell

Norm is with the Crown Zellerbach Corp in the L.A. area. He is the son of Norman J. Farrell '31. ΞΣΠ.

George T. Ferrell

George continues his graduate work with the Univ. in the field of zoology.

James A. Frank

Jim is with Evju Products Co in S.F.

Garrett R. Goodacre

Garry worked for four years as a forester with Masonite Corp in Ukiah. In mid-1963 he resigned to form an engineering and surveying consulting partnership, also in Ukiah. ΞΣΠ.

Walter J. Kaiser, Jr., PhD U.C. '63

Upon completion of his doctorate, Walt joined the tropical research dept of the United Fruit Co in Honduras, Central America as a plant pathologist. ΞΣΠ.

Wayne L. Knauf, BS U.C. '59 (Business Administration)

The first Cal-forester to receive two bachelor degrees at the same ceremony, Wayne worked for a time with the Rockport Redwood Co as a forester. In early 1960

he joined the USFS and is now a forester in the regional office in S.F. Wayne is secretary-treasurer of the Calif. Alumni Foresters Assoc.

Harry A. Kolkmann

Harry worked for four years with the USFS on the Eldorado and Inyo natl forests. In late 1963 he resigned to enter medical school.

Phillip H. Lord

Phil is with the USFS in Calif.

Richard L. McKinnon

Dick is on the Six Rivers NF.

Gary D. Morgan

Gary is a forester on the Plumas NF.

Don L. Olson

Don had three years of Army duty and then worked briefly as a photographic engineer with Itek Corp in Palo Alto. He is now with the Geosciences Div. of Texas Instruments Corp in Dallas, Texas.

Richard A. Parady

Dick is a computer programmer and analyst for the Systems Development Corp in Santa Monica, Calif.

Roy A. Perkins

Roy is an assistant state forest ranger with the Calif. Div. of For. in Santa Clara County.

Charles R. Pickering

Chuck is an assistant district ranger on the San Bernardino NF in southern Calif.

Donald A. Potter

Don is a forester on the Plumas NF. ΞΣΠ.

Fred L. Schaub

Fred is on the Shasta-Trinity NF. ΞΣΠ.

Raymond C. Utterback

Ray began with the USFS in Calif. In 1964 he joined the forestry dept of L.A. County. ΞΣΠ.

David M. Whitechat

After three years of active duty with the U.S. Air Force, Dave is now assistant forester with the Pacific Gas and Electric Co in S.F.

Everett R. Winter

Everett is a forester with the USFS on the Modoc NF.

Robert R. Ziemer, MS U.C. '63

Bob is a watershed management research forester with the PSWF&RES in Berkeley. ΞΣΠ.

Master of Forestry

John B. Benediktson, Jr., BS U.C. '57

Woodbury Lee Bunnell, Jr., BS U.C. '56

Glenn R. Davies, BS U.C. '54

Alan R. Eddy, BSF Univ. of Melbourne (Australia) '53

With more than 18 years of service, Alan is a senior lecturer and forester with the Forest Commission of Victoria, Australia. $\Sigma\Sigma\Pi$.

Friedrich W. von Althen, BSF Univ. of B.C. '56

Fred worked for a time with a consulting forestry firm in Vancouver, B.C., and is now a research officer with the Canadian Dept of Forestry at Richmond Hill, Ontario, Canada. $\Sigma\Sigma\Pi$.

William B. Wallace, BS Univ. of Idaho '55

Since getting his bachelor's degree at Idaho, Bill has been with the Crown Zellerbach Corp and is now assistant director of applied forest research on the Clatsop Div. at Gearhart, Ore.

Darroll L. Webb, BS U.C. '55

Master of Science

Eugene L. Bryan, BS Univ. of Idaho '57, MS U.C. '61 (Engineering Sciences), PhD Univ. of Mich. '63

Thesis: Bending strength of wood particle board under long-term loading. (Wood Technology)

Gene is wood technologist with Black-Clawson Co in Everett, Wash.

Jean Pierre V. de Riberolles, Graduate, Higher School of Forestry, Paris, France '56

Thesis: The influence of the surface texture of strength of butt-end glued wood. (Wood Technology)

Jean has returned to his native Paris, France.

Amram Kadish, BS U.C. '54

Thesis: The effect of fertilization on the yield and botanical composition of the forage crop on two range soils in Pinole, California. (Range Management)

William J. Libby, BS Univ. of Mich. '54, PhD U.C. '61. $\Sigma\Sigma\Pi$.

Thesis: Rooting responses of eastern white pine (*Pinus strobus* L.) to application of lanolin and kinetin.

(See Chapter 5—The Staff)

John B. McDonald, BSF Univ. of Toronto '57

Thesis: An ecological study of Monterey pine in Monterey County, California.

John is with the School of Forestry at the Univ. of Wash.

Camman Henry Niederhof, BS Pa. State Coll. '38

Henry is manager of the wood dept for W.Va. Pulp and Paper Co at Charleston, S.C. He is a commissioner of forestry for S.C. and chairman of the Forestry Study Committee for the S.C. state legislature.

Timothy R. Plumb, Jr., BS Ore. State Univ. '54

Thesis: Determining the crown closures of forest stands from aerial photographs.

Tim is now a research forester at the Riverside Forest Fire Laboratory of the PSWF&RES. ☞☞II.

Roger G. Skolmen, BS U.C. '58

Thesis: Growth fluctuations of ponderosa and sugar pine as related to the amount and seasonal distribution of rainfall.

Leslie V. Smith, BS U.C. '54

Thesis: Diurnal variations of the sugar content of sugar pine (*Pinus lambertiana* Dougl.) foliage.

Doctor of Philosophy

James O. Klemmedson, BS U.C. '50, MS Colo. A. & M. Coll. '53

Dissertation: Influence of pedogenic factors on availability of nitrogen, sulphur, and phosphorus in forest and grassland soils of California. (Soil Science)

Jane Murdock Ulrich, BS Mont. State Coll. '34, MS U.C. '36

Dissertation: Auxin production by some mycorrhizal fungi and its relation to the morphology of sugar pine roots. (Plant Physiology)

Other Alumni

Marcel DeBacker, Forest Engineer, Univ. of Louvain '50

A native Belgian and long-time resident of the Belgium Congo, Marcel is now with the U.N. FAO in Geneva. ☞☞II.

1 9 6 0

Bachelor of Science

Thomas J. Aley, MS U.C. '62

Tom served briefly as a research assistant at Berkeley in the spring of 1963. He combined his interest in soils and speleology to conduct research for a federal agency in some caves on islands in the Caribbean. In the fall of 1963 Tom did additional graduate work at the Univ. of Ariz. and in early 1964 joined a watershed engineering firm in the L.A. basin area. ☞☞II.

Frank F. Alford, Jr.

Frank is a forester with the USFS in Springville, Calif.

Richard M. Benedict

Dick is a forester with the Pacific Lumber Co at Scotia, Calif.

William R. Bentley, MF, Univ. of Mich. '61, PhD (Agric. Econ.) U.C. '65

Bill departed from Berkeley in the late summer of 1963, in a cloud of final drafts of his dissertation, for Ames, Iowa, where he had just been appointed assistant professor of forestry at Iowa State Univ. ☞☞II.

Joseph G. Bicho, MS U.C. '64

Joe is a continuing graduate student and working on his doctorate in wood technology. ☞☞II.

Stephen P. Bradley

Steve is in the supply corps of the U.S. Navy in the Pacific.

James S. Ceragioli

Jim is a right-of-way agent in the Land Acquisition Dept of the Calif. Div. of Highways in S.F.

Donald R. Collins

Don is with Juras and Assoc., surveyors, at Reseda, near L.A.

Stanley R. Cook

Stanley is a biology teacher at Lincoln High School at San Jose. $\Sigma\Pi$.

Robert P. Fairchild, MBA U.C. '64

After two years with the Army in Europe, Bob returned to Berkeley and received his master's degree in business administration and now works for the Pacific Vegetable Oil Co in S.F.

L. Eugene Hartzell

Gene worked briefly as a graduate trainee with the Calif. Div. of For. before entering the Navy.

Jack F. Hooper, MS U.C. '62

Jack is continuing his work toward a doctorate in agric. economics at Berkeley. $\Sigma\Pi$.

Kurt W. Korthals

Kurt is a forester with the Weyerhaeuser Co at Klamath Falls, Ore.

Gerald N. Lanier

Gerry worked briefly with the USFS and is now a doctoral graduate student in the forest entomology program at Berkeley. $\Sigma\Pi$.

Robert L. Leonard, MF Yale Univ. '61

Bob is a part-time research assistant in forestry while he continues work towards his doctorate in forest physiology at Berkeley. $\Sigma\Pi$.

Marvin P. Miranda

A native of Chili, Marvin is employed by Hammon, Jensen and Wallen, consulting foresters in Oakland.

Donald W. Paulsen

Don is an assistant forest technician with the Calif. Div. of For. at Fort Bragg.

David E. Pesonen

Dave has served as research assistant on two major contract research projects with the School, as a legislative assistant in Sacramento, and for the Sierra Club in S.F. Much of his time during 1963-64 was devoted to preventing the establishment of a nuclear power plant at Bodega Head on the northern Calif. coast. $\Sigma\Pi$.

Robert C. Peters, MF Yale Univ. '61

Bob is with the Northeastern FES of the USFS at Upper Darby, Penn. $\Sigma\Pi$.

Robert L. Rennie

Bob is a forester with the USFS on the Modoc NF.

John L. Ronald

A Cal footballer who played in the Rose Bowl in 1959, John is now a forester with the USFS on the Six Rivers NF.

F. Weldon Sharp

Weldon is a forester with the USFS on the Sierra NF.

Jack C. Smith

Jack is a forester with the USFS at Hat Creek on the Shasta-Trinity NF.

Reynold G. Stokes

Rennie entered the U.S. Army and was stationed in N.C. Early in 1964 he took a position in forest ecology with the New Zealand Forest Serv. at Rotorua.

George S. Unsoeld

George worked for nearly three years with the Pacific Lumber Co at Scotia. He is now with Frank and Dean Solinsky, consulting foresters, in S.F.

Richard B. Vasey

Dick is a continuing graduate student in Berkeley, and in May 1964 completed his qualifying examinations and was advanced to candidacy for his doctorate. AZ, Σ II.

W. Wayne Wilcox, MS '62 and PhD '65 Univ. of Wisc. (Plant Pathology)

Wayne completed his graduate work at the Univ. of Wisc. in 1964 and in October 1964 became assistant forest products pathologist at the U.C. Forest Products Laboratory. Σ II.

Master of Forestry**Prasert Bhodthipuks, BS U.C. '58****David M. Cameron, BSc Univ. of Queensland (Australia) '58**

Following his graduate work at Berkeley, David returned to his native Australia where he is a forest tree nutrition research officer with the Queensland Forestry Dept at Beerwah, Queensland. Σ II.

Richard Kankam, BS Mich. State Univ. '58

Dick returned to his native Ghana where he is senior assistant conservator of forests at Kumasi.

Robert J. Zwirtz, BS Univ. of Idaho '58

Bob is a forester with the USFS on Sierra NF.

Master of Science**Richard O. Meeuwig, BS U.C. '51**

Thesis: Effect of seeding and grazing on infiltration capacity and soil stability on a subalpine range in central Utah.

Asbjörn M. Svendsrud, Grad. Agric. Coll. of Norway '54

Thesis: Some characteristics of the market of the Norwegian pulp and paper industry.

Asbjörn returned to his native Norway where he is a research forester in the Inst. of Forest Economics in Vollebakk. $\Sigma\Pi$.

Keith Van Cleve, BS Univ. of Wash. '58

Thesis: A study of the nitrogen economy of Bishop pine (*Pinus muricata*) stands of various ages.

Keith is a continuing graduate student in the doctoral program.

Doctor of Philosophy

David L. Wood, BS N.Y. State Coll. of Forestry '52

Dissertation: Studies on host selection by *Ips confusus* (Le Conte) (Coleoptera: Scolytidae), with special reference to Hopkins' host selection principle. (Entomology)

David continues with the Dept of Entomology at Berkeley as a lecturer and specialist in forest entomology. $\Sigma\Pi$.

Other Alumni

Elliot L. Amidon, BS Colo. A. & M. Coll. '55, MS U.C. '60 (Agric. Economics)

Elliot is a forest economist with the PSWF&RES in Berkeley.

George A. Blitz, AB U.C. '53, MA U.C. '64

George left forestry before graduation. He is now a biology teacher in the East Bay area.

Roger S. Brunet

Roger is associated with his father in the Burlingame Hardware Co in Burlingame, Calif.

Harry Ervin

Harry is with the Weyerhaeuser Co in Oakland, Calif.

Lauri Hyvaaka, BS Univ. of Finland, '58

Lauri did one year of graduate work at Berkeley. $\Sigma\Pi$.

1961

Bachelor of Science

Kenneth A. Austin

With the Calif. Div. of For. for several years before coming to Berkeley, Ken rejoined the Div. as a forestry graduate trainee and is now an assistant ranger in Lassen and Modoc counties. $\Sigma\Pi$.

Brian R. Barrette

Brian is an assistant forest technician with the Calif. Div. of For. at Fort Bragg.

Philip H. Beam

Phil worked briefly for the Humboldt County tax assessor and later for Hammon, Jensen and Wallen in Oakland. In 1964 he became a representative in S.F. for the Natl Independent Business Assoc.

John B. Buchanan

John worked on survey crews with a number of small consulting engineering firms and now has his own consulting service in the Seattle, Wash. area.

Ronald B. Cecchi

Ron is a forester with the USFS on the Eldorado NF.

John J. Clifford

John had four years of Army service in Va. and in Europe before returning to civilian life in early 1964.

L. Terrence Conner

Terry is a technical forester with the Weyerhaeuser Co in Tacoma, Wash.

Gary W. Fowler

Gary entered the Army and was, for a time, an instructor at Fort Belvoir, Va. In late 1963 he was assigned to the far western Pacific and returned to graduate school upon his release from the Army in the summer of 1964. Gary is the son of Carl W. Fowler '34. ΞΣΠ.

William H. Gardiner

Bill is a park naturalist with the U.S. Natl Capital Parks in Wash., D.C. ΞΣΠ.

Arthur P. Gleason

Art was in the U.S. Marine Corps stationed in southern Calif., but has now joined the USFS in Ore.

Robert S. Gordon

Bob is an aviator with the U.S. Army at Milwaukee, Wisc.

Bernard W. Heitkotter

Barney is in the Army as a missile systems technician and stationed in Fla.

Kerby R. Lauderdale, MS Purdue Univ. '63

Unknown. ΞΣΠ.

Robert W. Loomis, Jr.

After some military and civilian service in Alaska, Bob worked briefly with the Calif. Div. of For. He is now an independent logger in the central Sierra region.

Stanley R. MacDonald

Until mid-1963, Stan worked as a lab technician with the Univ. Dept of Biological Control. He then became a forestry graduate trainee with the Calif. Div. of For. at Fresno. ΞΣΠ.

Paul D. Merrill

Paul is with the USFS on the Lassen NF.

John R. Mount

John was a forester with the USFS on the Sierra NF and is now a private consultant in the same area.

Brian R. Payne, MF Duke Univ. '62

After working part-time as a research forester with the PNWF&RES in Portland, Brian is now in full-time pursuit of his PhD in agric. economics at Berkeley. ΞΣΠ.

Edward S. Perse

Ed is with BLM in Roseburg, Ore.

Charles W. Philpot, MS U.C. '63

"C.Pot" is a research forester with the Riverside Forest Fire Laboratory of the PSWF&RES.

Jack E. C. Porter

Jack worked for three years as salesman with Western Fire Equipment Co in S.F. In August, 1964 he took a forestry position with Diamond Natl Corp at Red Bluff, Calif. ΞΣΠ.

Konrad B. Reinke

Konrad is a land assistant with the USFS on the Cleveland NF in San Diego.

John T. Rienstra

John is a forester with the BLM in Ore.

Keld G. Sorensen

Keld is a real property appraiser with the Calif. Board of Equalization in southern Calif. ΞΣΠ.

Donald E. Stickers, MF U.C. '62

After service in the Army, Don is again a forester with the Sierra NF. ΞΣΠ.

E. Hans Thiele

Hans worked for a year as a technical forester with the Weyerhaeuser Co in Tacoma, Wash. and in mid-1963 joined the USFS on the Modoc NF. ΞΣΠ.

Clint J. Wagner

Clint is a salesman with the Wilbur-Ellis Red Top Chemical Co in Fresno, Calif.

Donald W. Willen, MS U.C. '63

Don is a research forester with the PSWF&RES in Berkeley and has done some graduate work in addition to his master's degree. ΞΣΠ.

Alv D. Youngberg

Dan is a missionary with the LDS (Mormon) Church in Salt Lake City.

Master of Forestry**G. Stanley Chester, BSF Univ. of B.C. '56**

Stan is a fire research officer at the Richmond Hill, Ontario laboratory of the Canadian Dept of Forestry. ΞΣΠ.

†Fred W. Gius, BS Humboldt State Coll. '60

Fred was the forester for Foundation for American Resource Management at Fort Bragg, Calif. He was killed in an auto accident near Fort Bragg in July, 1964. ΞΣΠ.

Douglas E. Rickson, BSF Univ. of B.C. '56

Doug is a forester with the BC Forest Serv. at Vancouver. ΞΣΠ.

Master of Science

Barton A. Ecklund, BS Univ. of Mich. '57

Thesis: The fiber saturation point of wood as determined with radio-isotopes. (Wood Technology)

Bart is a staff wood technologist with the Union Lumber Co at Fort Bragg, Calif.

Raymond D. Ratliff, BS U.C. (Davis) '59

Thesis: Seasonal changes in herbage weight and species composition in an annual grass community. (Range Management)

Ray is a range conservationist with the PSWF&RES in Susanville.

Raymond M. Rice, BS Mont. State Univ. '51

Thesis: Hydrologic effects of logging in a snow zone watershed of the Sierra Nevada.

Ray is a project leader with the PSWF&RES at Glendora, Calif. $\Sigma\SII$.

Eugene Stefanescu, Graduate, School of Forestry, Bucharest, Rumania '48; Engineer, Natl School of Waters and Forests, Nancy, France '51.

Thesis: Growth fluctuations in a *Pinus ponderosa* plantation in Modoc County as related to amount and seasonal distribution of precipitation.

Before his master's work at Berkeley, Gene worked in Quebec and B.C., Canada as an engineering assistant. Gene is now chief assistant plant ecologist at the Inst. Natl de la Recherche Agronomique in Rabat, Morocco. $\Sigma\SII$.

John C. Tappeiner, II, BS U.C. '57

Thesis: A contribution to the study of the ecology of Squaw Carpet (*Ceanothus prostratus*) as relevant to the establishment and growth of conifer reproduction at Blodgett Forest.

Heinrich M. Tschinkel, BS Duke Univ. '59

Thesis: Short-term fluctuations in stream flow as related to evaporation and transpiration.

Henry is an assistant forester at the Inter-American Inst. of Agric. Science at Turrialba, Costa Rica. $\Sigma\SII$.

Jesus F. Veruette, Graduate, Natl. School of Agric., Chapingo, Mexico '56

Thesis: A comparative study of timber stand height and crown closure measurements as affecting aerial photo volume tables.

Jesus returned to his native Mexico where he is chief of the photogrammetry and photo interpretation section of the Natl Forest Research Inst. at Coyoacán near Mexico City. $\Sigma\SII$.

Doctor of Philosophy

Stanley L. Krugman, BS Univ. of Mo. '55, MS U.C. '56

Dissertation: Germination potential of sugar pine seed (*Pinus lambertiana* Dougl.) during maturation and associated biochemical changes. (Plant Physiology)

William J. Libby, BS Univ. of Mich. '54, MS U.C. '59

Dissertation: The use of clones in selection and in estimation of variants components and heritability in *Mimulus guttatus*. (Genetics)

Robert L. Lyon, BS '53 and MS '54 N.Y. State Coll. of Forestry

Dissertation: Studies on the structure and toxicity of insecticide deposits for control of bark beetles. (Entomology)

Bob is a research entomologist with the PSWF&RES in Berkeley. ΞΣΠ.

Richard H. Smith, BS '42 and MS '47 N.Y. State Coll. of Forestry

Dissertation: Toxicity of pine resins to adult *Dendroctonus* (Coleoptera: Scolytidae).

Dick is a research entomologist with the PSWF&RES in Berkeley.

Brayton F. Wilson, AB '55 and MF '57 Harvard Univ.

Dissertation: Cell wall development of cambial derivatives in *Abies concolor*. (Botany)

Brayton is a forest botanist at the Harvard Forest for the Cabot Foundation of Harvard Univ.

Other Alumni

David J. Dunaway

David is with USFS on the Shasta-Trinity NF.

Watson B. Fearing, BS '53 (Basic Chemistry) and '57 (Chemical Engineering); MS '61 (Chem. Engineering) U. C.

Watson was a laboratory technician at the U.C. Forest Products Laboratory for several years. His thesis problem was concerned with the solvent seasoning of tanoak. He is now with an industrial chemical laboratory in the L.A. area.

Richard D. Harrell

Dick is on the Angeles NF in southern Calif. He has completed requirements for his BS degree to be granted in 1965.

Frederick G. Henschell

Fred is with the U.S. Army Infantry in Okinawa.

Darrall T. Imhoff

First string center on Cal's NCAA National Basketball championship team in 1959 and All-American in 1960, Darrall interrupted his college career to play professional basketball. He played one year with the N.Y. Knickerbockers, and the last two years with the Detroit Pistons. In 1964, he joined the L.A. Lakers.

1962

Bachelor of Science

John R. Allardice

John is an assistant forester with Glenco Forest Products at Elk Creek, Calif.

Philip B. Benedict

Phil is a pilot with the Air Force in Texas.

James L. Bertenshaw

Jim joined the Peace Corps and went to Turkey. In mid-1964 he returned to the U.S. with plans for graduate study at the Univ. of Mich. ΞΣΠ.

Mark F. Bevan

Mark worked for about a year with the USFS on the Lassen NF, and in the summer of 1963 joined the Mt. Whitney Lumber Co at Kernville.

Philip P. Carville

Phil is with the U.S. Marine Corps in N.C.

Jule A. Caylor

Jule is doing advanced degree work in entomology at Berkeley. ΞΣΠ.

Linford A. Cloyd

Lin worked for a year with Shasta Forests Co in Redding before joining the Shasta-Trinity NF.

John S. Cortell

John was an instructor with the U.S. Army Engineers at Fort Belvoir, Va. but is now with Rockport Redwood Co. ΞΣΠ.

Ronald O. Crouse

Ron is a technical forester with the Weyerhaeuser Co in Tacoma, Wash.

Warren W. De Gottardi

Warren worked for a time on the Lassen NF before entering military service. After two years in Europe, he is now in the Bay Area working for U.S. Steel Co.

Ernest T. Dierking

Ernie is a forester with the USFS on the Shasta-Trinity NF.

Walter A. Duckworth

Tony is with the Calif. Div. of For. in the Susanville area.

Robert S. Dutra

Bob is a personnel analyst with the State Personnel Board in Sacramento. ΞΣΠ.

Archie A. Dyer

Archie worked for a time with U.S. Plywood Corp in Anderson, Calif., but is now an accountant with the Shell Oil Co in South S.F.

Ronald O. Gibson

Ron is with the U.S. Marine Corps at Quantico, Va. ΞΣΠ.

Lyle E. Jensen

Lyle was with the U.S. Army in Ga. and has returned to Berkeley for graduate work. ΞΣΠ.

Robert K. Johnson

Until 1964 Bob was a salesman with Western Fire Equipment Co in S.F. He is now a forester with Diamond Intern. Corp at Red Bluff.

George A. Kenline

George had two years of service with the U.S. Army in Anchorage, Alaska and is now with the forestry dept of L.A. County.

Geraldine B. Larson, MA (Botany) U.C. '65

Gerry worked part-time as a research physiologist with the PSWF&RES until she completed her MA degree. She now works part-time with the Univ. as a research assistant. Cal's eighth lady forester, Gerry received the highest academic distinction ever bestowed upon a U.C. forester. In addition to being elected to Phi Beta Kappa and receiving highest honors at graduation, Gerry was a runner-up for the University Medal. $\Sigma\Sigma\Pi$.

Paul A. Leimbach

Paul is a forester with the USFS on the Klamath NF.

Jerry D. Lent

Jerry was a forest research technician with the PSWF&RES in Berkeley and now continues his graduate studies.

Gerald H. Little

Gerry is with the USFS on the Shasta-Trinity NF. $\Sigma\Sigma\Pi$.

William C. Livingston

Bill is with the U.S. Navy in the Pacific.

Chester E. Lopez, Jr.

Unknown.

James E. Maloney, MF U.C. '63

Jim is continuing his graduate study towards his PhD at Berkeley. $\Sigma\Sigma\Pi$.

Robert B. McNairn

Bob is continuing his education with the botany dept on the Davis campus. $\Sigma\Sigma\Pi$.

Fred M. Raymond

The son of California's state forester, Fred was on active duty with the U.S. Army in Okla. In late 1964 he joined Diamond Natl Corp at Red Bluff.

Richard P. Roseberry

A son of Richard D. Roseberry '34, Dick is with the U.S. Navy on active duty in the Pacific.

Richard L. Rothwell

Dick joined his classmate Jim Bertenshaw in the Peace Corps, and they were working together in Turkey. He returned to Calif. in mid-1964 and is a graduate student.

Dale J. Sanders

Dale is with the U.S. Air Force at Pease AFB in N.H.

Ladislaus R. Scroggins

Laddy is a forester on the Stanislaus NF in Calif.

C. Wayne Simonson

Wayne worked for a year and a half as a forester on the Inyo NF in eastern Calif. before entering the U.S. Army.

Albert G. Stoll, MF Yale Univ. '63

Al is with the USFS in Blue River, Ore.

Gene A. Thorley

Gene is a research assistant on the School of Forestry staff. $\Sigma\Sigma\Pi$.

Kenneth R. Werner

Ken completed two years of Army service in Europe in the spring of 1964, and is attending graduate school at Berkeley. $\Sigma\Sigma\Pi$.

Master of Forestry**Frank E. Lewis**, BS Univ. of Wash. '49

Before his year of graduate work, Frank was the fire control officer of the Mt. Hood NF in Ore. Upon completion of his graduate degree Frank returned to the Portland area where he is the fire control officer on the Gifford Pinchot NF in Wash.

John R. Naumann, BS Purdue Univ. '59

John is a resource forester with the USFS in Condon, Mont.

Jerry R. Nilsson, BS Univ. of Ill. '60

Jerry is a forester with the USFS at Wytheville, Va. $\Sigma\Sigma\Pi$.

Donald E. Stickers, BS U.C. '61**William J. Wright**, BS Univ. of Edinburgh (Scotland) '58

Bill has returned to his position as district forester in Forestry Div., Ministry of Agric., North Ireland in Belfast.

Master of Science**Thomas J. Aley**, BS U.C. '60

Thesis: Snow avalanche tracks and their vegetation.

Ed E. Gilden, BS State Coll. of Wash. '47

Thesis: Acceptance of forest management practices by land owners of El Dorado County, California.

Since 1956 Ed has been ext. forestry specialist on the staff of the U.C. Agric. Ext. Ser. $\Sigma\Sigma\Pi$.

Jack F. Hooper, BS U.C. '60

Thesis: Influences of soils and deer browsing on vegetation following logging redwood—Douglas fir near Korbelt, Humboldt County, California. (Range Management)

Paul C. Kersavage, BS Penn. State Univ. '58

Thesis: The effect of some chemical methods of fiber preparation on the tensile strength of Douglas fir fibers. (Wood Technology)

Paul is an instructor in the School of Forestry at the Univ. of Minn.

Carl W. Maxey, BS U.C. '57

Thesis: Instrumentation for the determination of surface texture and contact area as variables in gluing wood. (Wood Technology)

Douglass F. Roy, BS U.C. '46

Thesis: Some factors affecting establishment of pine reproduction on sage brush—flat edges in northeastern California.

Edward M. Squire, AB Univ. of Oxford (England) '61

Thesis: Changes in soil characteristics induced by manipulations of natural mulch in a California annual grass community. (Range Management)

Martin returned to England where he manages his family property.

Raphael Tamir, BS Hebrew Univ., Israel '60

Thesis: Infiltration rates under brush and grass vegetations. (Range Management)

Raphael has returned to Israel.

Dale A. Thornburgh, BS Univ. of Wash. '59

Thesis: An ecological study of the effects of man's recreational use at two subalpine sites in western Washington.

Dale is an instructor in the School of Forestry at the Univ. of Wash.

David D. Thornton, BSc '53 and MSc '56 Univ. of London

David's degree was in Range Management. He is a pasture agronomist with the Uganda Dept of Veterinary Services and Animal Industry in Mbarara, Uganda, Africa. He was the recipient of a Rockefeller Award in 1961.

Doctor of Philosophy

William D. Bedard, BS U.C. '57 (Agric.)

Dissertation: Media for the rearing of immature bark beetles (Scolytidae). (Entomology)

Bill is a research entomologist with the PSWF&RES in Berkeley.

James R. Griffin, BS U.C. '52, MS U.C. '58

Dissertation: Intraspecific variation in *Pinus sabiniana* Dougl. (Botany)

Roger Q. Landers, BS '54 and MS '55 A. & M. Coll. of Texas

Dissertation: The influence of chamise, *Adenostema fasciculatum*, on vegetation and soil along chamise—grassland boundaries. (Botany)

Roger is an assistant professor at Iowa State Univ.

Robert O. McMahon, BS '51 and MF '53 Univ. of Idaho

Dissertation: A deductive study of differences in forest management intensity on non-industrial forest lands. (Agricultural Economics)

After 12 years with the USFS as a research forester in the PNWF&RES, Bob was appointed, in 1963, to assistant professor in the School of Forestry at Yale Univ.

William G. O'Regan, BS U.C. '49 (Agric. Economics)

Dissertation: An experimental approach to the determination of demand for orange concentrate. (Agric. Economics)

Bill's interest and enthusiasm for the precise world of mathematics led him out of observational forestry and into the field of agric. economics. He was, for a time, assistant professor at the Univ. of Fla. at Gainesville, and, since 1957, has been a statistician with the PSWF&RES at Berkeley. In this capacity Bill has ample opportunities and challenges to attempt to reduce biological processes to mathematical simplicity. Bill was the recipient of a Fulbright Scholarship in 1951-52, and in 1962-63 he was a Charles Bullard Fellow at Harvard.

Charles H. Schaefer, BS U.C. '58

Dissertation: The life history, development, and distribution of the monterey pine cone beetle, *Conophthorus radiatae* Hopkins (Coleoptera: Scolytidae). (Entomology)

Harvey S. Whitney, BS '56 and MS '58 Univ. of Saskatchewan

Dissertation: Heterokaryosis and variation in *Rhizoctonia*. (Plant Pathology)

Harvey has returned to his position with the Canadian Dept of Forestry. He was in Quebec Province for two years and is now in Alberta Province at Calgary.

1 9 6 3

Bachelor of Science

Edwin B. Bascom

Ben joined the Peace Corps and is now in Peru.

James A. Beck, Jr.

Jim continues his graduate studies in forest management at Berkeley. ΞΣΠ.

Philip C. Branch

Phil entered the Peace Corps and was in Brazil. He plans more school work at Berkeley. ΞΣΠ.

Kenneth A. Briggeman

Ken is a forester with the USFS on the Klamath NF.

†**Donald H. Brown, Jr.**

Don entered U.S. Naval Aviation right after graduation and completed his flight training in the spring of 1965. Early in the summer he joined the Pacific fleet operating off Vietnam. He is reported missing in action while on a night, armed, road reconnaissance mission on August 12, 1965. ΞΣΠ.

Robert D. Brown

Bob is with the Calif. Div. of For. at Redding.

David M. Carnegie

David continues his graduate studies at Berkeley and has served as teaching assistant at summer camps in 1963 and 1964. ΞΣΠ.

Loyd J. Candle, Jr.

Loyd worked for six months with the USFS and entered the Army early in 1964.

Robert L. Caver

Bob is a timber cruiser with Hammon, Jensen and Wallen in Oakland.

Ray H. Chaffee

Ray is a forester with the USFS on the Cleveland NF in southern Calif. ΞΣΠ.

Edward W. Chatfield

Ed is a right-of-way agent with the Calif. Div. of Highways at Eureka.

Gerald R. Conley, MF Yale Univ. '64, MBA Harvard Univ. '65

Before continuing his graduate studies in business administration, Gerry has spent one summer each with the USDI Bur. of Indian Affairs and the Weyerhaeuser Co in Ore. He is now with Tuolumne Corp. in S.F. ΞΣΠ.

Kenneth S. Fowler

Ken is on active duty with the U.S. Navy in San Diego.

Kenneth R. Goings

With seven years of experience with the Calif. Div. of For. before finishing his bachelor's work, Dick continues with them in the north coast area.

Karl W. Graves

Karl is a forestry aid with the USFS on the Plumas NF.

Clifford C. Grimmell

Cliff is with the USFS on the Lassen NF.

Richard J. Kettlewell

Rich was honored as a distinguished military graduate and is now on active duty with the U.S. Army in Germany. ΞΣΠ.

Stephen A. Kling

Steve is with the U.S. Peace Corps and is now in Peru. ΞΣΠ.

Roger D. Krueger

Roger is at Naval Officer School in R.I.

Donald T. Lauer

Don continues his graduate studies in the School of Forestry at Berkeley.

Robert D. Lund

Denny is on the Kaibab NF in Ariz.

Roy M. Mannion

Roy is a junior forester with the USFS on the Angeles NF.

David A. Marshall

Dave is with Shasta Forests Co in Redding.

Thomas M. McChesney

Mike continues his graduate studies in business administration at the Univ.

Carl R. Naumann

After a period with the USFS, Carl cruised timber for the Southern Pacific Land Co at Mt. Shasta.

Christopher C. Perlee

"Kit" worked briefly with the USFS before entering the Army.

Michael E. Schymeinsky

Mike is a forest technician with the USFS on the Stanislaus NF.

Charles P. Shoemaker, Jr.

Chuck is with the USFS on the Stanislaus NF.

Michael W. Skenfield

Mike is on active duty with the U.S. Navy. ΞΣΠ.

Charles J. Spinetta

After a training period at Fort Sill, Okla., Charlie served in Okinawa. A civilian again, he seeks private industry employment. ΞΣΠ.

Glenn P. Standley, MF Yale Univ. '64

Glenn, after finishing his degree work at Yale Forestry School, entered the Naval Reserve. $\Sigma\Sigma\Pi$.

Robert T. Suter

After a field season with James F. Nicklos '50, forest consultant, Bob is now with a small wildland brokerage and management firm in S.F.

Dennis B. Tavares

Dennis is a forester with the Union Lumber Co at Fort Bragg. $\Sigma\Sigma\Pi$.

Leonard E. Theiss

Len is a forest assistant with the Southern Pacific Land Co in Weaverville.

Frederick A. Tuemmler

Fred was on active duty with the U.S. Army Corps of Engineers. He is now with Fiberboard Paper Prod Corp at Truckee.

Edwin W. Wilson

Ed is in the U.S. Air Force.

Morris D. Van Meter

Van is with an ornamental tree nursery in Elk Grove, Calif.

Master of Forestry**James E. Maloney**, BS U.C. '62**Hayri M. Osmanlioglu**, Graduate, Univ. of Istanbul '49, LLB Univ. of Ankara '57

Following his degree work at Berkeley, Hayri returned to his former position as research economist with the Turkish Forest Research Inst. at Ankara. $\Sigma\Sigma\Pi$.

Hans E. Strand, BS Agric. Coll. of Norway '60

Hans is a research assistant in the Agric. Research Council of Norway at Ås. $\Sigma\Sigma\Pi$.

James N. Woodman, BS Univ. of Wash. '59

Jim is a forester with the USFS at Naches, Wash. $\Sigma\Sigma\Pi$.

Master of Science**Robert L. Bjornsen**, BS Utah State Agric. Coll. '50

Thesis: The sandtable as a prediction tool in the spread of wildfire.

With more than 12 years of service with the USFS in the Pacific Northwest, Bob took educational leave to complete his master's work. Upon completion of his graduate work, Bob was assigned to the Missoula Forest Fire Laboratory where he is a field liaison development officer with an air-borne infrared fire-scanning device. $\Sigma\Sigma\Pi$.

Gustav S. Klem, Graduate, Agric. Coll. of Norway '60

Thesis: The natural durability of tan-oak (*Lithocarpus densiflorus*). (Wood Technology)

Gustav has returned to his position at the Norwegian Wood Technology Inst. at Oslo, Norway. $\Sigma\Sigma\Pi$.

Arthur W. Magill, BS Univ. of Wash. '57

Thesis: Soil compaction in relation to forest recreation.

Art is a research forester with the PSWF&RES in Berkeley.

Charles W. Philpot, BS U.C. '61

Thesis: Vegetation moisture trends in the central Sierra Nevada.

Donald W. Willen, BS U.C. '61

Thesis: Erodibility indexes and surface soil characteristics of some southern Sierra Nevada forest soils as related to parent rock, topography, and vegetation type.

Robert R. Ziemer, BS U.C. '59

Thesis: Summer evapotranspiration trends as related to time following logging of high elevation forest stands in Sierra Nevada.

Doctor of Philosophy

Manohar N. Bartakke, BE Coll. of Engineering, India '58; MS U.C. '60 (Engineering)

Dissertation: Mechanics of wood cutting. (Engineering)

Manohar has returned to his native India to continue his career.

Donald L. Dahlsten, BS U.C. (Davis) '56, MS U.C. '60 (Entomology)

Dissertation: The bionomics of pine sawflies, *Neodiprion fulviceps* complex, in a California brushfield plantation. (*Hymenoptera: Diprionidae*) (Entomology)

Don has joined the staff of U.C.'s Div. of Biological Control.

Walter J. Kaiser, Jr., BS U.C. '59

Dissertation: Influence of nutrition and environment on the growth and sporulation of the plant pathogen *Verticillium albo-atrum*. (Plant Pathology)

Clayton D. Mote, Jr., BS '59 and MS '60 (Mechanical Engineering) U.C.

Dissertation: Effect of in-plane stresses on the vibration characteristics of clamped free discs. (Engineering)

Clayton is with the Dept of Mechanical Engineering at The Univ., Birmingham, England on a post-doctoral fellowship. In the fall of 1965 he will take his appointment as assistant professor at Carnegie Inst. of Technology in Pittsburgh, Penn.

Constantinos P. Panetsos, Graduate, Univ. of Thessaloniki (Greece) '53

Dissertation: Sources of variation in wild populations of *Raphanus* (Cruciferae). (Genetics)

Costas has returned to the Forest Research Inst. in Athens, Greece where he is a research worker. ΕΣΠ.

Rex D. Pieper, BS Univ. of Idaho '56, MS Utah State Univ. '58

Dissertation: Production and chemical composition of arctic tundra vegetation and their relation to the Lemming cycle. (Botany)

Rex has accepted a teaching appointment with the Dept of Animal Husbandry at N.M. State Univ.

Lynn Rader, BS Colo. A&M Coll. '51

Dissertation: Economic analysis of range improvement practices in beef cattle ranch management for the foothill range areas of California. (Agric. Economics)

Lynn is a range economist in the Washington office of the USFS.

Robert F. Scharpf, BS Univ. of Mo. '54, MS U.C. '57 (Entomology)

Dissertation: Epidemiology and parasitism of the dwarf mistletoe, *Arceuthobium campylopodum* Engelm., in California. (Plant Pathology)

Richard S. Smith, Jr., BS Utah State Univ. '58

Dissertation: Epidemiology and host-parasite relations in the charcoal root disease of sugar pine. (Plant Pathology)

Dick is a research pathologist with the PSWF&RES.

Reinhard F. Stettler, Forest Engineer, Federal Inst. of Technology, Zürich '55

Dissertation: Dosage effects of the lanceolate gene in tomato. (Genetics)

Reinhard is now an assistant professor in the Coll. of Forestry at the Univ. of Wash. in Seattle. ΞΣΠ.

Richard H. Waring, BS '47 and MS '59 Univ. of Minn.

Dissertation: Vegetation of the California coast redwood region in relation to gradients of moisture, nutrients, light and temperature. (Botany)

Dick is on the staff of the Ore. Research Laboratory at Corvallis.

Other Alumni

Frederic H. Batchelor

Fred is with the Calif. Div. of For. at Red Bluff. He completed requirements for his degree in 1965.

Daeyeng Cha, BS Seoul Natl. Univ. (Korea) '59, MS U.C. '63 (Chemical Engineering)

Daeyeng did his master's work in the field of wood adhesives. He is now working toward his doctorate at the Univ. of Mich.

Arnold L. Moon, BS '62 and MS '63 (Chemical Engineering) Univ. of Calif.

Arnold did his master's work on equipment for evaporation of wood pulp liquor. He is continuing work toward his doctorate at Berkeley.

1964

Bachelor of Science

E. Alan Batchelder

Al joined the Calif. Div. of For. in Sacramento.

Gordon L. Beach

Gordon was in the Army during the spring of 1964 and has now joined the USFS.

William S. Berry, MF Univ. of Mich. '65

Son of William B. Berry '37 and grandson of Swift Berry, a 1907 graduate of the Biltmore Forest School, young Bill is believed to be the first third-generation American-educated forester. Bill completed his masters work at the Univ. of Mich. and is teaching at Humboldt State Coll. ΞΣΠ.

Steven L. Birge

Steve joined the Calif. Div. of For. at Fresno.

Raimond F. Clary

Rai plans to do graduate work at Utah State Univ.

†Jon E. Colombano

Jon was working temporarily with the U.S. Post Office in S.F. Jon was killed in a hiking accident at Pt. Reyes in October, 1965.

William C. Draeger, MS, U.C. '65

Bill continues with graduate studies at Berkeley after serving as summer camp T.A. in 1965. $\Xi\S\Pi$.

Barry K. Ford

Barry joined the USFS on the Six Rivers NF before going off with the U.S. Army to Fort Sill, Okla.

Raymond J. Gosden

Ray first visited his parents, who are in Japan, before working for Fiberboard Paper Prod. Corp. He plans to study for the ministry.

Elliott L. Graham

Elliott is a junior forester with the USFS on the Eldorado NF.

Robert J. Keefe

Bob had temporary plans after graduation before joining the U.S. Marine Corps in October. $\Xi\S\Pi$.

Robert H. Kinzy

Bob worked briefly with the Calif. Div. of For. at Santa Rosa before joining the USFS on the Lassen NF.

Robert G. Lee

Bob accepted a forestry position with the Rockport Redwood Co in Mendocino County. $\Xi\S\Pi$.

Timothy E. Lee

Tim planned to complete his military service immediately after graduation.

Robert F. Luck

Bob continues graduate study in entomology at Berkeley.

William E. McArthur

Bill is in the U.S. Marine Corps.

Jere L. Melo

A January graduate, Jere worked for Kimberly-Clark Corp in Shasta County for six months before entering the Army.

Gerald E. Ranger

Gerry joined the Calif. Div. of For. in Sacramento.

Jeffrey M. Romm

Jeff joined the Peace Corps and is off for Nepal. $\Xi\S\Pi$.

Richard G. Rose

Rich expects to enter the Air Force in late 1964.

Richard A. Rust

Somewhat undecided at graduation time, Rick planned to join the Peace Corps.

Glenn D. Savelle

Glenn continues with graduate studies at Berkeley. ΞΣΠ.

Dennis L. Tompkins

Before entering the Army in June, Denny worked for a number of months with the Weyerhaeuser Co at Klamath Falls.

Michael G. Sudborough

Mike is headed for a career with the USNPS with some graduate study and Army service in the immediate future. ΞΣΠ.

Phillip A. Weiss

Phil is a forester with the Pacific Gas and Electric Co Land Dept with headquarters in S.F.

James G. Zander

Jim joined the USFS in Ore.

Master of Forestry

Richard M. Pomeroy, BS U.C. '49

Master of Science

Joseph G. Bicho, BS U.C. '60

Thesis: Use of gas phase chromatography in lignin nitrobenzene oxidation studies. (Wood Technology)

E. Carlyle Franklin, BS N.C. State Coll. '63

Thesis: An analysis of branching and forking characteristics in families of lodge-pole pine (*Pinus murrayana*, Balf.)

Ed plans to return to N.C. State and continue graduate work toward his doctorate in genetics.

Andrew Herczeg, BS Univ. of B.C. '61

Thesis: The wettability of wood. (Wood Technology)

Andy is a wood technologist with Shell Development Co at Emeryville, Calif. ΞΣΠ.

Vernon O. Mayes, BS U.C. (Davis) '62 (Range Management)

Completing his master's work in range management in the summer of 1964, Vernon plans to work for his doctorate at Utah State Univ. He was elected to Phi Beta Kappa at U.C. Davis in 1962.

Joe R. McBride, BS Mont. State Univ. '60

Thesis: Invasion of East Bay Regional Parks grasslands by *Baccharis pilularis* DC.

Joe continues his studies at Berkeley toward his doctorate in botany.

Michael M. Merriman, BS Iowa State Univ. '56

Thesis: Reaction of oxygen and wood in buffered systems. (Wood Technology)

Mike plans to continue his studies toward a doctorate in agric. chemistry. $\Sigma\Sigma$.

Lajos J. Nemeth, BS Univ. of B.C. '58

Thesis: The influence of moisture on creep of wood. (Wood Technology)

Lajos is a wood technologist with Potlatch Forest Industries at Lewiston, Idaho.

Peter D. Stent, BS U.C. (Davis) '63 (Range Management)

Peter plans to continue his studies at Berkeley while working for an MBA in business administration.

Donald A. Stumbo, BS Mich. State Univ. '56

Thesis: Influence of surface aging prior to gluing on the bond strength in Douglas fir and redwood. (Wood Technology)

Don is a wood technologist with Olin Matheson Industries at Monroe, La. $\Sigma\Sigma$.

Lars F. Toksvig, MF Royal Veterinary and Agric. Coll., Copenhagen, '63

Thesis: Projection of newsprint consumption in Denmark in 1975.

Lars plans to return to his position with the Danish Forest Serv.

Doctor of Philosophy

Alan A. Berryman, BSc Imperial Coll. (London) '59, MS U.C. '61 (Entomology)

Dissertation: The role of insect predators in the dynamics of western beetle (*Dendroctonus brevicomis*, LeConte) populations. (Entomology)

Alan has been appointed assistant professor at Wash. State Univ. in Pullman.

Richard W. Bushing, BS U.C. (Davis) '57 (Entomology)

Dissertation: Parasites of the western pine beetle, *Dendroctonus brevicomis*, Lec. (Coleoptera: Scolytidae), with particular reference to *Roptrocercus xylophagorum*, Ratz. (Hymenoptera: Torymidae). (Entomology)

Dick is a sales-service representative trainee with the Niagara Chemical Co and will move to the company operations at Middleburg, N.Y.

Lawrence S. Davis, BS '56 and MF '60 Univ. of Mich.

Dissertation: The economics of wildfire protection with emphasis on fuel break systems. (Agricultural Economics)

Larry has been appointed assistant professor at the forestry school at Va. Polytechnic Inst.

Robert D. Schultz, BS '58 and MS '60 Purdue Univ.

Dissertation: Decision-making in a wildland fire game. (Business Administration)

Bob is employed by the Battelle Memorial Inst. in Columbus, Ohio.

Dennis E. Teeguarden, BS Mich. Coll. of Mining and Technology '53, MF U.C. 58

Dissertation: The market for private timber in the central Sierra Nevada region of California: an economic analysis of market structure, conduct, and stability. (Agric. Economics)

Joe B. Zaerr, BS U.C. '54

Dissertation: Auxin in *Pinus ponderosa* Laws. seedlings and its relation to the root-regenerating potential. (Plant Physiology)

Other Alumni

Ernest P. DeGraff, Jr., AB U.C. '62 (Wildlife Conservation)

Ernie went to camp in 1962 and completed one year in the School before transferring to Colo. In December, 1964, he was in the Army in Texas. $\Xi\Sigma\Pi$.

Robert C. Mauch, BChE Fenn Coll. (Cleveland) '62, MS U.C. '64

Thesis: Off-gas analysis and rate study in nitric acid pulping by gas chromatography. (Chemical Engineering)

Bob plans to join a chemical engineering industrial firm.

Charles B. Neubecker, BS Mich. State Univ. '63, MS U.C. '64

Thesis: Evaporation of wood pulp liquor by immiscible fluid heat transfer. (Chemical Engineering)

Unknown.

Kishan K. Seth, BS '59 and MSc '62 Univ. of Bombay (India), MS U.C. '64

Thesis: Solvent seasoning of redwood. (Chemical Engineering)

Kishan plans to continue work toward his doctorate at N.C. State Coll.

ERRATA

[A last moment check of University records shows one less MS (Forestry) and two less PhD's (Entomology) in 1964. E. Carlyle Franklin (see page 378) received his MS in 1965. Alan A. Berryman (see page 379) received his PhD in 1965. Richard W. Bushing had not completed his PhD requirements by late 1965.

These corrections require revisions in the table on page 65, the table and totals on page 206, and the graph on page 208.]

APPENDIX A

HONORS - AWARDS - PRIZES

SCHOOL OF FORESTRY AWARDS

1. Departmental Citation
2. Xi Sigma Pi Award for Scholarship
3. Xi Sigma Pi Freshman Scholarship Honor Roll
4. Charles Lathrop Pack Essay Awards
5. Stuart Bevier Show Memorial Award
5. Gimbel Prize and Medal in Scholarship and Athletic Achievement
6. Edward Frank Kraft Prizes
7. Scabbard and Blade Medals in Military Science
8. Robert Gordon Sproul Speech Award
9. Dean Witter Trophy

UNIVERSITY AWARDS

1. Honors and Highest Honors at Graduation
2. University Medal
3. Phi Beta Kappa Honor Society
4. Alpha Zeta Scholarship Medal

OTHER AWARDS

1. Johnson Award — Forest Industry Award
2. Koppers Foundation Award
3. Western Forestry and Conservation Association Essay Awards



SCHOOL OF FORESTRY AWARDS

DEPARTMENTAL CITATION IN FORESTRY

(Conferred in recognition of outstanding undergraduate accomplishment)

- | | |
|-------------------------|----------------------------|
| 1957 James E. Whitacre | 1962 James L. Bertenshaw |
| 1957 James L. Jenkinson | 1963 Philip C. Branch |
| 1959 Donald A. Potter | 1964 Michael G. Sudborough |
| 1960 Joseph C. Bicho | 1965 Robert N. Coats |
| 1961 Donald E. Stickers | |

XI SIGMA PI

AWARD FOR SCHOLARSHIP

- | | |
|------------------------------|--------------------------|
| 1915 Duncan Dunning | 1936 Leon R. Thomas |
| 1917 Ansel F. Hall | 1937 R. Keith Arnold |
| 1920 Earl M. Blair | 1938 Hugh E. Wilcox |
| 1921 Virgil B. Davis | 1939 Hudson G. Reynolds |
| 1922 Harold P. Miller | 1940 Vernon A. Nielsen |
| 1923 Marc W. Edmonds | 1941 J. Howard Powell |
| 1924 Leonard F. Kellogg, Jr. | 1942 Arthur H. Nelson |
| 1926 Warren T. Murphy | 1943 Bruce J. Zobel |
| 1927 Thomas H. Harris | 1944 Henry W. Anderson |
| 1929 Waldo E. Wood | 1946 Richard D. Cosens |
| 1930 Fred W. Grover | 1947 William C. Johnson |
| 1931 Philip B. Hackley, Jr. | 1948 Richard L. Holland |
| 1932 David W. Dresbach | 1949 Bruce J. Rogers |
| 1933 Edward A. Colman | 1950 James O. Klemmedson |
| 1934 Theodore W. Daniel | 1951 Norman McLean, Jr. |
| 1935 John S. Hall | 1952 Kurt A. C. Munnich |

1953	John W. Steely, Jr.	1960	Joseph G. Bicho
1954	Emily A. Shideler	1961	Donald E. Stickers
1955	Phillip G. Annand	1962	Geraldine B. Larson
1956	David S. Meyer	1963	Dennis B. Tavares
1957	James L. Jenkinson	1964	Michael G. Sudborough
1958	No Award	1965	John M. MacGregor
1959	Donald A. Potter		

XI SIGMA PI

FRESHMAN SCHOLARSHIP AWARD

1927	Charles C. Buck	1946	David H. Erb
1928	Philip B. Hackley, Jr.	1947	James B. Davis
1929	Leland E. Berriman	1948	Carl L. Abarr
1930	Arthur London	1949	Will B. Ellington, Jr.
1931	Theodore W. Daniel	1950	No Award
1932	Frederick A. Meyer	1951	Joseph B. Zaerr
1933	No Award	1952	Darroll L. Webb
1934	Robert J. Ball	1953	Larry R. Billings
1935	Curtis M. Rocca	1954	Larry J. Larson
1936	Preston H. McCanlies	1955	Daniel D. Oswald
1937	Edward C. Stone	1956	W. Wayne Wilcox
1938	Kermit A. Cuff	1957	Brian R. Payne
	Verl L. House	1958	Carl R. Naumann
1939	Robert B. Goldsworthy	1959	William C. Draeger
1940	Ray K. Mortenson	1960	Michael G. Sudborough
1941	William C. Finster	1961	William A. Peppin
1942	Paul W. Ward	1962	No Award
1943	Carl H. Stoltenberg	1963	No Award
1944	Ralph C. Meyer	1964	No Award
1945	Harold Davidson		

CHARLES LATHROP PACK ESSAY PRIZES

(The Charles Lathrop Pack Prize was endowed in 1924 by a grant to the Regents from the C. L. Pack Foundation. The Pack endowment provides prizes for award to one or more students each year who are judged to have submitted the best entries in a special competition. Such entries must be in the form of an essay or newspaper or magazine article dealing with some aspect of forestry from the public point of view. Entries are judged by a faculty committee appointed by the chancellor, on recommendation of the dean of the School.)

1924	Joseph Strehle, Jr.	1928	Howard W. Siggins
1925	Amihud Y. Grasovsky (Goor)		Raymond B. St. John
	Kenneth McLeod, Jr.		Ansel F. Hall
	Henry J. McFarland, Jr.	1929	Charles L. Tebbe
1926	Howard W. Siggins	1930	Wayne B. Read
	Kenneth McLeod, Jr.		Carol Nelson
	Raymond B. St. John		(first non-forester ever to receive award. A Latin major in L & S)
1927	Myron T. Bunger		Herbert A. Jensen
	C. Ray Clar		

1931	Edward A. Colman Crawford R. Buell Richard C. Wilson	1942-47	No Awards
1932	Edward A. Colman Richard H. May Claude A. Wagner, Jr.	1948	Richard J. Austin Harvey A. Striplin
1933	Horace R. Josephson David W. Dresbach	1949-50	No Awards
1934	R. Kenneth Smith	1951	Richard D. Reynolds
1935	Charles G. Sperry William E. Bullard Peter J. Ceremello	1952	No Awards
1936	No Awards	1953	Bernard Z. Agrons
1937	John A. Zivnuska William C. Robinson Kenneth E. Bradshaw	1954	Larry R. Burton
1938	Herbert A. Thomas John W. Wood Wesley R. Wooden	1955-57	No Awards
1939	Wesley R. Wooden Frank G. Goble Clarence Sterling	1958	Larry S. Rodick
1940	Levi T. Burcham Charles H. Bunting Harold F. Murdoff	1959	David E. Pesonen
1941	Theodore H. Simpson George H. DeKay James G. Beemer	1960	Thomas J. Aley } William R. Bentley } Tied
		1961	Heinrich M. Tschinkel John R. Allardice } Jerry D. Lent } Tied for 2nd
		1962	John R. Allardice
		1963	No Awards
		1964	Robert N. Coats
		1965	Tom Pope John W. Thomas

THE STUART BEVIER SHOW MEMORIAL AWARD

(Open to students in the School of Forestry who display the potentials and talents for the kind of conservation leadership which Stuart Show's career exemplified.)

1965 K. Norman Johnson

UNIVERSITY AWARDS

HONORS AND HIGHEST HONORS AT GRADUATION

1915	Duncan Dunning Glen G. Hahn (Graduated in Plant Pathology)	1917	Ansel F. Hall
		1920	Earl M. Blair

- 1921
Virgil B. Davis
- 1922
Harold P. Miller
- 1924
Leonard F. Kellogg, Jr.
- 1929
Waldo E. Wood
- 1930
Frederick W. Grover
- 1931
Philip B. Hackley, Jr.
- 1934
Highest Honors
Theodore W. Daniel
Eugene V. Zumwalt
- 1936
Horace D. Jones
Leon R. Thomas
- 1937
William E. Barthold
Highest Honors
R. Keith Arnold
- 1938
Philip N. Knorr
Andrew R. Schmidt
Hugh E. Wilcox
John A. Zivnuska
- 1939
William T. Hartman
Donald M. Levy
Preston H. McCanlies
Paul E. Packer
Hudson G. Reynolds
James E. Sorenson
William A. Tope
Highest Honors
Carl L. Breitingner
- 1940
Norman B. Herkenham
Highest Honors
Frank G. Goble
Gordon W. Ludwig
Vernon A. Nielsen
Edward C. Stone
- 1941
Harold L. Gentry
Norman E. Graham (Graduated in
Agricultural Economics)
Highest Honors
Levi T. Burcham
Kermit A. Cuff
Robert M. Miller
John H. Powell
- 1942
Milton T. Cunha
Robert B. Goldsworthy
- 1943
Highest Honors
Bruce J. Zobel
- 1944
Highest Honors
Henry W. Anderson
- 1947
David H. Erb
Highest Honors
William C. Johnson
- 1948
Richard L. Holland
Howard E. Moore
Carl H. Stoltenberg
Paul W. Ward
Highest Honors
Bryce D. Webster
- 1949
Frank J. Baron
Robert H. Blanford
John M. Bradley
William B. Critchfield
John M. Dodge
Highest Honors
Bruce J. Rogers
- 1950
David N. Bigbee
James O. Klemmedson
- 1951
Gerhard F. Muerle
Highest Honors
Norman McLean, Jr.
- 1952
Walter H. Gavin
Highest Honors
James R. Griffin
Kurt A. C. Munnich
Thomas J. O'Kelley
- 1953
Robert F. Krohn
Wee Yuey Pong
- 1955
Genaro Ingco, Jr.
William G. Munro
Darroll L. Webb
Highest Honors
Phillip G. Annand
- 1957
Dale E. Hosler
Hasan K. Qashu

Highest Honors

James L. Jenkinson
James E. Whitacre

1958

Richard E. Johnson
Richard G. Krebill
Larry J. Larson
Donald K. Rodgers
Cleburne O. Smith
Jack E. Throop

1959

George T. Ferrell
Donald A. Potter
Raymond C. Utterback

1960

Joseph G. Bicho
Robert L. Leonard
David E. Pesonen
Richard B. Vasey

1961

Bernard W. Heitkotter

Highest Honors

Donald E. Stickers
Eberhard H. Thiele

1962

John S. Cortell
Lyle E. Jensen
Gerald H. Little

Highest Honors

James L. Bertenshaw
Geraldine B. Larson
James E. Maloney

1963

Kenneth A. Briggeman

1964

William S. Berry
Robert G. Lee
Glenn D. Savelle

Highest Honors

Michael G. Sudborough

UNIVERSITY MEDAL

(Founded by friends of the University and awarded annually to the most distinguished graduate of the year.)

1962

Honorable Mention

Geraldine B. Larson

PHI BETA KAPPA

(National Honor Society)

1934 Theodore W. Daniel
1937 R. Keith Arnold
1940 Vernon A. Nielson
Clarence Sterling
(Degree in Botany)
Edward C. Stone
1941 Verl L. House
(Degree in Zoology)
1943 Bruce J. Zobel
1944 Henry W. Anderson
1945 George S. Allen
(Graduate Student)
1947 William C. Johnson
1949 Frank J. Baron
1952 Kurt A. C. Munnich

1953 G. Robinson Gregory
(Graduate Student)
1955 William B. Critchfield
(Elected as a graduate student)
1957 James E. Jenkinson
James E. Whitacre
1961 Donald E. Stickers
Eberhard H. Thiele
1962 James L. Bertenshaw
Geraldine B. Larson
James E. Maloney
Vernon O. Mayes
(Range management student
at Davis)
1964 Robert G. Lee

ALPHA ZETA SCHOLARSHIP MEDAL

(Scholastic award for freshmen by the agriculture honor society)

1923 Thomas H. Harris
1927 P. Beckwith Hackley
1930 Theodore W. Daniel
1934 John L. Swanson

1936 Edward C. Stone
1937 Verl L. House
1939 Thomas T. Sagimori

GIMBEL PRIZE AND MEDAL IN SCHOLARSHIP AND ATHLETIC ACHIEVEMENT

1941 Michael J. Koll

EDWARD FRANK KRAFT PRIZES

(Awarded to freshmen on the basis of competitive scholarship during their first semester of attendance.)

1928 Philip B. Hackley, Jr.

SCABBARD AND BLADE MEDALS IN MILITARY SCIENCE

(Given by Company "M," Fourth Regiment, National Society of Scabbard and Blade.)

1955 Donald K. Rodgers

ROBERT GORDON SPROUL SPEECH AWARD

(Competition open to all Berkeley undergraduates with the top three written entries judged finally on oral delivery.)

1964

First Prize

Ray H. Johnsson, Jr.

DEAN WITTER TROPHY

(Awarded annually to the member of the crew who shows the greatest loyalty, proficiency, and spirit.)

1957 John Petersen

OTHER AWARDS

THE FORESTRY INDUSTRY AWARD

(formerly: The Johnson Award)

(In 1948 the Regents of the University announced the establishment of a series of prizes for forestry students to be known as the Johnson Award, established initially by a gift from S. Orie Johnson of Berkeley. The award commemorated the name of his father, S. S. Johnson, a pioneer California lumberman in the McCloud area. A bronze bas-relief plaque commemorating S. S. Johnson and the award is mounted on the wall in the forestry library.

Responsibility for sustaining the program on a continuing basis was later assumed by the California Forest Protective Association which now furnishes generous annual support for its Forest Industry Award. The objectives of the award are to promote closer relations between the forest industries and the University and to provide an incentive for forestry gradu-

ates to seek careers in the forest industries in the state. Candidates for the award must be employed by a forest industry during the vacation period between their junior and senior years. Initially the five leading candidates were granted awards of \$100 each at the beginning of their senior year, based on the report of their activities with private industry, combined with the results of an oral interview with a small committee of industrial leaders. Upon graduation, the leading candidate received an additional \$150.

After 11 years of awards, the Johnson Award was modified and the name was changed to the Forest Industry Award. The modification provided for an expense-paid trip during the spring recess for the five leading junior student candidates. The trip, conducted under the leadership

of Rudy Grah, has been taken in alternate years to forest industry operations in the redwood region and in the California pine region. The other feature of the modified award is the grant of \$200 to a

senior selected on the basis of the quality of his academic performance, aptitude for industrial forestry, employment in an industrial forestry job, and a written report of his work experience.)

JOHNSON AWARD

(\$100 awarded to each. The winner (*) received additional \$150 on graduation)

1949

- *1. Wylie R. Macpherson
- 2. Silas B. Carr
- 3. Max H. Doner
- 4. Richard H. Ingraham
- 5. Philip A. Langley

1950

- *1. Warren E. Dick, Jr.
- 2. George W. Burtchett
- 3. Robert L. Fisher
- 4. Robert E. C. Heyden, Jr.
- 5. Thomas A. Linkecs

1951

- *1. John T. Keane
- 2. Will B. Ellington, Jr.
- 3. Kurt A. C. Munnich
- 4. Richard H. Pland
- 5. Gene P. Robinson

1952

- *1. James E. Nicholson
- 2. Robert F. Krohn
- 3. George Kyer
- 4. M. Lyle Trammell

1953

- *1. Henry C. Schwarz
- 2. Robert J. Bedow
- 3. Donald L. Binninger

1954

- *1. William A. Atkinson
- 2. Richard W. Gardner
- 3. Genaro Ingco, Jr.
- 4. Paul R. Kevin, Jr.
- 5. Verner R. Laursen

1955

- *1. Henry H. Haight IV
- 2. Peter A. Crebbin
- 3. David S. Dealey
- 4. Eldon R. Knauf, Jr.
- 5. John H. Razzeto

1956

- *1. James E. Whitacre
- 2. Robert A. Cline
- 3. John N. Coburn
- 4. Richard B. Fores
- 5. Samuel M. Van Wyck

1957

- *1. Donald K. Rodgers
- 2. Larry J. Larson
- 3. Daniel D. Oswald
- 4. Charles H. Schaefer
- 5. John H. Seyden, Jr.

1958

- *1. William N. Dennison
- 2. Richard A. Parady
- 3. Wayne L. Knauf

1959

- *1. Robert L. Leonard
- 2. William R. Bentley
- 3. David E. Pesonen
- 4. Jack E. C. Porter
- 5. W. Wayne Wilcox

1960

No Awards

FORESTRY INDUSTRY AWARD

(Senior Award—\$200. Junior Awards—One Week Expense-Paid Trip)

1961

Senior

Kerby R. Lauderdale

Juniors

- 1. Ronald O. Crouse
- 2. Gerald H. Little
- 3. James E. Maloney
- 4. Carl R. Naumann
- 5. C. Wayne Simonson

1962

Senior

Albert G. Stoll

Juniors

- 1. Gordon L. Beach
- 2. Gerald R. Conley
- 3. Kenneth S. Fowler
- 4. Stephen A. Kling
- 5. Dennis Tompkins

1963

Senior

Dennis B. Tavares

Juniors

1. William S. Berry
2. Stephen L. Cafferata
3. James E. Fleming
4. Elliott L. Graham
5. Robert G. Lee

1964

Senior

William S. Berry	}	Tied
Robert G. Lee		

Juniors

1. William A. Baker

2. William G. Horn, Jr.

3. Ray H. Johnston, Jr.

4. John M. MacGregor

5. Alan G. Stangenberger

1965

Senior

Ronald P. Monk

Juniors

1. Gary F. Arnese
2. Dennis E. Brown
3. Daniel P. Gaut
4. Wesley L. Melo
5. William R. Sager

THE WESTERN FORESTRY AND CONSERVATION ASSOCIATION ESSAY AWARD

(This essay contest was initiated by the WF&CA in 1948. Undergraduate students in all forestry schools in western North America are eligible to enter the contest. The subject matter is not specified and may be on any topic of the student's choosing. The best two papers submitted to each school's judging committee may be forwarded to WF&CA for final judging.

The author of the winning essay is given an expense-paid trip to the annual WF&CA meeting in December, reads his essay before a general session, and receives a cash prize of \$100. The second-place winner also attends the meeting but does not read his paper although it is published in the proceedings of the meeting, and receives a cash prize of \$50. The third-place winner receives \$25. There are also an irregular number of honorable mention certificates.)

1951 2nd Prize Kurt A. C. Munnich
"Why Differentiate Fire Protection
from Forest Management?"

1952 1st Prize Bernard Z. Agrons
"Bringing Forestry to the Small
Woodlands."

1958 1st Prize Robert R. Ziemer
"Logging Upon Forested Areas of
High Recreational Value."

1962 1st Prize Philip C. Branch
"The Cold War for Wilderness."

APPENDIX B

SCHOLARSHIPS—FELLOWSHIPS—LOAN FUNDS

UNDERGRADUATE

SCHOOL OF FORESTRY SCHOLARSHIPS

1. Daniel W. Dineen
2. Walter Mulford
3. White Brothers Hardwood Industry

UNIVERSITY SCHOLARSHIPS

1. Alumni Scholarships for Entering
Students
2. John Treadwell Bixby

3. Joseph Bonnheim Memorial
4. Crown Zellerbach Foundation
5. William R. Davis
6. Grand Army of the Republic
7. Isaias W. Hellman
8. Hilgard
9. Henry Morgan Holbrook
10. Carrie M. Jones
11. Herbert Kraft
12. Labell Foundation
13. Loughridge

14. James Monroe McDonald
15. William J. McGee
16. Marietta C. Mastick
17. Stephen Tyng Mather
18. Bernard Nathan
19. National Merit
20. LaVerne Noyes
21. David Doak Rice Liberty
22. Henry W. Seale
23. Rosie Sternheim Memorial
24. Levi Strauss
25. University Scholarships
26. Jean C. Witter, Jr. Liberty

OTHER SCHOLARSHIPS

1. Ben S. Allen College Forestry
2. Helen Bacon Boggs
3. Charles H. Bunting Memorial
4. California State
5. Interfraternity Mother's Club
6. Mt. Diablo Council of Federated Women's Clubs

GRADUATE

SCHOOL OF FORESTRY FELLOWSHIPS

1. The Baker and Bidwell
2. W. S. Rosecrans
3. San Francisco Foundation
4. Weyerhaeuser—Forestry

UNIVERSITY FELLOWSHIPS

1. Edward A. Colman Memorial—Watershed Management
2. Horace and Edith King Davis Memorial
3. James M. Goewey
4. Hilgard
5. Amy Bowles Johnson Memorial
6. LeConte Memorial
7. James Rosenberg Memorial—Agriculture
8. Willard Dawson Thompson Memorial
9. University
10. John H. Wheeler and Elliott H. Wheeler

OTHER FELLOWSHIPS

1. Danforth
2. Koppers Foundation—Wood Utilization
3. Charles Lathrop Pack
4. Woodrow Wilson Foundation
5. Crown Zellerbach Foundation
6. Weyerhaeuser—Wood Products

LOAN FUNDS

1. Walter Mulford
2. Southern Lumber Co.



UNDERGRADUATE

SCHOOL OF FORESTRY SCHOLARSHIPS

DANIEL W. DINEEN SCHOLARSHIP IN FORESTRY

(This scholarship, in the annual amount of \$500.00, is a gift from the Estate of Emaline McConathy of Cloverdale, California. A similar scholarship, the Elizabeth Dineen Scholarship, is available in the Music Department. Preference is to be given to graduates of Cloverdale High School.)

- | | |
|------|-------------------|
| 1955 | Donald K. Rodgers |
| 1956 | Larry J. Larson |
| 1957 | Larry J. Larson |
| | Donald K. Rodgers |
| | Jack E. Throop |
| 1958 | Jule A. Caylor |
| 1959 | Kenneth A. Austin |
| | David E. Pesonen |

- | | |
|------|-----------------------|
| 1960 | James E. Maloney |
| 1961 | William E. McArthur |
| 1962 | Donald L. Vance |
| 1963 | Michael G. Sudborough |
| 1964 | No Award |
| 1965 | Lawrence R. Pettinger |

WALTER MULFORD SCHOLARSHIP

(This scholarship was created by the California Alumni Foresters on December 4, 1953 when it became evident that the Walter Mulford Loan Fund had reached a level

of maximum need (about \$4,700). Further appeals for support have been directed toward the endowment of the scholarship. The award consists of \$400 per year to an undergraduate in the School of Forestry. Since the fund is still far short of endowment, it is supported from the annual alumni dues and direct contributions. The endowment grows a little each year and stands at approximately \$4,750 in 1964.

At their annual meeting on December 6, 1963, the California Alumni Foresters voted to underwrite the publication of this history and that all net proceeds from its sales would go to the Walter Mulford Scholarship Fund.)

1956	Lawson L. Winton	1960	Eberhard Hans Thiele
1957	Robert R. Ziemer	1961	No Appointment
1958	Robert L. Leonard	1962	Leonard S. Felix
1959	Wilbur Alan Benware (Resigned)	1963	Leonard S. Felix
		1964	William G. Horn, Jr.

WHITE BROTHERS HARDWOOD INDUSTRY SCHOLARSHIP

(For students in the School of Forestry)

1959	David E. Pesonen	1961	Geraldine B. Larson
1960	Jeffrey M. Romm	1964	Leonard S. Felix

UNIVERSITY SCHOLARSHIPS

ALUMNI SCHOLARSHIPS FOR ENTERING STUDENTS

(Awarded to entering students with leadership qualities, a superior scholastic achievement record, and financial need.)

1936	Roy W. Saarni	1958	Vernon O. Mayes (Davis)
1947	Carl L. Abarr		Laurence A. Spivak (Davis)
1951	Peter A. Crebbin	1961	Stephen A. Kling

JOHN TREADWELL BIXBY SCHOLARSHIPS

(Open to any student at Berkeley)

1958	William N. Dennison
------	---------------------

JOSEPH BONNHEIM MEMORIAL SCHOLARSHIPS

(Awarded to an undergraduate student or a mid-year graduate student during the school year of his graduation. Preference given to students between the ages of 16 and 19.)

1921	Harold P. Miller
------	------------------

CROWN ZELLERBACH FOUNDATION SCHOLARSHIP

(Awarded to an upper division student without restriction except recipient may not receive award twice.)

1961	James E. Maloney
------	------------------

WILLIAM R. DAVIS SCHOLARSHIP

(Awarded to an undergraduate student who is a bona fide resident of California. It may not be held more than four years.)

1933	Theodore W. Daniel	1938	Preston H. McCanlies
------	--------------------	------	----------------------

GRAND ARMY OF THE REPUBLIC SCHOLARSHIP

(Awarded to a descendant of a Union soldier or sailor of the Civil War and based on need, promise, and scholarship.)

1937 Hugh E. Wilcox

1940 Levi T. Burcham

ISAIAS W. HELLMAN SCHOLARSHIP

(Awarded alternately to academic students of the Jewish and Christian faiths. This is a loan scholarship to be repaid without interest or inconvenience.)

1938 Clarence Sterling

1952 Ami Y. Shachori

1960 Jeffrey M. Romm

HILGARD SCHOLARSHIPS

(Open to undergraduate students in agriculture.)

1957 Donald A. Potter

HENRY MORGAN HOLBROOK SCHOLARSHIP

(Awarded to a student who agrees to pay all "sums received by him without a serious inconvenience to him.")

1935 Louis J. Drnovich

CARRIE M. JONES SCHOLARSHIPS

(Open to male students in regular undergraduate status at Berkeley.)

1920 Harold P. Miller

1939 Levi T. Burcham

1932 Theodore W. Daniel

Kermit A. Cuff

1937 Ralph S. Waltz

1948 Carl L. Abarr

1938 Ralph S. Waltz

HERBERT KRAFT SCHOLARSHIPS

(Open to students at Berkeley or Davis who are 1) graduates of any high school in Tehama County and 2) have resided in Tehama County at least five years prior to appointment and 3) are registered in the College of Agriculture as an undergraduate or graduate.)

1926 to 1932 inclusive (7 years)

Ernest W. Wohletz

LABELL FOUNDATION SCHOLARSHIP

(Open to men or women at Berkeley.)

1936 R. Keith Arnold

LOUGHRIDGE SCHOLARSHIP

(For students of the agricultural departments at Berkeley.)

1940 Norman E. Graham (graduated in
Agricultural Economics)

1951 Ami Y. Shachori

JAMES MONROE McDONALD SCHOLARSHIP

(Awarded to a male student capable of using correct English and possessing good character and courteous manners, who has attained senior standing as a regular

student pursuing work relative to the cattle industry and improvement of California grazing lands in the College of Agriculture. May be awarded to a first-year graduate student who held the same scholarship in his senior year.)

1926	Waldo E. Wood	1938	Paul S. Pattengale
1927	Waldo E. Wood	1943	William O. Noack
1931	Lawrence R. Short	1946	William C. Johnson

WILLIAM J. McGEE SCHOLARSHIP

(Open to a student who was a resident of Amador County at least one year prior to registration and who demonstrates ability to maintain general University average scholarship during the year preceding award.)

1936	James K. Mace	1937	James K. Mace
------	---------------	------	---------------

MARIETTA C. MASTICK SCHOLARSHIPS

(For benefit of California boys needing help in obtaining an education.)

1939	Frank G. Goble
------	----------------

STEPHEN TYNG MATHER SCHOLARSHIPS

(For a freshman student)

1949	Robert L. Brown	1951	Darroll L. Webb
	Morris G. Cline	1955	Walter J. Kaiser, Jr.
	Forrest B. Wilde	1957	Richard E. Johnson

BERNARD NATHAN SCHOLARSHIP

(Open to men or women, with those of Jewish parentage given particular consideration.)

1930	Arieh Lahav
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NATIONAL MERIT SCHOLARSHIPS

(Open to all students on a scholarship and need basis.)

1957-60	Brian R. Payne
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LaVERNE NOYES SCHOLARSHIPS

(Open to U.S. Army or Navy veterans of World War I or their blood descendants.)

1940	Robert B. Goldsworthy	1952	Phillip G. Annand
1948	Walter E. Pease	1956	Larry S. Rodick
1949	Walter E. Pease	1957	Larry S. Rodick
1950	Walter E. Pease		

DAVID DOAK RICE LIBERTY SCHOLARSHIP

(Unrestricted)

1948	Daniel T. Seamount
------	--------------------

HENRY W. SEALE SCHOLARSHIPS

(Unrestricted loan scholarships to be repaid without interest or serious inconvenience to recipient.)

1933	Richard C. Wilson	1941	Robert B. Goldsworthy
1936	Preston H. McCanlies		Arthur H. Nelson
1939	Edward C. Stone	1949	Quenton H. Bruton
1940	Kermit A. Cuff		

ROSIE STERNHEIM MEMORIAL SCHOLARSHIPS

(Awarded to needy students.)

1952	Phillip G. Annand
------	-------------------

LEVI STRAUSS SCHOLARSHIPS

(Unrestricted scholarships distributed equally among Congressional Districts of California with preference to employees of Levi Strauss and Co.)

1917	Ansel F. Hall	1938	Kermit A. Cuff
1918	Harold P. Miller	1940	Henry W. Anderson
1928	Herbert A. Jensen	1941	Henry W. Anderson

UNIVERSITY SCHOLARSHIPS

(Unrestricted. Allocated by Congressional District of the State. Supported by income of the University. Originally called *State of California Scholarships*. Name changed to *Regents Scholarships* in 1958 and, in 1960, to *University Scholarships*.)

1915	Leland S. Smith	1936	Ralph S. Waltz
1921	Marc W. Edmonds		Hugh E. Wilcox
1929	Frederick W. Grover	1941	Ralph C. Andree

JEAN C. WITTER, JR. LIBERTY SCHOLARSHIP

(Unrestricted)

1960	Peter E. Smouse
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OTHER SCHOLARSHIPS

BEN S. ALLEN COLLEGE FORESTRY SCHOLARSHIP

(Formerly called the Redwood Region Conservation Council Scholarship, it is supported by voluntary contributions of the council's membership. It is open to upper-division students in a California forestry school who are residents of the California counties that border on the Pacific Ocean from Monterey County to Del Norte County plus Trinity County.)

Redwood Region Conservation Council Scholarship

1960	Lyle E. Jensen
------	----------------

Ben S. Allen College Forestry Scholarship

1964	William G. Horn, Jr.
------	----------------------

HELEN BACON BOGGS SCHOLARSHIPS

(Open to California residents who attend the University of California)

1956	Walter P. Bemis
------	-----------------

CHARLES H. BUNTING MEMORIAL SCHOLARSHIP (Formerly: Redding Forest Forum Scholarship)

(Established in 1954, it provided a grant of \$100 to a student from the Forum area—Shasta, Tehama and Trinity counties—who attends any forestry school accredited by the Society of American Foresters. Following Charles Bunting's '40 death in an air crash on July 1, 1961, this scholarship was renamed in his honor. In 1962 the grant was increased to \$200. This scholarship is not endowed but is supported by collections made at the Forum meetings.)

1959 Allen A. Dyer

1963 Michael J. Grenko

1961 Stephen A. Kling

1964 Michael J. Grenko

1962 Jere L. Melo

CALIFORNIA STATE SCHOLARSHIPS

(Open to needy students on a competitive examination basis. Supported by the legislature and pays tuition at California college of student's choice.)

1960 to 1963 (inclusive) Ray H. Chaffee

INTERFRATERNITY MOTHER'S CLUB SCHOLARSHIP

(Awarded to an active fraternity man on basis of scholarship)

1960 Brian R. Payne

MT. DIABLO COUNCIL OF FEDERATED WOMEN'S CLUBS SCHOLARSHIP

(Awarded to a forestry student on faculty recommendation based on scholarship, need and qualities of character.)

1964 Robert N. Coats

GRADUATE

SCHOOL OF FORESTRY FELLOWSHIPS

THE BAKER AND BIDWELL FELLOWSHIPS

(The oldest fellowships available exclusively to forestry students at the University of California are the Baker and Bidwell fellowships. The first award was made in 1922 to Hugh C. Lott, MS '23, a BS graduate of Mont Alto Academy in Pennsylvania in 1922. The Baker and Bidwell fellowships were known as research assistantships until 1929.

The story of the Baker and Bidwell fellowships is closely woven with the early history of the California State Board of Forestry. That story is well told in the book *California Government and Forestry* by C. Ray Clar '27. The first State Board of Forestry was created in 1885 and first met on April of that year. On July 19, 1887, the Board of Forestry adopted a resolution stating its determination to establish experimental plantations in the north, south, and central parts of California, provided that land were available for the purpose. These tracts were expected to serve as demonstration areas and to provide the necessary planting stock for the widespread testing and planting of a wide variety of species throughout the state. A number of properties were donated, including 20½ acres in Hesperia in southern California, 40 acres at Merced, 100 acres at San Jacinto Station in San Diego County, and 15 acres near Livermore, but the only two that survived after 1890 were the 20 acres in Santa Monica in southern California and the 29 acres donated by General John Bidwell in the vicinity of Chico in northern California. The Santa Monica property, a gift of Senator John P. Jones and Colonel R. S. Baker, was accepted by the Board on December 20, 1887. It is believed that Abbot Kinney, who

was then a member of the State Board of Forestry, was instrumental in arranging for the gift.

The Bidwell property in Chico was accepted two months later on February 23, 1888. These two properties are prominently mentioned in the history of the demise of the first Board of Forestry in 1893. With the downfall of the board in early 1893, the Santa Monica and Chico properties were placed under the administration of the Horticulture Department of the University of California and Charles H. Shinn was placed in charge of the properties. Later, Professor Arnold V. Steubenrauch was in charge and, in 1906-8, Norman Ingham carried on his studies of eucalyptus from the Santa Monica Station.

Toward the end of 1916, Woodbridge Metcalf of the forestry staff of the University was assigned the job of administering the Santa Monica and Chico forestry stations.

In 1921 the University received legislative permission to sell these two properties. The Bidwell Station was sold to the city of Chico for \$1,500 for park purposes and is today a part of Bidwell Park of that city.

The University reserved the right to carry on measurements of the trees and to do additional experimental planting at the Chico property. In 1942, advantage was taken of this understanding to conduct experimental stripping of 150 trees in the cork oak, *Quercus suber*, plantation, set out in 1904. In more recent years the Institute of Forest Genetics of the USFS has set out a limited number of hybrid pines on the Chico Station as a test of their adaptability. More than 100 species of trees were tested there and many have made fine growth.

The Santa Monica Station was sold and has since been developed for real estate purposes, except for about six acres now used for public recreation.

This station was mainly planted to blocks of eucalyptus species. A resumé of the species and their growth is contained in the U.C. College of Agriculture, Agriculture Experiment Station Bulletin 380, November, 1924, by Woodbridge Metcalf.

The money realized from these two sales forms the endowment for the Baker and Bidwell fellowships.)

Baker Fellowship in Forestry

1922	Hugh C. Lott
1923	John S. Barnes
1924	William G. Edwards
1925	Howard W. Siggins
1926	Charles G. Geltz
1927	No appointment
1928	Warren W. Chase
1929	Lester H. Reineke
1930	Lester H. Reineke (first semester)
	Teh-i Li (second semester)
1931	James L. Averell
1932	Nicholas T. Mirov
1933	No appointment
1934	Irving H. Isenberg
1935	No appointment
1936	Gerald D. Pickford (resigned)
	Finlay S. McKinnon (alternate)
1937	Theodore W. Daniel
1938	George S. Allen
1939	Philip G. Haddock
1940	Henry J. Vaux
1941	R. Keith Arnold (resigned)
	John A. Zivnuska (alternate)
1942	Cammon H. Niederhof
1943-45	No appointments
1946	G. Lloyd Hayes
1947	Edward C. Stone
1948	Bruce J. Zobel

1949	Bruce J. Zobel
1950	Bruce J. Zobel
1951	I. Irving Holland
1952	No appointment
1953	Johann Jacob Oertli
1954	No appointment
1955	Wilbur G. Charter
1956	No appointment
1957	Stanley L. Krugman
1958	No appointment
1959	Joseph B. Zaerr
1960	Don Minore
1961	No appointment
1962	Robert L. Leonard
1963	No appointment
1964	James P. Kimmins
1965	Leonard S. Felix

Bidwell Fellowship in Forestry

1923	Edwin W. Pohle
1924	William B. Miller
1925	Arnold N. Weber
1926-27	No appointment
1928	George W. Craddock
1929	No appointment
1930	August L. Hormay
1931	Edwin L. Mowat
1932	Harry S. Hinkley

1933 Horace R. Josephson (1st semester)	1947 Allen W. Wiegand
Irving H. Isenberg (2nd semester)	1948 Harold L. Baker
1934 No appointment	1949 G. Robinson Gregory
1935 Henry J. Vaux	1950 George A. James (resigned)
1936 No appointment	G. Robinson Gregory (alternate)
1937 Horace R. Josephson (resigned)	1951 No appointment
George S. Allen (alternate)	1952 George A. James
1938 John W. Duffield	1953 No appointment
1939 Philip N. Joranson	1954 Robert O. McMahon
(resigned 4/8/40)	1955 No appointment
1940 Hugh E. Wilcox	1956 Elliott L. Amidon
1941 John A. Zivnuska (resigned to take Baker Fellowship)	1957-58 No appointments
Philip G. Haddock (alternate)	1959 Reinhard F. Stettler
1942-45 No appointments	1960 No appointment
1946 Douglas S. Smith	1961 Dennis E. Teegarden
(deceased Apr. 1947)	1962 No appointment
Stanley P. Gessel (alternate)	1963 James E. Maloney
	1964 No appointment
	1965 Johann Veltkamp

W. S. ROSECRANS FELLOWSHIP IN FORESTRY

(In 1955 the W. S. Rosecrans Fellowship in Forestry was added to the facilities for graduate study. This annual grant of \$1,800 is in support of graduate study and research in the field of forest land management in California. The fellowship is made available through the interest and generosity of William S. Rosecrans of Los Angeles, well-known conservationist and formerly chairman of the State Board of Forestry.)

1956 Stanley L. Krugman	1961 Lawrence S. Davis (recalled to military duty 10/4/61)
1957 James R. Griffin	Richard B. Vasey (alternate)
1958 James L. Jenkinson	1962 James E. Maloney
1959 James L. Jenkinson	1963 Robert L. Leonard
1960 Joe B. Zaerr	

SAN FRANCISCO FOUNDATION FELLOWSHIP

(Awarded to graduate students in forestry on the basis of need and promise as determined by a faculty committee. This award of \$1,000 per year for the years 1957 and 1958 was made through the kindness of Curt Dietz.)

1957 Wayne C. Hickey, Jr.	1958 Marcel DeBacker
James O. Klemmedson	James L. Jenkinson
Hasan K. Qashú	James O. Klemmedson
Emily Anna Shideler	Emily Anna Shideler

WEYERHAEUSER FELLOWSHIP IN FORESTRY

(Open to graduate students in their first, second, or third year of study toward the doctor's degree in forestry.)

1962 James N. Woodman	1964 Gary W. Fowler
1963 Edward C. Franklin	1965 John E. Barker

UNIVERSITY FELLOWSHIPS

EDWARD A. COLMAN MEMORIAL FELLOWSHIP IN WATERSHED MANAGEMENT

(Shortly after the death of Edward A. Colman, BS U.C. '32, PhD U.C. '42, on March 20, 1956, a group of his friends organized to establish an endowed fellowship in his

memory. Colman, at the time of his death, was chief of the Watershed Management Division of the California Forest and Range Experiment Station.

A Board of Sponsors was formed to help plan for permanence of the fund and to secure additional contributions to it. This board formulated objectives and terms under which the fund should be administered and this was accepted by the Regents of the University in February of 1957. Board membership includes Clark H. Gleason, chairman, David R. Brower, Ralph J. Cebrian, Mrs. E. A. Colman, J. C. Colman, C. B. Hutchison, McDonald Denman, G. M. Jemison, J. Kittredge, D. E. Koshland, C. J. Kraebel, S. B. Morris, DeWitt Nelson, H. J. Vaux, C. F. Wente, and H. G. Wilm. The Colman Watershed Fellowship Fund objective is an endowment sufficient to support an annual fellowship of \$2,400 per year.

The fellowship is open to graduate students in watershed management who intend to remain in this field. It may be used at the University of California or elsewhere.

By 1964, the endowment fund had reached \$33,000.)

1960 Leonard F. DeBano

1965 David M. Carneggie

1962 James R. Wallis

HORACE AND EDITH KING DAVIS MEMORIAL FELLOWSHIP

(Open to outstanding graduate students in genetics (plant breeding) on the Berkeley Campus.)

1957 William J. Libby

JAMES M. GOEWEY FELLOWSHIP

(Open to students in any of the scientific branches of learning.)

1948 Carl B. Koford

HILGARD SCHOLARSHIPS

(Open to graduate students in agriculture.)

1958 Norman E. Johnson

1961 Charles H. Schaefer

Hasan K. Qashú

1962 William L. M. McKillop

1959 William J. Libby

1963 Vernon O. Mayes

1960 Norman E. Johnson

AMY BOWLES JOHNSON MEMORIAL FELLOWSHIP

(Open to graduate students who received their BS degree from the University of California and whose chief study is concerned with research in some field of scholarship.)

1963 Geraldine B. Larson

LECONTE MEMORIAL FELLOWSHIP

(Open to graduates of the University of California within the last three years, who wish to pursue advanced study in any department at the University of California or elsewhere.)

1963 Geraldine B. Larson

JAMES ROSENBERG MEMORIAL SCHOLARSHIPS IN AGRICULTURE

(Open to students in graduate status in the Department of Agriculture)

1937 John W. Duffield

WILLARD DAWSON THOMPSON MEMORIAL SCHOLARSHIPS

(Open to graduate students who are legal residents of Utah.)

1935 Paul E. Packer

1940 Stanley P. Gessel

1938 Paul E. Packer

UNIVERSITY FELLOWSHIPS

(Open to graduate students engaged in research in any department.)

1941 Clarence Sterling

1962 Lawrence S. Davis

1959 James R. Griffin

JOHN H. WHEELER AND ELLIOTT H. WHEELER FELLOWSHIPS

(Open to graduate students in any department.)

1962 Geraldine B. Larson

OTHER FELLOWSHIPS

DANFORTH FELLOWSHIP

(To encourage graduate students to develop into the most competent, highly motivated, and effective college teachers they have the capacity to become.)

1957-62 Roger Q. Landers

KOPPERS FOUNDATION FELLOWSHIP IN WOOD UTILIZATION

(Awarded to a graduate student in wood utilization who plans a career in teaching.)

1964 Joseph G. Bicho

CHARLES LATHROP PACK FELLOWSHIPS

(Open to graduate students in forestry in the United States.)

1933 Nicholas T. Mirov

one university)

Walter U. Gartska

1937 Horace R. Josephson

(first time for two Pack Fellows at

WOODROW WILSON FOUNDATION FELLOWSHIP

(To encourage promising students to enter graduate work to prepare for college teaching in the United States or Canada.)

1962 Richard B. Vasey

CROWN ZELLERBACH FOUNDATION FELLOWSHIP IN WOOD SCIENCE AND TECHNOLOGY

(Open to graduate students in wood science and technology.)

1964 Joseph G. Bicho

1965 Robert A. Kundrot

WEYERHAEUSER FELLOWSHIP FOR PHYSICAL SCIENCE RESEARCH ON WOOD PRODUCTS

(Open to graduate students in wood science and technology.)

1965 Joseph G. Bicho

LOAN FUNDS

There are two loan funds in the School of Forestry for financial assistance to needy students.

One of these is the Walter Mulford Loan Fund which has accumulated to approximately \$4,700 and is to be used to help students over the financial hardship caused by summer camp. It has reached the level of maximum expected need. Further alumni solicitations have been directed toward the Walter Mulford Scholarship Fund.

The second loan fund is called The Southern Lumber Company Loan Fund. Loans are available only to students specializing in lumber merchandising. This fund of \$1,000 was established by Edwin W. Pohle, president of the Southern Lumber Co of San Jose, California. Pohle did one year of graduate work at Berkeley in 1923-4 after receiving his BS from Iowa State College in 1923. He was the first recipient of the Bidwell Research Assistantship (see Fellowships). Pohle made a similar gift to Iowa State College.

APPENDIX C

TECHNICAL ADVISORY COUNCIL OF THE U.C. FOREST PRODUCTS LABORATORY (1955-1964)

<i>Name</i>	<i>Period of Council Service</i>	<i>Term as Council President</i>	<i>Name</i>	<i>Period of Council Service</i>	<i>Term as Council President</i>
A. W. Agnew	'55-'59	'58-'59	Ralph D. Hodges, Jr.	1958	-
Norman L. Bailiff	'64-'67	-	Walter F. Holzer	'56-'59	'57-'58
Ben Benioff	'57-'60	-	A. B. Hood	'57-'60	'59-'60
Charles Berolzheimer	'55-'56	-	E. P. Ivory	'56-'59	-
	'58-'61	-	Russell Johnson	'57-'60	-
Earl B. Birmingham	'55-'58	'55-'57	M. E. Jones	'64-'67	-
Russell Bjorn	'55-'58	-	Herman Kranz	'63-'66	-
Robert Blumenstein	'64-'67	-	William E. Lawson	'60-'64	-
Warren A. Carleton	'59-'60	-	George E. Lefler	'61-'63	-
Lester J. Carr	'58-'61	-	Byrne C. Manson	'55-'56	-
Harry Chase	'59-'62	-		'58-'60	-
R. A. Colgan, Jr.	'55-'57	-	Lee Moffett	'55-'58	-
Theodore C. Combs	'55-'57	-	Frank Momyer	'60-'62	-
Mal Combs	'63-'66	-	Kenneth L. Morrow	'56-'59	-
Henry J. Degenkolb	'61-'64	-	Stanwood A. Murphy	'59-'62	-
Arthur C. Dreshfield	'62-'65	'64-'65	A. C. Nixon	'62-'65	-
George R. Duff	'63-'66	-	Pierson Plummer	'64-'67	-
Eddy S. Feldman	'55-'60	-	Nicholas V. Poletika	'60-'63	'61-'62
H. W. Fieweger	1962	-	J. T. Rushton	'62-'65	'63-'64
Howard S. Gardner	'59-'62	'60-'61	Thomas Shelton	'60-'63	-
Verne C. Gardner	'60-'63	-	Alfred Smith	'58-'61	-
Alan C. Goudy	'63-'65	-	Herbert E. Toor	'60-'63	-
Stanley Gustafson	'63-'64	-	Henry Trobitz	'63-'66	-
William Hearon	'61-'64	'62-'63	W. G. Van Beckum	'55-'57	-
A. T. Hildman	'55-'58	-			

APPENDIX D

FOREST MANAGEMENT FIELD SCHOOLS

<i>No.</i>	<i>Date Held</i>	<i>Subject</i>	<i>Location</i>
1.	1947, Nov. 10-26	Timber Inventory— Aerial Photographs, Sampling Procedures, Cutting Practices	Quincy
2.	1949, Nov. 14-19	Forestry Uses of Aerial Photographs	Quincy
3.	1950, Nov. 13-17	Forest Management by Unit Area Control	Quincy
4.	1951, Nov.	Statistical Procedures in Forest Sampling	Higgins Corners, near Grass Valley
5.	1953, Jan. 19-21	Truck Road Location and Construction	Higgins Corners, near Grass Valley
6.	1954, Feb. 1-6	The Use of Aerial Photographs in Forestry	Berkeley
7.	1955, March 28- April 1	Forest Insects	Dew Drop, near Calaveras
8.	1956, March 26-30	Fire Problems in Forest Management	Redding
9.	1957, Jan. 28- Feb. 1	Punched Card Techniques in Forest Management	Berkeley
10.	1958, Jan. 27-31	How Wood Quality Can Be Improved in Forest Stands	Nevada City
11.	1959, Feb. 2-6	Soils in Forest Management	Willits
12.	1960, March 9-11	Prism Cruising in Forest Management Inventories	Placerville
13.	1961, April 24-28	Natural and Artificial Forest Regeneration in the Coastal and Sierra Nevada Areas of California	Placerville
14.	1962, April 9-13	Recreation in Wildland Management	Berkeley
15.	1963, May 13-15	Soils in Forest Land Management	Quincy
16.	1964, May 18-20	Entomology in Forest Management	Placerville
17.	1965, March 1-3	Designing Field Studies for Solving Forestry Problems	Berkeley

APPENDIX E

UNIVERSITY OF CALIFORNIA FORESTRY CLUB OFFICERS

<i>Year</i>	<i>President</i>	<i>Vice-President</i>	<i>Secretary</i>	<i>Treasurer</i>
Spring 1912	J. T. Saunders	R. T. Robinson	A. E. Wieslander	W. P. Smidt
Fall 1912	F. B. Herbert	A. E. Wieslander	F. P. Keen	W. P. Smidt
Spring 1913	A. E. Wieslander	V. S. Brown	W. P. Smidt	F. B. Herbert
Fall 1913	F. P. Keen	O. R. Miller	V. S. Brown	R. E. Cuendett
Spring 1914	W. C. Mathews	L. S. Smith	O. R. Miller	H. O. Bowman
Fall 1914	W. C. Mathews	R. E. Cuendett	W. T. Robie	A. Kempe
Spring 1915	R. E. Cuendett	A. F. Hall	A. H. Muzzall	D. Dunning
Fall 1915	A. F. Hall	D. Dunning	H. L. Hansen	A. Kempe
Spring 1916	A. F. Hall	F. N. Aylward	H. L. Hansen	M. E. Krueger
Fall 1916	M. C. Warren	C. Van Riper	H. L. Hansen	F. N. Aylward
Spring 1917	F. N. Aylward	V. P. Davis	G. G. Byrne, Jr.	E. M. Blair

(Davis elected Pres. 3/14/17 because Aylward had left.)

<i>Year</i>	<i>President</i>	<i>Vice-President</i>	<i>Secretary</i>	<i>Treasurer</i>
Fall 1917	G. G. Byrne, Jr. (Elected 4/25/17)	T. K. Oliver	C. O. Gerhardy	E. M. Blair
Fall 1917	C. Van Riper (Elected 8/28/17)	Turner	C. O. Gerhardy	E. E. Honeycutt
Fall 1917	V. P. Davis (Elected 9/26/17)	R. W. Beeson	C. O. Gerhardy	G. Ellis
Spring 1918	R. W. Beeson	—	C. O. Gerhardy	—
Fall 1918	No organized club			
Spring 1919	C. O. Gerhardy	T. K. Oliver	J. Pemberton	L. J. Arnold
Fall 1919	G. M. Gowen	L. J. Arnold	W. W. Wagener	V. B. Davis
Spring 1920	R. W. Beeson	A. F. Tissot	J. C. Sammi	Reynolds
Fall 1920	A. F. Tissot	J. C. Sammi	H. G. Keith	R. M. Riley
Spring 1921	R. G. Hiscox	R. C. Downs	R. W. Smith	R. M. Riley
Fall 1921	J. T. McGinn	W. H. Gibbs	H. P. Miller	G. Ellis
Spring 1922	W. H. Gibbs	R. M. Riley	A. N. Weber	R. S. Bacon
Fall 1922	M. W. Edmonds	R. S. Bacon	J. B. Byrne	F. D. Monroe
Spring 1923	G. Ellis	J. B. Byrne	P. D. Hanson	S. J. Meiring
Fall 1923	K. McLeod	P. D. Hanson	R. M. Rutherford	R. L. Follett
Spring 1924	J. L. Averell	R. M. Rutherford	R. L. Follett	C. M. McHugh
(On Mar. 12 Rutherford was appointed acting treasurer, as McHugh had to leave the University due to ill health.)				
Fall 1924	P. D. Hanson	P. Kearney	V. L. Harper	J. M. Flynn
(On Sept. 3 Kearney resigned from VP post. H. I. Bower elected to fill this position on 9/17/24.)				
Spring 1925	R. M. Rutherford	C. E. McDuff	J. M. Flynn	R. F. Kellett
Fall 1925	J. M. Flynn	R. F. Kellett	R. A. Miller	M. C. Collins
Spring 1926	V. L. Harper	W. B. Coombs	M. C. Collins	C. R. Clar
Fall 1926	J. D. Sinclair	T. H. Harris	C. R. Clar	T. J. Orr
(At first meeting of fall semester, 9/1, H. E. Norton elected to take Orr's place, who had been called to Denver.)				
Spring 1927	J. R. Freeman	G. W. Craddock	R. L. Ahlf	T. M. Tyrrell
Fall 1927	K. W. Parker	B. Howard	Alice Craig	Harland
Spring 1928	T. M. Tyrrell	T. J. Orr	Alice Craig	C. C. Buck
Fall 1928	W. B. Augustine	A. C. Edler	P. J. Van Huizen	R. B. St. John
Spring 1929	H. Durbrow	A. F. Halloran	W. P. Maguire	M. P. Mortigia
Fall 1929	H. G. Sabine	W. E. Nelson	P. B. Hackley, Jr.	E. W. Wohletz
Spring 1930	J. E. Osborne	J. W. Dennison	F. W. Grover	P. B. Hackley, Jr.
Fall 1930	W. P. Maguire	F. M. Dunow	P. L. Johannsen	J. M. Rhoads
Spring 1931	I. F. Pearce	P. L. Johannsen	Alice D. Watson	F. M. Dunow
Fall 1931	L. E. Berriman	F. A. Meckel	Alice D. Watson	G. T. Nordstrom
Spring 1932	S. V. Dennison	F. Iverson	Alice D. Watson	G. T. Nordstrom
Fall 1932	G. T. Nordstrom	A. London	R. C. Wilson	F. W. Embree
Spring 1933	A. London	C. A. Wagner, Jr.	J. F. Kellogg	W. H. Marshall
Fall 1933	W. H. Marshall	R. C. Wilson	R. A. James	P. G. Haddock
Spring 1934	J. C. Kern	W. D. Chick, Jr.	P. G. Haddock	J. F. Kellogg
Fall 1934	R. T. Allbright	J. S. Hall	W. H. Brainard	K. E. Bradshaw
(Bradshaw resigned. Replaced by J. J. Whalen 8/29/34.)				
Spring 1935	F. L. Hector	J. S. Hall	M. H. Mitchell	R. W. Gardner
Fall 1935	R. F. Droege	E. Griffith	L. R. Thomas	E. S. Albert
Spring 1936	E. Griffith	R. Gravem	J. J. Whalen	J. F. Thornton
Fall 1936	W. E. Barthold	L. G. Cox	G. J. Taylor	G. F. Weaver
Spring 1937	J. C. Gibson	J. E. Armstrong	W. E. Scott	P. H. McCanlies
Fall 1937	J. K. Mace	J. E. Armstrong	P. H. McCanlies	J. G. Rowbury
Spring 1938	W. M. Beaty	P. S. Pattengale	L. J. Drnovich	H. B. Kaufner
		W. L. Noland		
		P. H. McCanlies		

<i>Year</i>	<i>President</i>	<i>Vice-President</i>	<i>Secretary</i>	<i>Treasurer</i>
Fall 1938	P. H. McCanlies	G. Mahony P. E. Packer R. K. Service	C. H. Bunting	T. F. Arvola
Spring 1939	R. Wallace	C. H. Bunting S. W. Jacobsmeyer D. B. Langford	K. A. Cuff	J. A. Hanson
Fall 1939	S. W. Jacobsmeyer	G. W. Ludwig W. H. Fairbank, Jr. K. A. Cuff	E. L. Smith	E. C. Stone
Spring 1940	K. A. Cuff	L. Haneline N. A. Smith P. A. Vincent	R. B. Goldsworthy	R. C. Sinclair
Fall 1940	P. A. Vincent	E. Doe C. F. White E. L. Smith	E. H. Voorhees	E. I. Viers
Spring 1941	C. F. White	R. B. Goldsworthy G. H. DeKay, Jr. R. Praun	C. Daily	J. R. Gunther
Fall 1941	G. H. DeKay, Jr.	E. L. Smith G. J. Rau R. P. Smith	K. Shearer	J. A. Nicholson
Spring 1942	E. L. Smith	(K. Shearer elected but did not serve—no record of his replacement.) A. E. W. Kelly D. Tackle W. T. Bailey W. J. Haussler		
		} Tied for third		
Spring 1946	A. M. Björnsen	Club inactive during World War II. P. Cox W. C. Johnson W. H. Ferry		
Fall 1946	W. C. Johnson	W. C. Finster V. A. Brown J. C. Dozier	D. R. Navon	P. W. Ward
Spring 1947	W. C. Finster	P. W. Ward K. D. Gordon D. R. Navon	A. K. Clapp	R. E. Burton
Fall 1947	K. D. Gordon	F. A. Timmers R. J. Christianson P. E. Shively	R. C. Meyer	H. F. Anderes
Spring 1948	R. C. Andree	R. C. Meyer R. E. Burton H. F. Anderes	E. F. Blunt	R. H. Ingraham
Fall 1948	R. C. Meyer	S. R. Tocher R. G. Weeks R. H. Blandford	R. Cheney	J. D. Thatcher
Spring 1949	S. R. Tocher	R. Cheney	J. D. Thatcher	
Fall 1949	R. Cheney	R. W. Cermak R. C. Spies R. W. Pole	L. S. Price	R. D. Baker
Spring 1950	J. C. Springer	R. W. Feuchter F. E. Quadro R. D. Baker	B. C. Lyon	L. S. Price
Fall 1950	R. W. Feuchter	L. R. Biddison R. L. Fisher B. D. Lyon	V. R. Price	R. H. Pland
Spring 1951	B. C. Lyon	V. R. Price J. B. Nile R. H. Pland	J. T. Keane	

<i>Year</i>	<i>President</i>	<i>Vice-President</i>	<i>Secretary</i>	<i>Treasurer</i>
Fall 1951	J. B. Nile	N. B. Owens Bud Fish J. Perry	W. B. McCallum	R. F. Krohn
Spring 1952	H. B. Owens	B. Z. Agrons W. B. McCallum R. F. Krohn	T. W. Nelson	O. J. Brichacek
Fall 1952	R. F. Krohn	G. I. Gentry J. E. Nicholson F. E. McFarland, Jr.	L. D. Steed, Jr.	T. W. Nelson
Spring 1953	B. Z. Agrons	R. J. Day T. W. Nelson C. S. Dickinson	T. L. Neil	W. G. Munro
Fall 1953	T. W. Nelson	T. L. Neil D. L. Binnering J. S. Lavender	W. A. Atkinson	M. A. Rotto
Spring 1954	J. S. Lavender	R. W. Gardner A. S. Harris J. B. Benediktson, Jr.	J. H. Denham	G. D. Cooper
Fall 1954	A. S. Harris	H. R. Miller, Jr. P. R. Kevin, Jr. D. J. Sanguinetti	J. N. Coburn	L. R. Billings
Spring 1955	H. R. Miller, Jr.	E. R. Knauf, Jr. H. E. Waksdal R. J. McDonald	R. B. Vasey	W. L. Knauf
Fall 1955	R. J. McDonald	A. J. West D. S. Meyer P. A. Crebbin	D. E. Johnson	R. W. Jessen
Spring 1956	A. J. West	W. E. Schlumpf J. N. Coburn J. E. Whitacre	D. E. Hosler	R. W. Benseler
Fall 1956	J. N. Coburn	R. B. Fores D. E. Hosler R. G. Weinmann	R. E. Johnson	O. J. Kolkmann
Spring 1957	D. E. Hosler	D. K. Rodgers H. Sebring J. Warnock	W. J. Kaiser, Jr.	J. R. Batchelder
Fall 1957	D. K. Rodgers	J. R. Batchelder R. G. Krebell J. H. Seyden, Jr.	D. W. Paulsen	C. Pickering
Spring 1958	J. R. Batchelder	(D. W. Paulsen drafted Sept. 1957, replaced by W. N. Dennison.)		
		W. N. Dennison H. Ervin R. R. Ziemer	G. N. Lanier	J. V. Clifford
Fall 1958	W. N. Dennison	J. V. Clifford D. A. Potter T. L. Conner	G. T. Ferrell	W. M. Cannon
Spring 1959	T. L. Conner	K. A. Austin D. W. Paulsen J. G. Bicho	J. R. Mount	R. L. Leonard
Fall 1959	J. G. Bicho	S. R. MacDonald S. P. Bradley G. S. Unsoeld	D. E. Stickers	F. G. Henschell
Spring 1960	R. L. Leonard	D. E. Stickers P. H. Beam B. Payne	B. K. Ford	G. A. Thorley
Fall 1960	P. H. Beam	G. A. Thorley J. R. Mount C. W. Philpot	G. Larson	K. R. Werner

<i>Year</i>	<i>President</i>	<i>Vice-President</i>	<i>Secretary</i>	<i>Treasurer</i>
Spring 1961	G. A. Thorley	R. O. Crouse R. O. Gibson R. K. Johnson	S. L. Beck*	J. L. Bertenshaw
Fall 1961	R. O. Crouse	E. T. Dierking P. C. Branch F. A. Tuemmler	D. T. Lauer	G. P. Standley
Spring 1962	R. O. Gibson	G. L. Beach S. A. Kling S. L. Beck*	M. G. Sudborough	D. B. Tavares
Fall 1962	S. L. Beck	R. D. Lund M. W. Skenfield R. J. Kettlewell	Kirsten Salstrom*	R. M. Mannion
(S. L. Beck drafted day after elected. Replaced by J. A. Beck, Jr.)				
Spring 1963	R. M. Mannion	W. S. Berry E. A. Batchelder M. G. Sudborough	W. L. Melo*	D. L. Tompkins
Fall 1963	W. S. Berry	A. S. Benson* J. E. Fleming* D. L. Tompkins	D. W. McCrory*	W. L. Melo*
Spring 1964	E. A. Batchelder	J. F. Gorman* C. W. Donaldson* R. P. Monk*	D. E. Brown*	J. R. Boozer*
Fall 1964	J. F. Gorman*	D. K. Crummer* F. S. Page* J. R. Boozer*	G. F. Arnese*	D. E. Brown*
Spring 1965	S. L. Beck*	W. L. Melo* G. F. Arnese* J. K. Agee*	T. J. Smith*	K. K. Rein*

*To complete requirements for graduation after December, 1964.

APPENDIX F-1

CALIFORNIA ALUMNI FORESTERS

OFFICERS

<i>Year</i>	<i>President</i>	<i>Vice-President</i>	<i>Secretary-Treasurer</i>
1922-23	Murrell C. Warren '17	—	Willis W. Wagener M.S. '28
1924	Willis W. Wagener MS '28	—	Duncan Dunning '15
1925	Willis W. Wagener MS '28	—	Duncan Dunning '15
1926	Myron E. Krueger MS '17	—	Arnold N. Weber '23
1927	Arnold N. Weber '23	—	V. Lester Harper '26
1928	Lawrence C. Merriam '21	—	Duncan Dunning '15 (Refused) Robert W. Cowlin '23 (Appointed)
1929	Rubin W. Smith '22	William Gibbs '23	Selwyn J. Sharp '20
1930	Hubert I. Bower '25	Don Leidig '22	Selwyn J. Sharp '20
1931	Robert M. Riley '22	Marc W. Edmonds '23	John R. Freeman '27
1932	Thomas K. Oliver '21	James Averell '24	John R. Freeman '27
1933	Selwyn J. Sharp '20	William H. Gibbs '23	Hereford Garland '31
1934	William H. Gibbs '23	Robert M. Riley '22	Hereford Garland '31
1935	William B. Augustine '30	Leland Berriman '32	Harry W. Camp '33
1936	Ernest W. Wohletz '30	Herbert A. Jensen '30	John C. Crowell '22
1937	John C. Crowell '22	Eugene H. Kincaid '35	T. H. Harris '27 (Permanent S-T)

<i>Year</i>	<i>President</i>	<i>Vice-President</i>	<i>Secretary-Treasurer</i>
1938	Charles L. Tebbe '29	J. Cordner Gibson '37	T. H. Harris '27
1939	Victor A. Clements '26	Earl Hanson '36	T. H. Harris '27
1940	John R. Freeman '27	Norman E. Dole, Jr. '35	T. H. Harris '27
1941	Theodore B. Plair MF '31	Herbert A. Jensen '30	T. H. Harris '27
1942	James K. Mace '37	Wm. B. Berry '37	T. H. Harris '27
1943	Russell Beeson '20	Waldo Wood '28	T. H. Harris '27
1944	Waldo Wood '28	Herbert A. Jensen '30	T. H. Harris '27
1945	Herbert A. Jensen '30	Bob Evju '37	T. H. Harris '27
1946	Bob Evju '37	Leon Snyder '42	T. H. Harris '27
1947	Leon Snyder '42	T. H. Harris '27	Charles C. Buck '30
1948	Thomas H. Harris '27	P. H. McCanlies '39	Charles C. Buck '30
1949	Thomas H. Harris '27 (for P. H. McCanlies '39 who resigned and moved to Oregon)	Art London '33	Charles C. Buck '30
1950	Arthur London '33	Charles R. Arment '39	Charles C. Buck '30
1951	Charles R. Arment '39	George Craig '39	John C. Crowell '22 (Acting Sec.)
1952	George Craig '39	Wm. M. Beaty '38	John C. Crowell '22
1953	William M. Beaty '38	Harry Abraham '43	John C. Crowell '22
1954	Harry C. Abraham '43	Tobe Arvola '38	John C. Crowell '22
1955	Tobe Arvola '38	Al Merrill '40	Ed. C. Stone '40
1956	Alfred Merrill '40	Wm. P. Maguire '30	Kermit Cuff '41
1957	Wm. P. Maguire '30	Glen Dietz '40	Kermit Cuff '41
1958	Glen Deitz '40	Bob Heyden '51	Fred W. Bacon '31
1959	Bob Heyden '51	Don Knowlton '39	Robert F. Krohn '53
1960	Don Knowlton '39	Horace Jones '36	Robert F. Krohn '53
1961	Horace Jones '36	Robert Service '39	Don Biddison '55
1962	Robert Service '39	Norman E. Dole, Jr. '35	Don Biddison '55
1963	Norman E. Dole, Jr. '35	R. Keith Arnold '37	Wayne L. Knauf '59
1964	R. Keith Arnold '37	Wm. Hartman '39	Wayne L. Knauf '59
1965	Wm. Hartman '39	Harold F. Bowman '43	Wayne L. Knauf '59

APPENDIX F-2

CALIFORNIA ALUMNI FORESTERS

ALUMNI ADVISORY COUNCIL

- 1932 Selwyn J. Sharp '20, L. C. Merriam '21, Burnett Sanford x'17
 1933 D. Dunning '15, L. C. Merriam '21, John A. Rudbach '30
 1934 Carl O. Gerhardy '22, Vic Clements '26, Sid V. Dennison '32
 1938 J. R. Freeman '27, Robert M. Riley '22, Tom H. Harris '27
 1944 Tom K. Oliver '21, Charles Tebbe '29, F. Paul Keen '14
 1946 F. Paul Keen '14 (Ch.), T. K. Oliver '21, _____
 1947 F. Paul Keen '14 (Ch.), Waldo E. Wood '28, Earl M. Blair '20
 1948 Earl M. Blair '20 (Ch.), Waldo E. Wood '28, Carl G. Albertus '35
 1950 Waldo E. Wood '28 (Ch.), Carl G. Albertus '35, R. G. Hiscox '21
 1951 Carl G. Albertus '35 (Ch.), R. G. Hiscox '21, Douglass F. Roy '46
 1952 R. G. Hiscox '21 (Ch.), Douglass F. Roy '46, Clinton Hallsted '39
 1953 Douglass F. Roy '46 (Ch.), Clinton T. Hallsted '38, Russell W. Beeson '20
 1954 Clinton T. Hallsted '38 (Ch.), Russell W. Beeson '20, Myron S. Wall, Jr. '42
 1955 Russell W. Beeson '20 (Ch.), Myron S. Wall, Jr. '42, Lewis Moran '38
 1956 Myron S. Wall, Jr. '42 (Ch.), Lewis Moran '38, Wes Spinney '33
 1957 Lewis Moran '38 (Ch.), Wes. Spiney '33, Sam Bryan '43, Don Cosens '46,
 Fred Dunow '31, Earl Hanson '36
 1958 Wes Spinney '33 (Ch.), Fred Dunow '31, Earl Hanson '36, Don Cosens '46,
 Norman E. Dole, Jr. '35, Paul E. Shively '48

- 1959 Don Cosens '46 (Ch.), Norman E. Dole, Jr. '35, Paul E. Shively '48, Earl P. Hanson '36, Emery Sloat '37, Henry E. Branagh '37
 1960 Norman E. Dole, Jr. '35 (Ch.), Paul E. Shively '48, Emery Sloat '37, Henry E. Branagh '37, William Haussler '48, Richard H. Pland '52
 1961 Emery Sloat '37 (Ch.), Richard H. Pland '52, William Haussler '48, Henry E. Branagh '37, Ralph C. Andree '48, Dana Cox '35
 1962 Richard H. Pland '52 (Ch.), William Haussler '48, Dana Cox '35, Ralph C. Andree '48, Harry C. Abraham '43, Irwin Bosworth '39
 1963 Ralph C. Andree '48 (Ch.), Harry C. Abraham '43, Irwin Bosworth '39, Dana Cox '35, Ted Nelson '54, L. T. Peterson '38

APPENDIX F-3

CALIFORNIA ALUMNI FORESTERS

EDITORS

1922-23	W. W. Wagener MS '28	1955	Arnold Bjornsen '46
1924	Duncan Dunning '15	1956-57	Arnold Bjornsen '46 Richard H. May MF '39 Clinton Phillips '47
1925-26	E. Fritz		
1927	Myron E. Krueger MS '17	1958	Arnold Bjornsen '46, Editor Richard H. May MF '39 Clinton Phillips '47 James Whitacre '57
1928	M. E. Krueger and E. Fritz		
1929-32	E. Fritz	1959	Clinton Phillips '47, Editor Richard H. May MF '39 Dennis E. Teegarden MF '58 James Whitacre '57
1933-34	A. F. Halloran '30		
1935-36	E. Fritz	1960	Clinton Phillips '47, Editor James Whitacre '57 Dennis E. Teegarden MF '58 Ernest Draves '50 Walter Bemis '57 Frank Quadro '51
1937	T. H. Harris '27		
1938	No publication	1961-62	Clinton Phillips '47, Editor James Whitacre '57 Ernest Draves '50 Jack Hansen '53
1939	R. F. Keniston '37		
1940	J. C. Crowell '22	1963	Clinton Phillips '47, Editor Jim Whitacre '57 Jack Hansen '53
1941-48	E. Fritz		
1949-50	H. A. Jensen '30, Editor-in-Chief Robert N. Colwell '38 John C. Crowell '22 Wm. Fairbank '40 Waldo E. Wood '28	1964	No publication
1951-52	Herbert A. Jensen, '30, Editor-in-Chief Victor A. Clements '26 John C. Crowell '22 John A. Zivnaska '38	1965	Clinton Phillips '47, Editor Jim Whitacre '57 Jack Hansen '53
1953	Victor A. Clements '26, Editor-in-Chief		
1953	Philip H. Intorf '38, Editor-pro-tem Douglass F. Roy '46 John A. Zivnaska '38		
1954	Myron E. Krueger MS '17 Arnold Bjornsen '46		

APPENDIX G

ATTENDANCE AT THE 50TH ANNIVERSARY CELEBRATION

BERKELEY, CALIF., DECEMBER 4-5, 1965

ALUMNI (By Class)		ALUMNI (By Class)	
Year	No.	Year	No.
'14	5	'16	1
'15	1	'17	1

ALUMNI (By Class)	
Year	No.
'18	—
'19	—
'20	3
'21	2
'22	2
'23	4
'24	1
'25	2
'26	1
'27	3
'28	3
'29	2
'30	4
'31	5
'32	1
'33	7
'34	7
'35	7
'36	6
'37	12
'38	8
'39	8
'40	5
'41	10
'42	12
'43	4
'44	—
'45	—
'46	3
'47	12

ALUMNI (By Class)	
Year	No.
'48	10
'49	11
'50	12
'51	14
'52	12
'53	15
'54	7
'55	7
'56	7
'57	8
'58	9
'59	7
'60	6
'61	4
'62	15
'63	10
'64	5
Total	301
Alumni Total	301
Non-Alumni	
Faculty	13
Associates	4
Students	9
Honorary Life Members	2
Others	75
Non-Alumni Total	103
Total	404

APPENDIX H

U.C. FORESTERS IN THE BIG "C" SOCIETY

VARSITY ATHLETICS

David L. Anderson	'39	Football	William F. Kleiman	'40	Baseball
Richard B. Bahme	'40	Track	Mike J. Koll	'42	Baseball
Frank J. Baron	'49	Crew	and President of Society		
Ernest L. Baxter	'29	Track	Richard A. Larsen	'49	Crew
Eugene H. Berkenkamp	'37	Crew	Donald T. Lauer	'63	Basketball
Arnold M. Bjornsen	'46	Track	C. Bentley Lyon	'52	Honorary
Robert E. Burton	'15	Track	William Main	x'49	Football
Douglas W. Clayton	'47	Baseball	Richard L. McKinnon	'59	Crew
Joel S. Conklin	'16	Baseball	Charles Mehlert	'40	Track
Richard J. Day	'55	Football	Leo W. Meyer	'14	Track
Laurence A. Dodge	'37	Crew	Foster E. Murphy	'48	Crew
Robert C. Downs	'21	Crew	William O. Noack	'47	Crew
Louis J. Drnovich	'38	Football	Carl Pedersen	'36	Crew
David H. Erb	'47	Baseball	John Peterson	'57	Crew
A. E. Garrissere	'42	Intramural	William A. Peterson	'34	Baseball
manager			Nick J. Poppin	'58	Football
Kenneth G. Gustafson	x'48	Baseball	Curt M. Rocca	'39	Crew
and President of Society			David H. Rogers	'37	Track
Darrall T. Imhoff	x'61	Basketball	John L. Ronald	'60	Football
Raymond E. Johnson	'44	Football	Martin A. Rotto, Jr.	'54	Crew

Richard W. Saukko	'50	Baseball	Jack D. Swaner	'50	Football
Daniel T. Seamount	'50	Track	Charles L. Tebbe	'29	Track
Gwynne H. Sharrer	'39	Crew	Henry K. Trobitz	'38	Crew

APPENDIX I-1

SOCIETY OF AMERICAN FORESTERS

U.C. FORESTERS IN NATIONAL OFFICES

(F = Faculty)

<i>President</i>			<i>Council</i>		
1924	Walter Mulford	F	1954-55	Percy D. Hanson	BS '25
			1956-59	Henry J. Vaux,	
					MS '35, PhD '48 & F
1917	David T. Mason (resigned)	F	1958-59	Maurice K. Goddard	MS '38
1934-37	Emanuel Fritz	F	1962-63	John A. Zivnuska,	
1938-41	Myron E. Krueger, MS '17 & F				BS '38, MS '40 & F
1942-45	Frederick S. Baker	F	1964-65	R. Keith Arnold	BS '37
1944-45	F. Paul Keen	BS '14		Floyd Iverson	BS '33

APPENDIX I-2

SOCIETY OF AMERICAN FORESTERS

U.C. FORESTERS ELECTED FELLOW

(F = Faculty)

<i>Fellows</i>			<i>Fellows</i>		
	Frederick S. Baker	F		Walter C. Lowdermilk	PhD '29
	John W. Duffield	PhD '51		David T. Mason	F
	Emanuel Fritz	F		Woodbridge Metcalf	F
	Suren R. Gevorkiantz	BS '24		Walter Mulford	F
	Maurice K. Goddard	MS '38		Arthur W. Sampson	F
	V. Lester Harper	BS '26, MS '27		Francis X. Schumacher	F
	F. Paul Keen	BS '14		Henry J. Vaux	MS '35, PhD '48 & F
	Joseph Kittredge	F		John A. Zivnuska	BS '38, MS '40 & F
	Myron E. Krueger	MS '17 & F			

PHOTOGRAPH CREDITS

<i>Page</i>	<i>Photography Source</i>	<i>Page</i>	<i>Photography Source</i>	<i>Page</i>	<i>Photography Source</i>
Frontis-	Painting by Jonniaux.	30	Leon Johnson from	114	McCullagh
piece	Photo by U.C. Agr. Ext.		Wieslander collection	116	Malmsten collection
3	(Gilman) Bancroft Libr.	32	McCullagh	117	Krueger collection
3	(Kinney) Bancroft Libr.	41	Forestry Album	120	School files
10	(Hilgard and Wickson)	45	George Craig	121	McCullagh
	Ryerson collection	46	Keith Arnold	123	U.C. Agr. Ext.
10	(Shinn) P. Kasch coll.	48	Forestry Album	125	U.S. Forest Service
10	(Stubenrauch) U.C. Agr.	58	University Archives	126	McCullagh
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18	(Wheeler) Un. Archives	66	Forestry Album	131	Barry Evans
18	(Greeley) U.S. Forest	73	ASUC Photography	132, 133, 135, 136,	
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18	(Dudley) D. Herbarium	89, 91, 92	U.C. Agr. Ext.	148, 149	U.C. Agr. Ext.
22	(Bridwell) Wieslander	98	Timber	153	Graphic Arts—F. Kirwan
22	(Jepson) J. Herbarium	99	Harold E. Heady &	154, 156	Woodbridge Metcalf
24	Wieslander		Clinton B. Phillips	160	Mel Barron collection
26	(Homans) Calif. Div. of	102	U.C. Agr. Ext.	166	John Zivnuska album
	Forestry	103	Vaux collection	167, 176	Forestry album
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	collection	108	Bruce family collection	179, 182	Timber
27	(Cornwall) Mrs. Cornwall	110	Harris & Ewing	192	Clinton B. Phillips
27	(Hunt) Ryerson coll.	111	Rolla Watt	194	U.C. Agr. Ext.
		113	Little		

ALUMNI INDEX

Alumni biographies will be found on pages 210 to 380. They are alphabetized under the year and heading of the earliest reference. The heading order is: BS, MF, MS, PhD, Other. The symbol † means the individual is deceased. See pages 209 and 210 for more detail.

- A
- Abarr, Carl L. BS, '51
 Abraham, Harry C. BS, '43
 Acker, Harvey R. BS, '51
 Ackerly, William F. BS, '49
 Adams, Paul B. BS, '49
 Adams, Ronald S. BS, '40
 Adams, Thomas C. BS, '40
 Adams, Thomas E. BS, '30
 Agrons, Bernard Z. Other, '53
 Ahlf, Richard L. Other, '29
 Akers, Joseph C. BS, '49
 Albert, E. Schuyler BS, '36
 Albertus, Carl G. BS, '35
 Albright, Rex T. BS, '36
 †Alcorn, Earl J. BS, '38
 Alden, Holt M. Other, '51
 Aldrich, Thomas Other, '45
 Alexander, Ira H. BS, '42
 †Alexander, Robert S., Jr. BS, '52
 Aley, Thomas J. BS, '60; MS, '62
 Alford, Frank F., Jr. BS, '60
 Allardice, John R. BS, '62
 Allen, George S. PhD, '45
 Allen, Urban C. MS, '28
 Alward, Charles L. BS, '38
 Amidon, Elliot L. Other, '60
 Anderes, Harold F. BS, '49
 Anderson, Alice D. Watson
 (See: Watson, A. D.)
 Anderson, David L. BS, '39
 Anderson, Henry W.
 BS, '43; MS, '47
 Anderson, Robert T. Other, '39
 Andree, Ralph C. BS, '48
 Andrews, John D. BS, '52
 †Andrews, William B., Jr. BS, '52
 Anglemyer, Robert E. BS, '42
 Angwin, Edwin L. BS, '46
 Annand, Phillip G. BS, '55
 Ares, Eugene T. BS, '49
 Arment, Charles R. BS, '39
 Armstrong, John E. BS, '38
 †Arnold, Landis J. Other, '20
 Arnold, R. Keith BS, '37
 Arpin, Peter K. BS, '40
 Arvola, Toivo F. BS, '38
 Aschoff, James BS, '37
 Ashby, Vernon W. BS, '53
 Atkinson, William A.
 BS, '55; MS, '56
 †Atwood, Ted C. BS, '37
 Augustine, William B. BS, '30
 Austin, Kenneth A. BS, '61
 Austin, Richard J. BS, '49
 Averell, James L. BS, '24
- B
- Babeock, John R. BS, '39
 Babin, Max BS, '38
 Bacon, Elmer M. Other, '38
 Bacon, Frederick W. BS, '31
 Bacon, Russell S. BS, '23
 Baden, Gerald M. BS, '39
 Badran, Osman A.
 BS, '48; MS, '49
 Baer, Herbert H. BS, '42
 Bahme, Richard B.
 BS, '40; PhD, '49
 Bailey, Charles A. BS, '42
 Bailey, John W. BS, '36
- Bailey, Wesley T. BS, '43
 Baker, Harold L. MS, '42
 Baker, Robert D. BS, '51; MF, '52
 Balch, Raymond E. Other, '40
 Bales, Forrest H. BS, '36
 Ball, James C. BS, '31
 Ball, Robert J. BS, '37
 Bangsberg, Ralph C. BS, '31
 Banks, Don R. BS, '56
 †Barkan, Fritz, Jr. BS, '39
 Barker, Z. Allen BS, '38
 Barnes, George H. MS, '29
 Barnes, John S. MS, '24
 Barnes, Warren E. BS, '32
 Barnes, William S. BS, '51
 Barnum, Louis E. BS, '33
 Baron, Frank J.
 BS, '49; PhD, '57
- Baronovich
 (See: Baron, F. J.)
 Barrette, Brian R. BS, '61
 Barron, Keith V. BS, '40
 Barron, Melvin E. BS, '34
 Bartakke, Manohar N. PhD, '63
 Barthold, William E. BS, '37
 Bascom, Edwin B. BS, '63
 Bash, Donald R. BS, '52
 Batchelder, E. Alan BS, '64
 Batchelder, James R. BS, '58
 Batchelor, Frederic H. Other, '63
 Bates, James C. BS, '58
 Baugh, Frederick R. MF, '49
 Baughn, E. Lee BS, '36
 Bauslaugh, George A. BS, '39
 †Baxter, Ernest L. BS, '29
 Baxter, Katherine D.
 (See: Dillon, K.)
 Beach, Gordon L. BS, '64
 Beadell, Henry A. Other, '32
 Beam, Philip H. BS, '61
 Beard, Frank W., Jr. BS, '58
 Beardwood, George R. BS, '36
 Beattie, Byron B. BS, '35
 Beattie, Edward Other, '44
 Beaty, William M. BS, '38
 Beaty, William R. C. BS, '43
 Beck, James A., Jr. BS, '63
 Becker, Maxwell E. BS, '33
 Beckwith, Stephen L. BS, '38
 Bedard, William D. PhD, '62
 Bedell, Thomas E. MS, '57
 Bedow, Robert J. BS, '54
 Bee, Stanley P. BS, '37
 Beebe, John D. BS, '37
 Beecher, Milton Other, '40
 Beemer, James G. BS, '41
 Beeson, Allan W. BS, '54
 Beeson, Russell W. Other, '20
 Belforte, Charles R. BS, '49
 Bellon, Alan L. BS, '53
 Bellue, Alfred J. Other, '22
 Bemis, Walter P. BS, '57
 Benedict, Philip B. BS, '62
 Benedict, Richard M. BS, '60
 Benediktson, John B., Jr.
 BS, '57; MF, '59
 Bennett, Deane L. BS, '47
 Benseler, Rolf W. BS, '57
 Bentley, Frederic A. BS, '37
 Bentley, William R. BS, '60
- Bergman, Lester D. BS, '52
 Berkenkamp, Eugene H. BS, '37
 Berridge, Roy D. BS, '52
 Berriman, Leland E. BS, '32
 Berry, Jack S. BS, '35
 †Berry, William B. BS, '37
 Berry, William S. BS, '64
 Berryman, Alan A. PhD, '64
 Bertenshaw, James L. BS, '62
 Best, Robert H. Other, '53
 Bevan, Mark F. BS, '62
 Bhodhipuks, Prasert BS, '58
 Bicho, Joseph C.
 BS, '60; MS, '64
 Biddison, Donald L. BS, '55
 Biddison, Lynn R. BS, '51
 Biehler, William A. Other, '50
 Bigbee, David N. BS, '50
 Billings, George E. BS, '39
 Binninger, Donald L. BS, '54
 Birge, Steven L. BS, '64
 †Bishop, Charles F. Other, '45
 Bishop, William H. BS, '49
 Bjornsen, Arnold M. BS, '46
 Bjornsen, Robert L. MS, '63
 Black, Bruce W. BS, '48
 Black, Hollis M., Jr. Other, '43
 Blair, Earl M. BS, '20
 †Blanchard, Robert K. Other, '36
 Blanford, Robert H.
 BS, '49; MS, '50
 Blanks, Herbert B. BS, '37
 Blitz, George A. Other, '60
 Blunt, Edward F. BS, '51
 Bollaert, Rene BS, '34
 Bolster, Walter R. BS, '52
 Bolt, Benjamin D. BS, '33
 Bolton, Herbert E., Jr. BS, '37
 Bonham, Frank L. BS, '42
 Boodt, William BS, '50; MS, '52
 Borden, Knox Other, '36
 Boring, William R. BS, '50
 Bosworth, Irwin E. BS, '39
 Bouchet, Robert BS, '49
 Bourgeois, Paul A. BS, '53
 Bouse, Thomas M. BS, '56
 Bower, Hubert I. BS, '25
 Bower, Russell W. BS, '30
 Bowman, Harold F. BS, '43
 Boyns, Charles F. BS, '41
 Bradley, John M., Jr. BS, '49
 Bradley, Stephen P. BS, '60
 Bradshaw, Kenneth E. BS, '37
 Bradshaw, Roy I. BS, '48
 Brainard, William H. BS, '35
 Branagh, Henry E. BS, '37
 Branch, Philip C. BS, '63
 †Brandeberry, J. K. Other, '34
 Brettinger, Carl L. BS, '39
 Brichacek, Otto J. BS, '53
 Brickwedel, Frank Other, '41
 Briggeman, Kenneth A. BS, '63
 Briggs, George S. BS, '53
 Bright, Donald W. BS, '51
 Brinkerhoff, Duncan W.
 Other, '50
 Brinkley, Clifton C. BS, '43
 Britton, Lloyd R. BS, '48
 †Brock, Thomas R. BS, '54
- †Deceased

- Brougher, Robert W. BS, '49
 Brovarney, Stanley BS, '51
 †Brown, Donald H., Jr. BS, '63
 Brown, Richard L. BS, '50
 Brown, Robert D. BS, '63
 Brown, Robert L. BS, '53
 Brown, Robert T. Other, '53
 Brown, Vance S. Other, '14
 Brown, Vernon A. BS, '47
 Brunet, Roger S. Other, '60
 Bruni, Richard L. BS, '57
 †Brunk, Max J. Other, '36
 Bruton, Quenton H. BS, '50
 Bryan, Eugene L. MS, '59
 Bryan, Homer R. Other, '38
 Bryan, Loren E. BS, '38
 Bryan, Mackay B. BS, '35
 Bryan, Sam H. BS, '43
 Buchanan, John B. BS, '61
 Buchanan, Thomas S. MS, '37
 Buck, Charles C. BS, '30
 Buemann, William R. BS, '50
 †Buel, Robert J. BS, '40
 Buell, Crawford R. Other, '31
 Buerge, Vincent V. Other, '38
 Bullard, William E. BS, '35
 Bunger, Myron T. BS, '27
 Bunnell, Woodbury L. BS, '56; MF, '59
 †Bunting, Charles H. BS, '40
 Burcham, Levi T. BS, '41; PhD, '56
 Burdick, Donald L. BS, '36
 Burke, Cecil O. BS, '39
 Burks, George F. BS, '33
 Burns, David M. BS, '59
 Burns, Robert BS, '47
 Burris, James A. BS, '41
 Burtchett, George W. BS, '51
 Burton, Larry R. BS, '55
 Burton, Robert Edward BS, '49; MS, '50
 Burton, Robert E. Other, '15
 Busby, Francis M., III BS, '52
 Bushing, Richard W. PhD, '64
 Buss, Paul A. BS, '35
 Butler, Kenneth L. BS, '34
 Butler, William E. BS, '59
 Buxton, John S. BS, '42
 †Byrne, George G., Jr. BS, '23
 †Byrne, John B. BS, '24
- C
- Caceres, Ruben V. MS, '46
 Cha, Daeyeng Other, '63
 Calef, Jeremiah F. BS, '41
 Callaghan, John BS, '37
 Callahan, Robert Z. BS, '49; PhD, '55
 Callahan, Dean T. BS, '50
 Cameron, David M. MF, '60
 Cameron, John A., Jr. BS, '37
 Camp, Harry W., Jr. BS, '33
 Campbell, Alex R. BS, '36
 Campbell, David R. BS, '59
 Cannon, William M. BS, '59
 Carignani, Adrian J. BS, '42
 Carleton, Warren A. BS, '42
 Carlson, Frederick J., Jr. BS, '51
 Carlson, Norman K. BS, '35; MS, '39
 Carnegie, David M. BS, '63
 Carr, Silas B. BS, '50
 Carrington, Raymond C. BS, '53
 Carson, Richard D. BS, '58
 Carville, Philip P. BS, '62
- Casamajor, Paul BS, '41; MF, '58
 Caster, Paul B. BS, '54
 Castles, John R. MF, '50
 Caudle, Lloyd J., Jr. BS, '63
 Caver, Robert L. BS, '63
 Caylor, Jule A. BS, '62
 Cecchi, Ronald B. BS, '61
 Ceragioli, James S. BS, '60
 Ceremello, Peter J. BS, '35
 Cermak, Robert W. BS, '50
 Chaffee, Ray H. BS, '63
 Chambers, Wayne F. BS, '47
 Chancey, Ted S. BS, '49
 Chandler, Craig C. BS, '51; MS, '55
 Chaney, Richard W. BS, '44
 Chapin, Harold E. BS, '38
 Charlton, James W. H. BS, '38
 Charter, Wilbur G. BS, '53; MF, '56
 Chase, Warren W. Other, '29
 Chatfield, Edward W. BS, '63
 Cheatham, Norden H. BS, '59
 Cheney, Robert BS, '51
 Cheshire, James T. BS, '52
 Chester, Stanley G. MF, '61
 Chick, William D., Jr. BS, '34
 Christiansen, Daniel S. BS, '35
 Christiansen, Roland J. BS, '48
 Clabaugh, Richard W. BS, '56
 Clapp, Allen K. BS, '49
 Clar, C. Raymond BS, '27
 Clark, Harry S. BS, '43
 Clark, Kenton P. BS, '55
 Clary, Raimond F. BS, '64
 Clayton, Douglas W. BS, '47
 Clemens, Roger W. C. BS, '41; MS, '56
 Clements, Victor A. BS, '26
 Clifford, John V. BS, '61
 Cline, Morris G. BS, '53
 Cline, Robert A. BS, '57
 Clopton, William H. BS, '49
 Clor, Mahmood A. BS, '50
 Cloyed, Linford A. BS, '62
 Cobb, D. Irving BS, '51
 Coburn, John N. BS, '57
 Cochran, Harold H. Other, '52
 Coggins, Clyde A. BS, '50
 Colby, Jerrold G. BS, '55
 Coleman, Glenn A. BS, '49
 Collings, Ralph W. BS, '50
 Collins, Donald R. BS, '60
 Collins, Edward D. Other, '23
 Collins, Maurice C. BS, '26
 †Colman, Edward A. BS, '32; PhD, '42
 †Colombano, Jon E. BS, '64
 Colwell, Robert N. BS, '38; PhD, '42
 Colwell, Wilmer L., Jr. MS, '50
 †Conklin, Joel S. BS, '16
 Conley, Gerald R. BS, '63
 Conner, Terrence L. BS, '61
 Connors, Robert J. BS, '53
 Conrow, Thomas M. BS, '49
 Converse, John C. BS, '41
 Conway, Raymond F. BS, '37
 Cook, Stanley R. BS, '60
 Coombs, George M. BS, '50
 Coombs, Bruce B. BS, '53
 †Coombs, Willard B. Other, '27
 Cooper, George D. BS, '57
 Cope, Robert H. BS, '54
 †Cornwall, George F. Other, '16
 Cortell, John S. BS, '62
- Cosens, Richard D. BS, '46
 Cowlin, Robert W. BS, '22; MS, '28
 Cox, Dana W. BS, '35
 Cox, James E. BS, '56
 †Cox, Leland G. BS, '36
 Cox, Paul BS, '47
 Cox, Wilbur K. Other, '25
 Craddock, George W. BS, '27; MS, '29
 Craig (Hiatt), Alice BS, '28
 Craig, George A. BS, '39
 Crandall, Harold E. BS, '46
 Crebbin, Alfred K. Other, '28
 Crebbin, Paul E. BS, '52; MS, '53
 Crebbin, Peter A. BS, '56
 Crews, Arthur G. BS, '39
 Crist, Paul V. BS, '40
 Critchfield, William B. BS, '49; PhD, '56
 Cross, Allen H. BS, '50
 Crossfield, Frank E. BS, '51
 Crouse, Ronald O. BS, '62
 †Crowell, John C. BS, '22
 Crull, James A. BS, '50
 Crupper, John C., Jr. MF, '51
 Cuff, Kermit A. BS, '41
 Culley, Thurlow S., Jr. BS, '49
 Culver, Robert G. BS, '39
 †Cunha, Milton T. BS, '42
 Curry, John R. MS, '33
 Curry, Wilmar L. BS, '50
- D
- Dahlsten, Donald L. PhD, '63
 Dake, Clarence G. BS, '51
 D'Amelio, James F. BS, '54
 Daniel, Theodore W. BS, '34; MS, '36; PhD, '42
 Darmsted, Robert G. BS, '38
 Dasmann, Robert E. BS, '34
 Dasmann, William P. BS, '36
 Davidson, Harold BS, '49
 Davies, Glenn R. BS, '54; MF, '59
 Davis, Francis R. BS, '49; MF, '53
 Davis, James B. BS, '50; MF, '52
 Davis, Lawrence S. PhD, '64
 Davis, Virgil B. BS, '20
 Davis, Wendell E. MS, '33
 Day, Maurice W. MS, '47
 Day, Richard J. BS, '55
 Dealey, David S. BS, '56; MF, '57
 DeBacker, Marcel Other, '59
 DeBano, E. A. (See: Shideler)
 Dechant, Harry P., Jr. BS, '38
 Degenkolb, John G. BS, '38
 De Gottardi, Warren W. BS, '62
 De Grace, Lawrence A. MF, '48
 De Graff, Ernest P., Jr. Other, '64
 Deitz, Glen L. BS, '40
 DeKay, George H., Jr. BS, '42
 De la Puente E., José M. MF, '50
 Dennison, Junius W. BS, '31
 Dennison, Sidney V. BS, '32
 Dennison, William N. BS, '59
 Denny, James C. BS, '48
 De Riberolles, Jean P. V. MS, '59
 Dick, Warren E., Jr. BS, '51
- †Deceased

- Dickerman, Murlyn B. MS, '35
 Dickinson, Charles S. BS, '56
 †Diemer, Jack A. Other, '31
 Dierring, Ernest T. BS, '62
 Dieterich, Clarence W. BS, '38
 Diffenbaugh, Harry BS, '45
 Dillon (Baxter), Katherine BS, '29
 Dimock, Donald E. BS, '37
 Dion, Joseph P. BS, '40
 Dirksen, Norman E. BS, '35
 †Dobrotin, Michael N. BS, '33
 Dodge, John M. BS, '49
 Dodge, Laurence A. BS, '37
 Doe, Everett S. BS, '41
 Doeller, Arthur H. Other, '34
 Doheny, Ralph J. Other, '33
 Dole, Norman E., Jr. BS, '35
 Doll, J. Henry Other, '37
 Doner, Max H. BS, '50
 Dortignac, Edward J. BS, '33
 Doss, William A. BS, '50
 Dotta, Daniel D. BS, '41
 Douglass, John R. BS, '39
 †Douthitt, Robert H. BS, '43
 Dowdakin, John C. BS, '41
 †Downs, Robert C. BS, '21
 Doyle, David S. BS, '57
 Dozier, John C. BS, '47
 Draeger, William C. BS, '64
 Drake, Joseph S. BS, '59
 Draves, Ernest E. BS, '50
 Dressbach, David W. BS, '32
 Dresser, Richard E. BS, '58
 Dresser, William T. BS, '42
 Drew, Reginald Other, '22
 †Drnovich, Louis J. BS, '38
 Droege, Richard F. BS, '36
 Duberow, Bernard G. Other, '46
 Duckworth, Walter A. BS, '62
 †Dudley, Herbert E. BS, '41
 Duffield, John W. PhD, '51
 Dulitz, James H. BS, '47
 Dunaway, David J. Other, '61
 Duncan, David L. BS, '47
 Dunham, Maurice A. BS, '52
 Dunlap, Allen E. BS, '52
 Dunn, Gerald A. BS, '50
 Dunn, James W. BS, '38
 Dunning, Duncan BS, '15; MS, '16
 Dunow, Fred M. BS, '31
 Durbin, Jack H. BS, '50
 Durbrow, Houghton BS, '30
 Dutra, Robert S. BS, '62
 Dyer, Archie A. BS, '62
- E
 †Eaton, Charles B. Other, '35
 Ebnet, John M. BS, '50
 Ecklund, Barton A. MS, '61
 Eddy, Alan R. MF, '59
 Everts, Ambrose B. Other, '26
 Eden, Cecil J. BS, '49
 †Edler, Arthur C. BS, '29
 †Edmonds, Marc W. BS, '23
 Edmunson, George C. BS, '41; MS, '51
 Edwards, Adolph E. BS, '28
 Edwards, Thomas J. BS, '22
 Edwards, William G. MS, '25
 †Egan, James A. BS, '35
 Ehelebe, Carl E. MF, '48
 Ellington, Will B., Jr. BS, '52
 Elliot, Joseph E., Jr. BS, '35
 Ellis, Clayton A. BS, '39
 Ellis, Elmer R. BS, '29
- Ellis, Guerdon BS, '23
 Elvin, Marshall A. BS, '33
 Ely, Eugene L., Jr. BS, '39
 Embree, Frank W. BS, '34
 Emery, Kennan M. BS, '26
 Emlen, Warren M. BS, '55
 Emmert, Francis C. BS, '37
 Emrie, William J. BS, '53
 Engel, Russell W. BS, '49
 †Engen, Edward T. BS, '48
 England, Charles D. BS, '49
 English, Alfred H. Other, '28
 Enright, John R. BS, '50
 Erb, David H. BS, '47
 †Erickson, Arvid L. BS, '41
 Ervin, Harry Other, '60
 Espenas, Lief D. MS, '40
 Estes, Alfred C. BS, '39
 Estes, John A. BS, '50
 Evans, Gray G. BS, '33
 Evans, Peter A. BS, '51
 Everett, Dean W. BS, '53
 Evju, Robert T. BS, '37
- F
 Fair, John D., Jr. BS, '41
 Fair, William Other, '30
 Fairbank, Charles W. BS, '37
 Fairbank, William H., Jr. BS, '40
 Fairchild, Robert P. BS, '60
 Falconer, Peter W. BS, '50
 Farrell, Norman A. BS, '59
 Farrell, Norman J. BS, '31
 Farris, George A. Other, '37
 Fay, Richard M. BS, '39
 Fayter, Harry L. BS, '50
 Fearing, Watson B. Other, '61
 Fellers, Charles F. BS, '39
 Felthouse, James W. BS, '37; MS, '39
 Fenley, John M. BS, '39; MS, '48
 Fenner, Ralph L. BS, '48
 Ferrell, George T. BS, '59
 Ferrin, DeVere L. BS, '57
 Ferris, Cal BS, '41
 Ferry, William H. BS, '47
 Feuchter, Roy W. BS, '51
 Feyer, Bernard Other, '40
 Fiebelkorn, Carl MF, '50
 Fiedler, Howard W. Other, '42
 Fielding, John M. Other, '49
 Fielding, Joseph E. MF, '52
 Figley, George S. Other, '39
 Finney, Gerald M. BS, '38
 Finster, William C. BS, '47
 Fischbein, Irwin W. PhD, '50
 Fischer, Conrad A. BS, '34
 Fischer, William F. BS, '33
 Fish, Dana R., Jr. BS, '40
 Fish, Howard S. BS, '54
 Fisher, Robert L. BS, '51
 Flannery, Robert D. BS, '37
 Flint, Garth F. BS, '34
 Floyd, J. Whitney MS, '42
 Flynn, Joe M. Other, '26
 Follett, Ralph L. BS, '26
 Ford, Adrian W. BS, '41
 Ford, Barry K. BS, '64
 Fores, Richard B. BS, '57
 Fosberg, Kenneth P. BS, '40
 Foster, Charles S. BS, '50
 Foster, Mark BS, '56
 Foster, William R. BS, '44
 Fowells, Harry A. Other, '53
 Fowler, Carl W. BS, '34
- Fowler, Gary W. BS, '61
 Fowler, Kenneth S. BS, '63
 Fowler, Ralph E. Other, '44
 Francis, George C. BS, '49
 Frank, James A. BS, '59
 Franklin, E. Carlyle MS, '64
 †Frazier, William T. BS, '42
 Fredericksen, Norman E. Other, '51
- †Freeman, John R. BS, '27; MS, '31
 French, Howard E. BS, '40
 Frescoln, Joseph W. Other, '51
 Frosali, Mario J. BS, '43
 Furbush, Paul B. BS, '40
 Furniss, Malcolm M. BS, '50
 Furtado, Franklin A. BS, '49
 Fyock, Ira J. BS, '37
- G
 Gaines, Edward M. Other, '35
 †Gaiser, Richard N. BS, '38
 Gallison, Glenn D. BS, '54
 Gansberg, William O. BS, '40
 Garbutt, Phillip N. BS, '49
 Gardiner, William H. BS, '61
 Gardner, Richard W. BS, '55
 Gardner, Robert W. BS, '35
 Garey, Carl A. MF, '50
 Garland, Hereford BS, '31; MS, '32
 Garrissere, Alpheus E. BS, '42
 Garstka, Walter U. Other, '33
 Garthwaite, Edwin L. BS, '48
 Gartner, Robert F. MS, '56
 Gavin, Walter H. BS, '52
 Gayner, James L. BS, '51
 Gearhart, David S. BS, '53
 †Geary, Harry O. Other, '20
 Gedney, Donald R. BS, '42
 Geibel, Gustav E. BS, '37
 Geiger, Albert J. BS, '39
 Gentry, Charles G. MS, '27
 Gentry, George I. BS, '53
 Gentry, Harold L. BS, '41
 Gerhardt, Carl O. BS, '20
 Gorman, Geoffrey D. BS, '38
 Gerson, William M. BS, '42
 Cessel, Stanley P. PhD, '50
 †Gevorkiantz, Suren R. BS, '24
 Gibbs, William H. BS, '23
 Gibson, J. Cordner BS, '37
 Gibson, Ronald O. BS, '62
 Gifford, Arthur D. BS, '31
 Gifford, Carlton K. BS, '49
 Gilbert, Robert R. BS, '49
 Gilden, Edward E. MS, '62
 Gillespie, William A. BS, '39
 Gillett, George W. MF, '49
 Gilman, Herbert S. BC, '38
 Gish, Delmon B. BS, '41
 †Gius, Fred W. MF, '61
 Gladish, Edward N. BS, '53
 Gleason, Arthur P. BS, '61
 Glidden, Charles S. BS, '41
 Glover, Earl W. BS, '39
 Glover, Harry R. BS, '46
 Goble, Frank G. BS, '40
 Goddard, Maurice K. MS, '38
 Goen (Jones), Alice BS, '37
 Goings, Kenneth R. BS, '63
 Goldman, Anathol Other, '43
 Goldsworthy, Robert B. BS, '42
 Goodacre, Garrett R. BS, '59
 Goodwin, Wayne C. BS, '40
 Googins, Paul H. BS, '40
- †Deceased

- Goor (Grasovsky),
 Amihud Y. BS, '23; MS, '25
 Gordon, D. Keith BS, '48
 Gordon, Donald T. BS, '39
 Gordon, Robert S. BS, '61
 Gorrell, Joseph W. MS, '57
 Gosden, Raymond J. BS, '64
 Gossard, Samuel F. BS, '39
 †Graham, George M. BS, '20
 Grah, Rudolf F. MS, '41
 Graham, Charles A. BS, '49; MS, '55
 Graham, Elliot L. BS, '64
 Graham, Hatch, Jr. BS, '51
 Graham, Lesley B. BS, '24
 Graham, Norman E. Other, '41
 Graham, Robert S. BS, '50
 Graham, Wesley C., Jr. BS, '50
 Graham, Wright E. BS, '38
 Grahman, Robert R. BS, '48
 Grasovsky (See: Goor)
 Gravem, Roy BS, '36
 Graves, Karl W. BS, '63
 Gray, John L. BS, '35
 Gray, Keith M. MF, '57
 Greene, Geoffrey E. MS, '55
 Greenhood, Edward C. Other, '45
 Gregg, Edwin H., Jr. BS, '51
 Gregory, G. Robinson PhD, '53
 Greig, James Edward BS, '50
 Grieve, Robert C. BS, '50
 Griffin, James B. BS, '50
 Griffin, James B. BS, '52; MS, '58; PhD, '62
 Griffin, John P. BS, '52
 Griffin, William J. BS, '42
 Griffith, Edmund BS, '36
 Griggs, Dean B. BS, '38
 Grimmell, Clifford C. BS, '63
 Gross, John H. BS, '47
 Grover, Dana L., Jr. BS, '37
 Grover, Frederick W. BS, '30
 Grundman, Robert BS, '39
 Gunther, James R. BS, '41
 Gustafson, Carl A. MS, '29
 Gustafson, Kenneth G. Other, '48
 Gustafson, Robert Warren, BS, '50
- H
 Habib, Philip C. PhD, '52
 †Hackley, Philip B., Jr. BS, '31
 Haddock, Philip G. BS, '34; PhD, '42
 Haderle, John Other, '36
 Hadley, Kenneth W. BS, '48
 †Hagen, Roy M. Other, '15
 Hahn, Glenn G. Other, '14
 Haight, Henry H. IV BS, '56
 Hale, John S. BS, '49
 †Hall, Ansel F. BS, '17
 Hall, Dale O. BS, '51; MF, '58
 Hall, Edward J. BS, '53
 Hall, George L. BS, '25
 Hall, Guy H., Jr. BS, '51
 Hall, John S. BS, '35
 Hall, Sydney M. BS, '39
 Hall, Ward, Jr. BS, '39
 Hallett, Albert F. E., Jr. BS, '51
 Halloran, Arthur F. BS, '30
 Hallsted, Clinton T. BS, '39
 Halsey, Donald G. BS, '52
 Hamilton, Francis E. BS, '52
 Hamilton, Warren F. BS, '29
 Hammitt, John H. BS, '58
 Hand, George F. BS, '39
- Haneline, Loren BS, '42
 Hanks, Charles Other, '32
 Hansen, George M. MS, '41
 †Hansen, Harvey L. Other, '17
 Hansen, Jack H. BS, '53; MF, '54
 Hansen, Lawrence G. BS, '46
 †Hansen, Ralph H. MF, '51
 Hansen, Walter O. BS, '37
 Hansen, William H. BS, '36
 Hanson, Earl P. BS, '36
 Hanson, James A. BS, '39
 Hanson, Percy D. BS, '25
 †Hanson, Robert T. BS, '38
 Harlan, Clair E. BS, '32
 Harmon, James R. BS, '52
 Harper, V. Lester BS, '26; MS, '27
 Harrell, Richard D. Other, '61
 Harris, Arland S. BS, '55
 Harris, Marion R. BS, '23; MS, '27
 Harris, Thomas H. BS, '27
 Harrison, James W. BS, '55
 Harrison, John R. BS, '39
 Hart, James E. BS, '52
 Hartman, William T. BS, '39; MF, '51
 Hartzell, Lahman E. BS, '60
 †Haskell, Horace S. BS, '39
 Haskin, William A. BS, '35
 Hastings, John H. BS, '47
 Haussler, William J. BS, '48
 †Hawley, William A. BS, '36
 Hayden, Douglas W. BS, '57
 Hayes, G. Lloyd Other, '46
 Heasley Waldo L. BS, '52
 Hector, Fred L. BS, '35
 Hedrick, Donald W. MS, '49
 Heitkotter, Bernard W. BS, '61
 Heller, George W. BS, '42
 Hellmers, Henry PhD, '50
 Helm, Raymond E. BS, '51
 Helsing, Robert E. BS, '51
 Hemphill, Norman W. BS, '38
 Henschell, Frederick G. Other, '61
 Herbert, Albert W. BS, '43
 †Herbert, Frank B. BS, '14
 Herbolzheimer, William G. MF, '57
 Herczeg, Andrew MS, '64
 Herkenham, Norman B. BS, '40
 Heron, Donald G. BS, '40
 Hervey, Donald F. MS, '48
 Heyden, Robert E., Jr. BS, '51
 Heyer, John BS, '41
 Heyward, Frank D., Jr. MS, '30
 Hiatt, Alice Craig (See: Craig, A.)
 Hickey, Wayne C., Jr. MS, '58
 Hiehle, Jack L. BS, '47
 Higgenbotham, James Other, '36
 Higginson, Guy R. BS, '49
 Hill, James T. BS, '37
 Hill, Wesley G. BS, '41
 Hinkley, Harry S. MS, '33
 Hirschenberger, Peter M. J., Jr. BS, '41
 Hiscox, Richard G. BS, '21
 Hobbs, Samuel M. BS, '39
 Hochmuth, Harold R. MS, '38
 Hodges, Ralph D., Jr. BS, '46
 Hodgkins, Earl J. MS, '40
 Hodgkins, Francis I. BS, '38
 Hoerr, Robert C. BS, '54; MS, '57
- Hoffman, William P. BS, '42
 Holden, Daniel W. BS, '55
 Holderman, James A. BS, '50
 Holland, I. Irving BS, '40; MS, '41; PhD, '55
 Holland, Richard L., Jr. BS, '48
 Hollingsworth, Ralph J. BS, '49
 Holmes, Arthur W. BS, '47
 Holmes, Fred V. Other, '14
 Holstein, Charles A. BS, '37
 Honeycutt, Everett E. Other, '23
 Hooper, George R. BS, '42
 Hooper, Jack F. BS, '60; MS, '62
 Hoover, Marvin D. MS, '39
 Hope, David G. BS, '51
 Hormay, August L. BS, '30
 Horn, Max Other, '51
 †Horning, Walter H. MS, '28
 Horton, Jerome S. MS, '40
 Hosler, Dale E. BS, '57
 Host, John R. BS, '50
 †Housden, Eric N. BS, '58
 House, Verl L. PhD, '51
 Houston, Richard C. BS, '47
 Howard, Benton BS, '27
 Howden, W. Robert BS, '34
 Howell, Joseph, Jr. Other, '30
 Hrabosky, Joseph BS, '39
 Huey, Ben M. Other, '54
 Hughes, Bennett O. MS, '30
 Hughes, John E. BS, '34
 Hughes, Robert T. BS, '48
 Hughes, William C. BS, '51
 Hull, Herbert M. BS, '46
 †Hult, Gustav W. Other, '29
 Hundt, Joachim R. BS, '49
 †Hunewill, Harvey A. BS, '41
 Hurd, Pete R. V. BS, '52
 Husted, James H. MS, '40
 Hyvaaka, Lauri Other, '60
- I
 Imhoff, Darrall T. Other, '61
 Ingco, Genaro, Jr. BS, '55
 Ingraham, Richard H. BS, '50
 Intorf, Philip H. BS, '38
 Isbell, Fred W. BS, '54
 Isberg, Jon L. BS, '58
 Isenberg, Irving H. PhD, '36
 Isensee, Arthur E. BS, '42
 Isle, Raymond W. Other, '42
 Iverson, Willard R. BS, '41
 Iverson, Floyd BS, '33
- J
 Jacobs, Allen W. BS, '23; MS, '24
 Jacobsmeier, Stanley W. BS, '40
 †Jacobson, Frank A. BS, '47
 Jacobson, William T. BS, '35
 Jakobson, Eric E. BS, '40
 James, George A. MF, '53
 James, Ralph A. BS, '34
 Janeczek, Rudolph J. MS, '39
 Janes, Robert C. BS, '47
 Jankowski, Edwin J. MS, '42
 Jansen, Peter B. BS, '44
 Jasper, Charles M. BS, '52
 Jeans, Ivan R. BS, '39
 Jenkinson, James L. BS, '57
 Jensen, Herbert A. BS, '30
 Jensen, Lyle E. BS, '62
 Jensen, Ralph Other, '41
 Jensen, Willis A. BS, '52
 Jepsen, Edward P. BS, '40
- †Deceased

- Jessen, Robert W. BS, '56
 Jogo, Milan BS, '41
 Johannsen, Paul L. BS, '31
 Johnson, David E. BS, '57
 Johnson, Donald D., Jr. BS, '52
 Johnson, Morris C. Other, '39
 Johnson, Raymond E. BS, '44
 Johnson, Richard E. BS, '58
 Johnson, Robert A. BS, '38
 Johnson, Robert K. BS, '62
 Johnson, Samuel S. BS, '38
 Johnson, William C. BS, '47
 Jones, Alice Goen (See: Goen, A.)
 Jones, Horace D. BS, '36
 Jones, Ray W. BS, '39
 Jones, Richard Harrison BS, '33
 Jones, Richard Hosken BS, '40
 Jones, Roger G. BS, '39
 Joos, Peter J. BS, '48
 Jope, Harold B. BS, '51
 Joranson, Philip N. PhD, '44
 Jorgenson, Elmer C. BS, '42
 Jorgensen, Leroy BS, '41
 Josephson, Horace R. MS, '33; PhD, '39
 Joy, Austin S. BS, '38
 Joy, Irwin E. BS, '40
- K
- Kadish, Amram BS, '54; MS, '59
 Kaiser, Walter J., Jr. BS, '59; PhD, '63
 †Kampschmidt, Jean Other, '44
 Kankam, Richard MF, '60
 †Kasak, Joseph J. BS, '36
 Kaufner, Herbert B. BS, '38
 Kay, Burgess L. BS, '53
 Keane, John T. BS, '52; MF, '54
 Keast, Fred W. BS, '47
 Keefe, Robert J. BS, '64
 Keen, Frederick Paul BS, '14
 Keith, Harry G., Jr. BS, '24
 Kellett, Robert F. BS, '26
 Kelley, Alfred E. W. BS, '43
 Kellogg, Edward E. BS, '51
 Kellogg, John F. BS, '34
 Kellogg, Leonard F. BS, '24
 Keniston, Robert F. BS, '37
 Kenline, George A. BS, '62
 Kennon, Curtiss W. BS, '57
 Keogh, James E. BS, '39
 Kepon, Peter P., Jr. BS, '49
 Kermickel, Howard P. BS, '39
 Kern, Jack C. BS, '34
 Kernohan, Clifford T., Jr. BS, '31
 Kersavage, Paul C. MS, '62
 Kesareodi, Shankar N. MS, '35
 Kettlewell, Richard J. BS, '63
 Kevin, Paul R., Jr. BS, '55
 Kidder, Richard R. BS, '50
 Kincaid, Eugene H. BS, '36
 King, Joseph L. BS, '36
 Kingdon, Richard H., Jr. BS, '57
 †Kinkor, Clarence P. MS, '41
 Kintigh, Robert G. MF, '47
 Kinzy, Robert H. BS, '64
 Kirk, Bernard M. BS, '35
 Kirkendall, Paul G. BS, '52
 Kitazawa, George BS, '40
 Kittani, Hasan BS, '39
 Kleiber, John C. BS, '39
 Kleiman, William F. BS, '40
 Klem, Gustav S. MS, '63
- Klemmedson, James O. BS, '50; PhD, '59
 Kling, John R. BS, '52
 Kling, Stephen A. BS, '63
 Klugh, Richard H. BS, '32; MS, '36
 Knapp, Robert M. Other, '38
 Knauf, Eldon R., Jr. BS, '56
 Knauf, Wayne L. BS, '59
 Knepp, John E. BS, '49
 Knight, John H. BS, '39
 Knorr, Philip N. BS, '38
 Knowlton, Donald E. BS, '39
 Koch, Edward C. BS, '36
 Koepf, John L. BS, '50
 Koford, Carl B. BS, '37; PhD, '50
 Kolkmann, Harry A. BS, '59
 Kolkmann, Oliver J. BS, '57
 Koll, Michael J. BS, '42
 Kopenhaver, Ralph W. BS, '27
 Korthals, Kurt W. BS, '60
 Koster, Wallace F. BS, '50
 Kotok, Edward S. BS, '41
 Krebill, Richard G. BS, '58
 Krohn, Bernhard J. BS, '58
 Krohn, Robert F. BS, '53
 Krueger, Myron E. MS, '17
 Krueger, Roger D. BS, '63
 Krugman, Stanley L. MS, '56; PhD, '61
 Kupnaldt, William H. BS, '47
 Kyer, George, Jr. BS, '53
- L
- †Labaig, Martin E. BS, '38
 Ladd, Martin W. BS, '56
 Ladine, Elmer E. BS, '37
 †Lahav, Arie BS, '32; MS, '33
 La Jeunesse, John L. BS, '39
 Lamb, Perry A. BS, '43
 Lammi, Joe O. PhD, '54
 Lancaster, Robert G. BS, '51
 Landers, Roger Q. PhD, '62
 Langdon, Hector BS, '46
 Langford, Daniel B. BS, '40
 Langley, Philip G. BS, '50
 Lanier, Gerald N. BS, '60
 Larsen, Richard A. BS, '49
 Larson, Geraldine B. BS, '62
 Larson, Larry J. BS, '58
 Lauderdale, Kerby R. BS, '61
 Lauer, Donald T. BS, '63
 Laursen, Raymond V. BS, '55
 Laush, John BS, '52
 Lavell, Robert M. BS, '54
 Lavender, James S. BS, '54
 Lawson, John D. BS, '38
 Leatherman, Robert L. BS, '49
 LeConey, James E. BS, '40
 Lee, Howard C. BS, '32
 Lee, Robert G. BS, '64
 Lee, Timothy E. BS, '64
 Leidig, Don M. BS, '22
 Leimbach, Paul A. BS, '62
 Leisz, Douglas R. BS, '50
 †Lemos, Andres BS, '28
 Lent, Jerry D. BS, '62
 Leonard, Melvin P. BS, '38
 Leonard, Robert L. BS, '60
 Leone, Norman J. BS, '36
 Leoni, Leonard R. BS, '40
 Levy, Donald M. BS, '38
 Lew, Albert G. BS, '35
 Lewis, Anselmo N. BS, '30
 Lewis, Frank E. MF, '62
 Lewis, Richard T. BS, '57
- Li, Teh-i MS, '31
 Libby, William J. MS, '59; PhD, '61
 Lim, Peter PhD, '56
 Links (Linkees), Thomas A. BS, '51
 List, Edgar G., Jr. BS, '40
 Little, Gerald H. BS, '62
 Liukkonen, Reino O. BS, '38
 Livingston, William C. BS, '62
 Lloyd, Dean W., Jr. BS, '49
 Lloyd, Richard M. BS, '42
 †Lodbell, William W. BS, '35
 Lockhart, John S. BS, '38
 Lofgren, John O. BS, '51
 †London, Arthur BS, '33
 Long, Leonard O. BS, '39
 Loomis, Robert W., Jr. BS, '61
 Lopez, Chester E., Jr. BS, '62
 Lord, Phillip H. BS, '59
 Lott, Hugh C. MS, '23
 Loughhead, Harvey J. MS, '37
 Lowdermilk Walter C. PhD, '29
 Lowe, Jesse R. BS, '52
 Lowe, William H. BS, '52
 Lowell, Phillip G. BS, '56
 Lozanov, Nathan BS, '48
 Luck, Robert F. BS, '59
 Ludwig, Gordon W. BS, '40
 Lund, Johan Owe (See: Owe, J. L.)
 Lund, Richard E. BS, '58
 Lund, Robert D. Other, '63
 Lunsford, Billy D. Other, '50
 Lyon, C. Bentley BS, '52
 Lyon, Robert L. PhD, '61
 Lyons (Samson), Eunice H. BS, '38
 Lyons, Torrey BS, '38
- M
- Maben, Robert L. BS, '51
 MacDonald, Stanley R. BS, '61
 MacDougall, Robert T., Jr. BS, '41
 Mace, James K. BS, '37
 Mace, Robert B. BS, '53
 MacGregor, RobRoy A. BS, '58
 MacIay, Robert D. BS, '23
 Maclean, Robert M. BS, '47
 Macnair, James H. BS, '36
 Macpherson, Wylie R. BS, '50
 Macres, James T. BS, '39
 †Madsen, William R. BS, '40
 Magill, Arthur W. MS, '63
 Maguire, James P. Other, '37
 Maguire, William P. BS, '30
 Mahoney, John M. BS, '38
 †Mahony, Grant BS, '39
 Main, William Other, '49
 Majestic, James J. MF, '50
 Mak, Kenneth R. BS, '52
 Malain, Robert J. BS, '50
 Maloney, James E. BS, '62; MF, '63
 Mannion, Roy M. BS, '63
 Manson, Byrne C. Other, '36
 Margosan, Richard BS, '43
 Marron, Frank C. BS, '39
 Marsh, Luther W., Jr. BS, '52
 Marsh, Richard B. BS, '43
 Marshall, David A. BS, '63
 Marshall, Eugene D. MS, '38
 Marshall, Richard C. BS, '41
 Marshall, William H. BS, '33
- †Deceased

- Marston, Richard B. MS, '48
 Martin, Edward F. BS, '51
 Martin, Robert M. BS, '57
 Masson, John H. BS, '46
 Mather, William W. Other, '39
 Matthews, William C. Other, '15
 Mauch, Robert C. Other, '64
 Maxey, Carl W. BS, '57; MS, '62
 May, G. Morton BS, '50
 May, Richard H. MS, '39
 Mayes, Vernon O. MS, '64
 Mazellis, Mendel BS, '43; PhD, '54
 Mazurak, Andrew P. PhD, '48
 Mazzetta, Angelo J. BS, '33
 McArthur, William E. BS, '64
 †McAuley, Donald H. BS, '39
 McBride, Joe R. MS, '64
 McBride, Robert S. BS, '49
 McCallum, William B. BS, '53
 †McCanlies, Preston H. BS, '39
 McCarthy, James Other, '39
 McCarthy, Robert E. BS, '47
 †McCarthy, Edward C. PhD, '27
 McChesney, Thomas M. BS, '63
 McClain, David P. BS, '50
 McClay, T. Alan BS, '41
 McClellan, Grant E. BS, '52
 McCluskey, Don R. BS, '50
 McCluskey, George E. BS, '51
 McCollum, Lawrence H. BS, '40
 McCulley, Robert D. BS, '37
 McDonald, Donald BS, '51
 McDonald, John B. MS, '59
 McDonald, Robert J. BS, '56
 McDowell, Edward F. Other, '41
 McDuff, Clifford E. BS, '25
 †McFarland, Floyd E., Jr. BS, '53
 McFarland, Myron B., Jr. BS, '48
 McGinn, John T. BS, '22
 McGregor, William D. BS, '52
 McHugh, Charles R. Other, '29
 McKinnon, Richard L. BS, '59
 McLallen, William H. Other, '27
 McLean, Norman, Jr. BS, '51
 McLees, Kenneth C. BS, '32
 McLeod, Kenneth, Jr. BS, '24; MS, '27
 McMahon, Robert O. PhD, '62
 McNairn, Robert B. BS, '62
 McNairy, Louis N. BS, '39
 McNutt, Weston D. BS, '37
 McPeak, Gordon W. Other, '42
 McPherson, Stanley G. BS, '48
 McQuillan, John E. BS, '41
 McRorey, Russell D. BS, '36
 Mead, Robert R. Other, '58
 Means, Orrin P. BS, '38
 Meckel, Frederick A. BS, '32
 Meeuwig, Richard O. BS, '51; MS, '60
 Mehler, Charles BS, '40
 Meier, Paul R. BS, '37
 †Meiring, Stefanus J. BS, '23
 Mello, Clarence E. BS, '49
 Melo, Jere I. BS, '64
 Menkens, Harvey E. BS, '53
 Mensing, David BS, '49
 Merriam, Lawrence C., Jr. BS, '48
 Merriam, Lawrence C., Sr. BS, '21
 Merriam, Robert A. MS, '57
 Merrill, Alfred H. BS, '40
 Merrill, Paul D. BS, '61
 Merriman, Michael M. MS, '64
 Merritt, Richard A. BS, '50
 Meso, Stanley W., Jr. Other, '54
 Meyer, David S. BS, '56
 Meyer, Donald E. BS, '41
 Meyer, Frederick A. BS, '35; MS, '46
 Meyer, Herman P. BS, '37
 †Meyer, Leo W. BS, '14
 Meyer, Merle P. MF, '50
 Meyer, Ralph C. BS, '49
 Mezger, Robert W. MS, '49
 Michel, Kermit R. BS, '47
 Middleton, Robert L. BS, '39
 Miller, Alan R. BS, '53
 Miller, Harold B. BS, '34
 Miller, Harold P. BS, '22
 Miller, Harry R., Jr. BS, '55
 Miller, Hugo, Jr. BS, '50
 †Miller, Orville R. Other, '15
 Miller, Ralph A. Other, '27
 Miller, Robert M. BS, '41
 Miller, Russell S. BS, '37; MS, '38
 Miller, William B. MS, '25
 Miner, Ray W. BS, '52
 Minter, Brian E. BS, '50
 Miranda, Marvin P. BS, '60
 Mirov, Nicholas T. MS, '31; PhD, '36
 Mitchell, Charles Other, '43
 Mitchell, Grant A. BS, '41
 Mitchell, John N. MS, '35
 Mitchell, Martin H. BS, '35
 Mittman, Albert O. BS, '39
 Monroe, Fred D. BS, '23
 Moon, Arnold L. Other, '63
 Moore, Arthur D. PhD, '56
 Moore, Howard E. BS, '48
 Moore, Jack E. BS, '42
 Moorhead, James R. BS, '56
 Moran, Lewis A. BS, '38
 Morgan, David F. PhD, '56
 Morgan, Gary D. BS, '59
 Morris, Edward F. BS, '42
 Morris, William G. MS, '31
 Morrow, John M. Other, '49
 Mors, Richard H. BS, '33
 Mortiglia, Matias P. BS, '30
 Mote, Clayton D., Jr. PhD, '63
 Mount, John R. BS, '61
 Mounts, Jack BS, '50
 Mowat, Edwin L. Other, '32
 Moyer, Jack L. BS, '39
 Muerle, Gerhard F. BS, '51
 Muir, Robert J. BS, '53
 Munnich, Kurt A. C. BS, '52
 Munns, Dudley F. BS, '41
 Munro, William G. BS, '55
 Munster, Gregg H. BS, '52
 Murdock, Jane (See: Ulrich, J. M.)
 Murdoff, Harold F. Other, '41
 Murphy, Foster E. BS, '48
 Murphy, Warren T. BS, '26
 Murray, John H. BS, '43
 †Muzzall, Alexander H. BS, '15; MS, '16
 Nelson, Arthur H. BS, '42
 Nelson, Irwin G. BS, '39
 Nelson, Myron J. BS, '36
 Nelson, Robert E. BS, '42
 Nelson, Ted W. BS, '54
 Nelson, Wesley J. BS, '37
 †Nelson, William E. BS, '30
 Nemeth, Lajos J. MS, '64
 Neubecker, Charles B. Other, '64
 Neudeck, Donald H. BS, '51
 Newby, Allen M. BS, '39
 Nicholls, Chester O. BS, '35
 Nichols, Maurice B. BS, '36
 Nicholson, James A. BS, '42
 Nicholson, James E. BS, '53
 Nicklos, James F. BS, '50
 Niederhof, Camman H. MS, '59
 Nielsen, Vernon A. BS, '40
 Nielson, Barney N. BS, '41
 Nile, James B. BS, '52
 Nilsson, Jerry MF, '62
 Noack, William O. BS, '47
 Noland, William L. Other, '39
 Nordstrom, George T. BS, '32
 Nordstrom, Henry W. BS, '39
 Nordyke, James P. BS, '49
 Norman, Kenneth P. BS, '50; MF, '51
 †Norris, William R. BS, '35
 Norton, Henry E. Other, '27
 Noskowiak, Arthur F. BS, '42; MF, '49
 Nouri, Abdul K. BS, '53
 Nourse, Everett F. BS, '33
 O
 Ockenden, Rolfe M. BS, '41
 Oertli, J. Jakob MS, '53; PhD, '56
 O'Kelly, Thomas J. BS, '52
 Oliver, Thomas K. BS, '21
 Olson, Don L. BS, '59
 O'Neal, Nolan C. BS, '38
 Opsal, Neil B. BS, '53; MF, '56
 O'Regan, William G. PhD, '62
 Orr, Gaylord A. BS, '43
 Orr, Thomas J. BS, '28
 Orr, Thomas J., Jr. BS, '53; MF, '54
 Orr-Ewing, Alan L. MF, '51
 Ortez, Mervyn A. BS, '38
 Osborne, James E. BS, '30
 Osburn, Verne R. BS, '52
 Osmanlioglu, Hayri M. MF, '63
 Oswald, Daniel D. BS, '58
 Otter, John D. BS, '40
 Owe, Johan Lund MS, '30
 Owen, Donis W. BS, '57
 Owens, Harry B. BS, '52
 Oyung, Frank BS, '52
 P
 Packer, Paul E. BS, '39; MS, '50
 Paelinck, Paul M. MS, '55
 Palm, Jesse A. BS, '48
 Palmer, Stanley A. Other, '41
 Panetos, Constantinos P. PhD, '63
 Parady, Richard A. BS, '59
 Parker, Kenneth W. BS, '28; MS, '29
 Parsons, Robert H. BS, '40
 Partain, Gerald L. Other, '51
 Patee, Robert K. BS, '50
 Pattengale, Paul S. BS, '39
 †Deceased

- Paul, Edward A. BS, '51
 Paulsen, Donald W. BS, '60
 Payne, Brian R. BS, '61
 Payne, Fred L. BS, '52
 Peakes, William C. BS, '54
 Pearce, Irving F. BS, '31
 Pearl, Dugan H. BS, '39
 Pease, Walter E. BS, '53
 Pedersen, Carl M. BS, '36
 Pedlar, John E. BS, '49
 Pemberton, James E. BS, '21; MS, '23
 Pentoney, Richard E. BS, '49
 Perkins, Roy A. BS, '59
 Perlee, Christopher C. BS, '63
 Perry, James L. BS, '52
 Perse, Edward S. BS, '61
 Pesonen, David E. BS, '60
 Peterka, Martin J. BS, '45
 Peters, Robert C. BS, '60
 Petersen, John BS, '57
 Petersen, Leonidas T. BS, '38
 Petersen, Stanley S. BS, '48
 Peterson, Richard L. BS, '50
 Peterson, William A. BS, '34
 Petry, Robert A. BS, '39
 Phipps, George O. BS, '38
 Phillips, Clinton B. BS, '47
 Phillips, John M. BS, '46
 Philpot, Charles W. BS, 61; MS, '63
 Pickering, Charles BS, '59
 Pieper, Rex D. PhD, '63
 Pinkard Jacques J. Other, '47
 Pitman, Rinaré E. BS, '37
 Pitsker, Philip A. BS, '41
 Plair, Theodore B. MS, '31
 Pland, Richard H. BS, '52
 Plisco, Gary W. BS, '57
 Plumb, Timothy R., Jr. MS, '59
 Pohle, Edwin W. Other, '24
 Pole, Rupert W. BS, '50
 Pomeroy, Richard M. BS, 49; MF, '64
 Pomponio, Melvin M. BS, '37
 Pong, Wee Yuey BS, '53
 Pooley, Wilbur C. BS, '42
 Poppe, Charles R., Jr. BS, '51
 Poppin, Nicholas J. BS, '58
 Porter, Jack E. C. BS, '61
 Potter, Donald A. BS, '59
 Powell, J. Howard BS, '41
 Powell, Robert W. BS, '52
 Prater, Leland J. BS, '33
 Prater, William J. BS, '37
 Pratt, Elmer R. BS, '49
 †Praun, Robert BS, '42
 Prentice, Dale C. BS, '48
 Prescott, James A. BS, '50
 †Price, Daryl Other, '46
 Price, Luther S. BS, '52
 Price, Vincent R. BS, '52
 Pringle, Stanley L. MS, '42
 Proffitt, Norman A. BS, '34
 Pryor, Frank D., Jr. BS, '39
 Pugh, Paul E. BS, '40
- Q
 Qashu, Hasan K. BS, '57; MS, '57
 Quandro, Frank E. BS, '51
 Qualls, Carter P. MF, '49
 Quartly, John F. BS, '37
- R
 Rader, Lynn PhD, '63
 Rahm, Neal M. BS, '37
 Raibley, Michael W. BS, '49
 Ramirez, Norbert D. BS, '41
 Ranger, Gerald E. BS, '64
 Rathner, Harry B. BS, '43
 Ratliff, Raymond D. MS, '61
 Rau, George J. BS, '41
 Ray, Robert L. BS, '49
 Raymond, Fred M. BS, '62
 Iazzeto, John H. BS, '56
 Read, Wayne B. BS, '30
 Reents, Henry G. BS, '38
 Rehbein, Donald A. BS, '51
 Reid, Elbert H. Other, '35
 Reifsnnyder, William E. MF, '49
 Reiling, Paul D. Other, '49
 Reinecke, Ray H. BS, '53
 Reinecker, Haydn P., Jr. BS, '47
 Reineke, Lester H. Other, '30
 Reinke, Konrad B. BS, '61
 Remmy, Karl F. BS, '56
 Rennie, Robert L. BS, '60
 Reukema, Donald L. BS, '53
 Reynolds, Glenn L. BS, '50
 Reynolds, Harry V., Jr. BS, '47
 Reynolds, Hudson G. BS, '39; MS, '42; PhD, '54
 Reynolds, Richard D. BS, '51
 †Rhoads, Judson M. BS, '31
 Rice, Alfred M. Ex, '21
 Rice, Bert H. BS, '51
 Rice, Raymond M. MS, '61
 Rice, Robert E. BS, '52
 Rich, Arthur A. BS, '50
 Richey, Larry E. BS, '49
 Rickson, Douglas E. MF, '61
 Rienstra, John T. BS, '61
 Riihinen, Paivio Other, '54
 †Riley, Robert M. BS, '22
 Ritchie, Roy W. BS, '39
 Roberts, Francis Other, '45
 Roberts, Raymond BS, '30
 Robertson, James C. H. MS, '33
 Robertson, Taylor D. BS, '52
 Robie, Wendell T. Other, '17
 Robinson, Cyril S. Other, '26
 Robinson, Gene P. BS, '52
 Robinson, Gordon P. BS, '37
 Robinson, Ray C., Jr. BS, '42
 †Robinson, Russell T. Other, '15
 Robinson, William C. Other, '49
 Rocca, Curt M. BS, '39
 Rodgers, Donald K. BS, '58
 Rodick, Larry S. BS, '58
 Rogers, Bruce J. BS, '49; MS, '50
 Rogers, David H. BS, '37
 Romm, Jeffrey M. BS, '64
 Ronald, John L. BS, '60
 Ronayne, William P. BS, '47
 Rose, Jack A. BS, '53
 Rose, Richard G. BS, '64
 Roseberry, Richard D. BS, '34
 Roseberry, Richard P. BS, '62
 Ross, Gilbert L. BS, '51
 Ross, Robert N. BS, '40
 Rothacher, Jack S. MF, '48
 Rothwell, Richard L. BS, '62
 Rotto, Martin A. BS, '54
 Rowbury, James G. BS, '38
 Rowe, Burton M. BS, '55
 Rowland, Edgar I. BS, '38
 Roy, Douglass F. BS, '46; MS, '62
 †Ruben, Leon A. Other, '35
 Rudbach, John A. BS, '30
 Rueger, Alfred E. BS, '48
 Rusk, John, Jr. BS, '55
 Ruth, James D. Other, '57
 Rutherford, Robert M. BS, '25
 Rutter, John A. BS, '38
 Rust, Richard A. BS, '64
 Ryerson, Knowles A. Other, '16
- S
 Saarni, Roy W. BS, '40
 †Sabine, Horace G. BS, '30
 Sabiston, David W. BS, '48
 Sacher, Joseph A. PhD, '53
 †Sagimori, Thomas T. BS, '41
 Sai, Karim S. Other, '35
 St. John, Raymond B. BS, '28
 St. John, William M., Jr. BS, '48
 Sammi, John C. BS, '22
 Samson, Eunice H. Lyons (See: Lyons, E. H.) BS, '62
 Sanders, Dale J. BS, '31
 Sanford, Burnett BS, '31
 Sanford, William M. BS, '50
 Sanguinetti, David J. BS, '55
 †Santee, Richard C. BS, '40
 Saukko, Richard W. BS, '50
 Savelle, Glenn D. BS, '64
 Saville, Richard M. MF, '47
 Sawyer, Elliot BS, '38
 Saylor, Louis C. Other, '37
 Schaefer, Charles H. BS, '58; PhD, '62
 Schall, Walter M. MS, '42
 Scharpf, Robert F. MS, '57; PhD, '63
 Schatz, Louis W. MS, '40
 Schaub, Fred L. BS, '59
 Schimberg, Edgar Other, '38
 Schlobohm, Dean F. BS, '34; MF, '47
 Schlumpf, Walter E. BS, '57
 Schmahl, Edward L. BS, '38
 Schmidt, Andrew R. BS, '38
 Schneider, Ernest BS, '38
 Schori, Michael O. BS, '47
 Schubert, Gilbert H. MS, '50
 Schuessler, Edward BS, '39
 Schultz, Robert D. PhD, '64
 Schumacher, Gerald H. BS, '39
 Schuster, Charles L. BS, '37
 Schwarz, Henry C. BS, '54
 Schymelsky, Michael E. BS, '63
 Scott, Edward L. BS, '50
 Scott, Harry M. BS, '41
 Scott, Roy W. BS, '56
 Scott, William E. BS, '37
 Scroggins, Ladislaus R. BS, '62
 Seale, Robert H. BS, '40
 Seaman, William H. BS, '39
 Seamount, Daniel T. BS, '50
 Sebring, Harold F. BS, '58
 Sechrist, Edwin E., Jr. BS, '41
 †Seguerra, Justino Other, '40
 Semans, Arthur W. Other, '35
 Serex, John F. Other, '28
 †Service, Robert K. BS, '39
 Seth, Kishan K. Other, '64
 Settle, William H. BS, '50
 Severance, Hayward M. Other, '14
 Seyden, John H., Jr. BS, '58
 Shachori, Ami Y. BS, '53; MF, '54
 Shally, Vincent W. BS, '40
 Sharp, Selwyn J. Other, '20
 Sharrer, Cwynne H. BS, '39
 Sharp, F. Weldon BS, '60
 Shaw, Elmer W. MF, '47
 †Shearer, Kenneth Other, '43
- †Deceased

- Shepperd, Alfred E. BS, '47
 Shera, Hugh R. BS, '52
 Sherman, Irving W. BS, '39
 †Sherman, Pennoyer BS, '24
 Shideler (DeBano), Emily A. BS, '54; MF, '55
 Shiro, James H. BS, '55
 Shively, Paul E. BS, '48
 Shoemaker, Charles P., Jr. BS, '63
 Short, Lawrence R. Other, '33
 Shugart, Lee A. BS, '56
 Shukle, Archie A. BS, '37
 Sias, Richard Other, '37
 †Siggins, Howard W. MS, '26
 Simmen, Alfred E. BS, '40
 Simonson, C. Wayne BS, '62
 Simontacchi, Alexander BS, '38
 †Simpson, Lloyd W. BS, '31
 Simpson, Theodore H. BS, '41
 Sinclair, J. Donald BS, '26; MS, '29
 †Sinclair, Robert C. BS, '40
 †Sindel, Edwin E., Jr. Other, '41
 Sindel, Glen E. BS, '36
 Sindel, Jean E. BS, '39
 Sinkovitch (See: Edwards, A. E.)
 Sizer, William J. Other, '54
 Skenfield, Michael W. BS, '63
 Skolmen, Roger G. BS, '58; MS, '59
 Slattery Leo P. BS, '34
 †Slayden, Joseph E. BS, '34
 Sloat, Emery A., Jr. BS, '37
 Smart, Ellis F. BS, '51
 Smetts, Kenneth D. BS, '45
 †Smidt, Wm. Powell Other, '14
 Smiley, Mark F. Other, '49
 Smith, Alfred A. BS, '40
 Smith, Arthur D. MS, '37
 †Smith, Brian T. Other, '42
 Smith, Charles F. BS, '38
 Smith, Cleburne O. BS, '58
 †Smith, Douglas S. Other, '47
 †Smith, Elmer E. BS, '33
 Smith, Emerson L. BS, '42
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