

Missouri Log

1964

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1964



Jim and Irene.

A Tribute to "Big Jim"

AT ITS THIRTEENTH ANNUAL BANQUET, the Forestry Club awarded Professor James O'Neil an Honorary Lifetime Membership—only the second such honor granted by the Club. This tribute to O'Neil, coming only a few months before his scheduled retirement, recognized his long and active professional life of outstanding devotion to his students, his profession and his country.

"Big Jim" O'Neil was born at Chippewa Falls, Wisconsin, in 1894. He obtained his college training in the field of logging engineering at Oregon State College, receiving the Bachelor of Science degree in 1917. He served as an officer in the Field Artillery in World War I and in the Engineers in World War II. In World War II, he took part in five major European campaigns, was seriously wounded by a mine and spent more than a year in military hospitals.

His professional experiences read like a novel. His first job was that of time keeper for the Pine Tree Company at a Remer, Minnesota, logging camp in 1910 at the age of sixteen. He even built a mountain railroad in Oregon, and worked in Washington and British Columbia. Between 1921 and 1924 he lifted 99 miles of abandoned railroad in Minnesota in record time and cut 3½ million feet of white and red pine and drove it down the White Face River. In 1921 Jim headed an extensive survey of the Cloquet Fire of 1918. His report was probably instrumental in the dismissal of a \$15,000,000 law suit filed against the railroad accused of start-

ing the fire. From 1927 to 1929, he was Secretary-Treasurer of the O'Neil Brothers Lumber Company in Chicago and later served as a Civil Engineer for Cook County, Illinois. Jim joined the U.S. Forest Service in 1934 and spent many years in timber management, appraisal and supervision. In 1938, he was sent to Boston to estimate and salvage two billion feet of hurricane blow-down. After four days of inspection, he submitted a preliminary estimate which upon completion of the salvage work, proved to be in error by only ten percent.

His career is studded with active and noteworthy participation in professional and civic organizations, veterans' groups and of course, his church.

Jim joined the School of Forestry staff at the University of Missouri in 1951. His vast knowledge gained through study and incomparable experience earned him the respect of several hundred students and colleagues who have benefitted by their association with him.

With Jim through much of his colorful career and sharing many outstanding experiences, has been Irene O'Neil. This lovely, silver-haired lady, a former school teacher, has contributed much to the School and its students through participation in many activities. For several years a faithful "enrollee" at summer camp, she came to be considered a dear friend of many, many students, providing a friendly pat and kindly word when most needed.

Retirement means different things to different people. For some, it means a well-earned rest; for Jim O'Neil, it will mean merely a shift of gears, a change to some other active endeavor. Perhaps he will put down on paper his vivid recollections of a past era, travel and be able to spend more time with his grandchildren. They are still young enough for effective "spoiling," a privilege reserved for special Granddads. One thing is sure; Jim O'Neil will be busy!

At the banquet, March 10, Bill Payne, spokesman for the Club made these remarks:

"Tonight, it is my great privilege and solemn responsibility to speak for my fellow students of the School of Forestry and our alumni across the 50 states and some foreign countries.

Tonight, it is our purpose to recognize and salute one of the most outstanding persons we have known—a patriot of his time, a professional forester of highest reputation, a teacher of fantastic devotion, a gentleman held in high esteem by all who know his name.

Tonight, on behalf of the Forestry Club of the University of Missouri and pursuant to unanimous action by that body, I do hereby bestow the title of Honorary Lifetime Member upon William James O'Neil."

When Payne finished, 170 persons stood and applauded as the man of the moment rose for recognition.

This was their Tribute to "Big Jim."

Dedication

RESEARCH PLAYS AN IMPORTANT ROLE in forestry schools as a phase of graduate education and as a stimulation to faculty members to make their contribution to the solution of forestry and related problems. Working under the severe handicap of limited funds for forestry research, the full potential of the forestry schools for research could not be realized.

As graduates of land-grant institutions, Congressman Clifford McIntire and Senator John Stennis knew how valuable the federal funds under the Hatch Act had been in developing strong agricultural research programs. They felt that similar legislation which would earmark federal funds for forestry research was needed to stimulate financial support for forestry research by state government and private industry. Under their leadership, this idea became a reality when on October 10, 1962 the late President Kennedy signed into law, P.L. 87-788. The staff of the 1964 *Missouri Log* is proud to recognize the contribution of these men to the progress of forestry by dedicating the *Log* to them.



Congressman CLIFFORD G. McINTIRE, Republican of Maine, has shown an ardent interest in forestry affairs since going to Washington in 1951. He received all his formal education in his native Maine and was granted his Bachelor of Science degree in Agronomy in 1930 from the University of Maine. Since then he has been awarded honorary degrees from his Alma Mater, the University of Maine, and Maine Maritime Academy.

Because of the great importance of forests and forest industry in Maine, much of Congressman McIntire's attention has been devoted to introducing and supporting legislation designed to advance the best interests of forestry. Fully 87 per cent, nearly 17 million acres, of his State's area is forested. Of even greater significance is the fact that almost 99 per cent of this is in private owner-

ships. Forest products valued at \$550 million are harvested annually from Maine's forest lands.

From his position as the ranking minority member of the House Subcommittee on Forests of the House Agriculture Committee he has been able to keep his finger on the pulse beat of forestry legislation. Congressman McIntire has petitioned the Congress to approve such appropriations as would support a dynamic program of American forestry.

He felt, as did many of his associates, that research at competent universities throughout the nation could do much to advance the cause of forestry. To this end it seemed that the ideal instrument for advancing research would be a piece of legislation that provided a "line item" authorization for such purposes. Such legislation would specify that authorization be directed toward forestry research in the forestry schools and experiment stations of our Land Grant Colleges and through the facilities of other qualified State supported educational institutions.

Mr. McIntire on August 7, 1961 introduced H.R. 8535, the first forestry research bill. This was the forerunner of H.R. 12688 which on October 10, 1962 became Public Law 87-788, the McIntire-Stennis Act.

JOHN C. STENNIS, Democrat, has represented his native Mississippi as a United States Senator for the past sixteen years. During this time he has compiled a record of diligent, dedicated and devoted public service. A man of great capacity, ability and leadership, he is a ranking member of the Senate Armed Services Committee, the Senate Appropriations Committee and the Senate Space Committee.

Senator Stennis, brought up in a rural atmosphere in Mississippi, graduated from Mississippi State College with a Bachelor of Science degree in 1923. Later in 1928 he was granted his LL.B. degree from the University of Virginia Law School. From there he started on his long and illustrious political career. Last year he was awarded an Honorary Doctor of Law Degree by the University of Wyoming in recognition of his effective leadership in support of forestry research.

Senator Stennis' interest in forestry and forestry research and his endorsement of supporting legislation has in part been induced by the fact that forests and forest industry play such a large part in the economy of his state. Fully 54 per cent or about 17 million acres of Mississippi is in commercial forest land.

Through his key assignment on the powerful Senate Appropriations Committee, the Senator has made many outstanding contributions championing the fight for agricultural and forestry research.

On August 11, 1961, just four days after Congressman McIntire presented his forest research bill in the House, Senator Stennis introduced S. 2403. Later he introduced S. 3609, a clean bill identical to H.R. 12688, the final House version of the legislation.

The legislation appeared for a time to "bog down" in the Senate. Two amendments tacked on the bill threatened to render the bill unpalatable to Senator Stennis and other supporters of the forestry schools throughout the country. In a very significant moment on the floor of the Senate the amendments were rejected on motion of Senator Stennis. With this H.R. 12688 was passed and sent to the President for his signature.



FOREWORD

FORESTRY IS A BUSINESS. We have a product and service to offer the people of our state and country. Like every other business in order to move ahead we must strive to maintain, improve or develop new products and services. Research is necessarily the path to these goals. The *Missouri Log* recognizing significant past contributions as well as future potentials has selected FORESTRY RESEARCH as the theme for the 1964 edition. Two feature articles corresponding to the two major contributors of forestry research in Missouri keynote our theme. R. H. Westveld, the Director of the School of Forestry, outlines the past development of the research program at the University of Missouri. With the advent of the McIntire-Stennis Act, Dr. Westveld points out the tremendous future expansion of research now possible. Bob Ralston, Project Leader at the Columbia Field Office of the Central States Forest Experiment Station of the U.S. Forest Service has related the parallel progress of federal forest research in our state.

In a somewhat lighter vein Ed Wood of Pioneer Forests, Inc., has finally seen fit to tell the story of the Karkhagne in this year's *Log*.

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Photo Credits:

Credit for the photograph on page 30 goes to the U. S. Forest Service and on page 35 of the Karkhagne to Osal Capps of the Missouri Conservation Commission. The cover picture and the picture on page 24 were supplied by Andy Tau. Many photographs were supplied by various students attending the club activities. The bulk of the pictures herein were taken by Bill Payne, Staff Photographer.

New Funds Highlight Progress During 1963-64

R. H. WESTVELD

THE ACTIVATION OF THE McIntire-Stennis Act which provided \$20,190 for the School of Forestry, gifts of \$2350 to the School and the organization of the extension program in wood utilization and marketing were the most significant developments of the 1963-64 school year. The full impact of the McIntire-Stennis funds has not been felt since they did not become available until January 1964. Funds derived from gifts, chiefly from members of the School of Forestry Advisory Council or from foundations with which they had contact, were received chiefly in the middle of the school year, and, thus, their impact will also be felt later.

The research program was further strengthened by three grants from the U. S. Forest Service totaling \$8800. These grant funds are being used in support of special phases of two existing projects and the initiation of a new project which is supported also by McIntire-Stennis funds. Two of the projects support graduate assistants. Two new projects were initiated during the year: one is concerned with a study of taxation of forest lands and the other with a study of energy and water-balance of forest and range sites. Of particular significance in the research program was the publication of Bulletin 792, "Research—The Key to the Development of Missouri's Forest Resources and Wood-Using Industries." This was a joint effort of the staffs of the School of Forestry and the Forest Service. It is intended to provide a guide for the future development of the forest research in Missouri.

The extension program in wood utilization and marketing is making good progress. Under the guidance of Fred Taylor, the pallet manufacturers have organized an association which is designed to provide for communication between the pallet manufacturers and to assist them in problems of mutual interest. Sawmill owners in southeast Missouri developed sufficient interest in certain phases of their problems to request that the University offer a Short Course. This Short Course was given at the University Forest in February and utilized personnel from the Central States Forest Experiment Station, from the Division of Workmen's Compensation of Missouri Department of Labor and Industrial Relations, and the Extension Specialist from the School of Business Administration

The second of the annual Forestry Short Courses was held in October. The Short Course featured one day of topics on forest tree improvement and another day of topics on forest-based outdoor recreation. Personnel from the Lake States and Central States Experiment Stations and the School of Forestry at North Carolina State College were utilized on the forest tree improvement portion of the Short Course. Personnel of the Bureau of Outdoor Recreation, the Wisconsin Forest and Parks Division, the Missouri State Park Board, Resources for the Future, Inc., and the U. S. Forest Service presented papers on the program on forest-based outdoor recreation.

The first Tree Service Short Course was held in December. This program was developed at the request of the Tree Service Working Group of the School of Forestry Advisory Council. Personnel from the University Soils, Botany and Entomology Departments and the School of Forestry handled much of the program. Dr. Dan Neely of the Illinois Natural History Survey, an authority on the Dutch elm disease, made a fine contribution to the Short Course. The strong interest in this Short Course shown by those who attended indicates that the Tree Service Short Course is likely to become an annual affair.

Twenty-eight students were the recipients of scholarships which varied in amounts from \$100 to \$1200. Three of these were on athletic scholarships. In addition to Missouri students who received scholarships, out of state students included one from Kansas, New Jersey and Oklahoma.

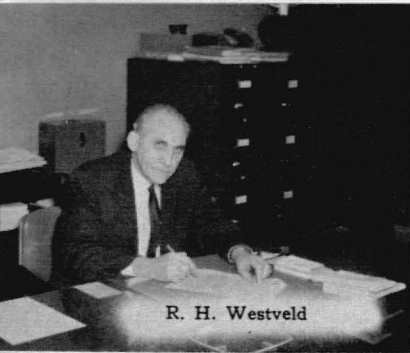
The graduate program continues to expand. During the fall semester, ten students were enrolled in graduate programs and in the winter semester, twelve students were taking graduate work. Six of them are working toward the Ph.D. Six of the fifteen members of the staff involved in teaching and research were serving as advisors to graduate students. The fields of work in which graduate work is in progress include forest pathology, tree physiology, forest management, ecology and economics.

Exhibits which featured the wood products and building materials management and residential and light construction curriculums were seen by large groups of people at the Convention of the Southwestern Lumbermen's Association and the Kansas City Home Show. Through these exhibits more people are becoming acquainted with the educational programs in these fields and with the career opportunities which they provide. During the Home Show and the Convention an opportunity was provided to talk to numerous prospective students, parents, high school teachers and counselors.

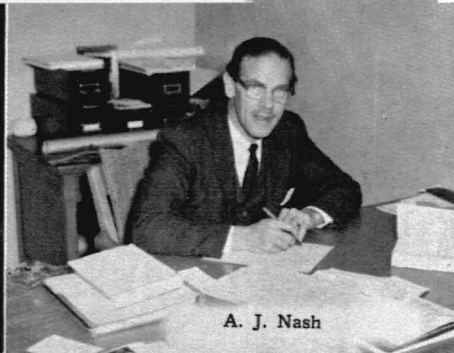
The School of Forestry Advisory Council continues to be very helpful in guiding the progress of the School of Forestry. The success of the Short Courses can be attributed directly to the Advisory Council which has worked closely with the School in developing them. The Development Committee which first proposed the idea of gifts to the School only a couple of years ago is beginning to see the results of its efforts. During the year \$1250 in gifts were earmarked for the research program, \$1000 was for unrestricted use, and \$100 was contributed to the School of Forestry Memorial Loan Fund which has grown from an initial sum of \$350 to approximately \$800. The Sales Working Group of the Advisory Council has been particularly effective during the year in assisting in locating suitable summer jobs for students in the wood products and building materials management and the residential and light construction curriculums.

The Curriculum Committee under the Chairmanship of Dr. Cox has made significant progress in the revision of the forestry curriculum. Agreements have been reached on changes in basic courses in the curriculum and the discussions now are concerned with the revision in the forestry courses. The job of curriculum revision is expected to be completed by the end of the school year.

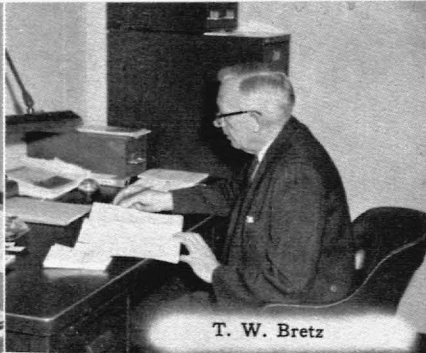
By exploring new opportunities and strengthening existing programs the School seeks more effectively to serve Missouri's citizens and to produce graduates who are stronger in their profession and in citizenship.



R. H. Westveld



A. J. Nash



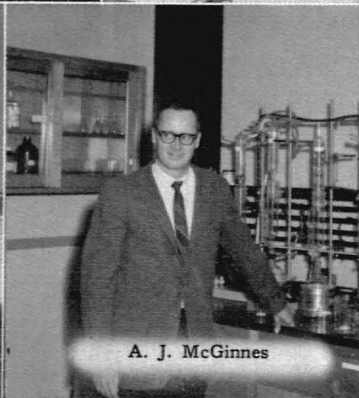
T. W. Bretz



W. J. O'Neil



J. T. Pastoret



A. J. McGinnes



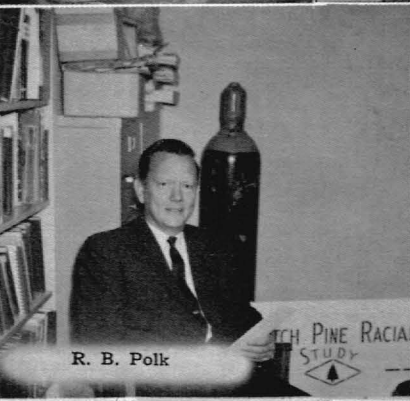
G. S. Cox



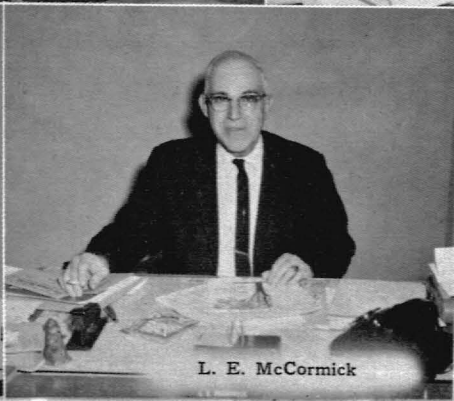
L. K. Paulsell



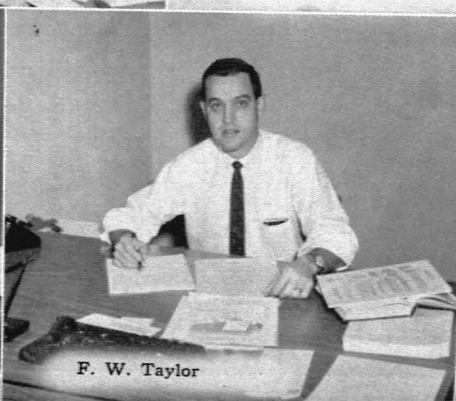
J. M. Nichols



R. B. Polk



L. E. McCormick



F. W. Taylor



C. D. Settergren

FACULTY NOTES

With the return of Dr. R. C. Smith from a year-long leave of absence to work in the Pacific northwest the faculty is once again at full staff—for the first time in the past five years. The Columbia Forest Research Center of the Forest Service which cooperates and works closely with the School of Forestry has experienced its usual shuffling of personnel. Both Willis Vogel and Arlow Dalrymple, range conservationists, left Columbia for other positions last fall. Vogel was transferred by the Forest Service to Berea, Kentucky where he is doing range research in connection with the reclamation of spoil-bank land. Arlow Dalrymple is now with the Bureau of Indian Affairs in North Dakota. Three men, two of whom transferred from the Sinkin Experimental Forest and one newly employed with the Forest Service, have joined the Research Center in Columbia.

PERSONNEL ADDITIONS

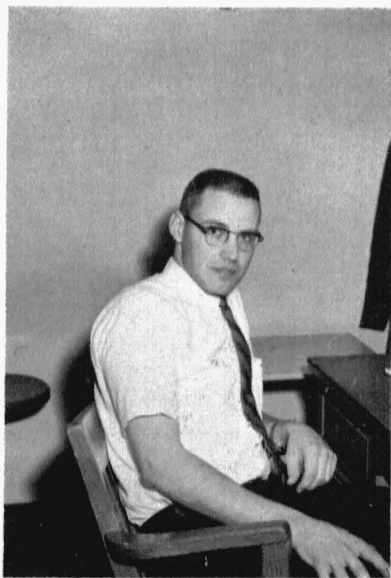


ARDEL BIUGSTAD currently working with John Ehrenreich as a range conservation research specialist joined the Research Center last November 4. Ardel received his A.S. from Botteneau College in Fargo, North Dakota in 1957 and his B.S. from North Dakota State in 1959. He has completed all his requirements for the Ph.D. degree and is awaiting the slow-turning academic wheels for his Doctorate.



BOB LOOMIS, a familiar face at the Sinkin Experimental Forest since 1957 where he has been working with John Crosby in fire research, was transferred to Columbia to resume work on his M.S. degree. Bob has been with the Forest Service since 1948, the same year he received his B.S. from the University of Michigan. He is doing his research under the direction of L. K. Paulsell. According to Bob the title for his thesis will be: "Effects of Season on Certain Factors of Fire Danger Evaluation."

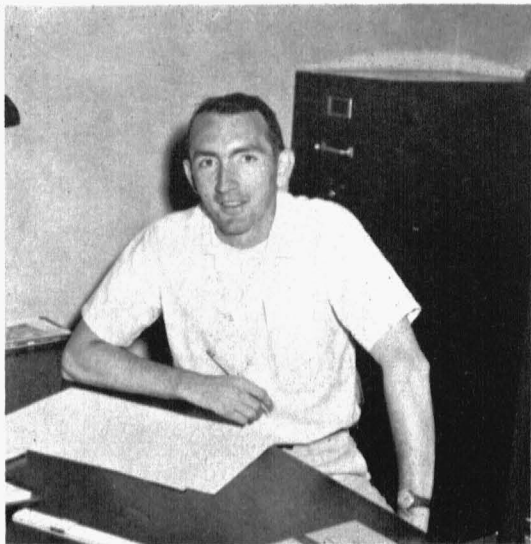
BOB MCQUILLIKIN a Research Forester in timber management at the Sinkin Experimental Forest since September 1961 was transferred to Columbia last fall to start work on his Ph.D. degree. Although the exact subject of his research for his dissertation is still to be determined, Bob will be working in soils under Dr. G. S. Cox. McQuillkin received his B.S. from Muhlenberg College in 1959, and his M.S. from Duke in 1961.



Master Degree Candidates

DENNIS M. COLE
Affton, Missouri

B.S.F. University of Missouri 1962
Society of American Foresters
Xi Sigma Pi
U. S. Army



Thesis :

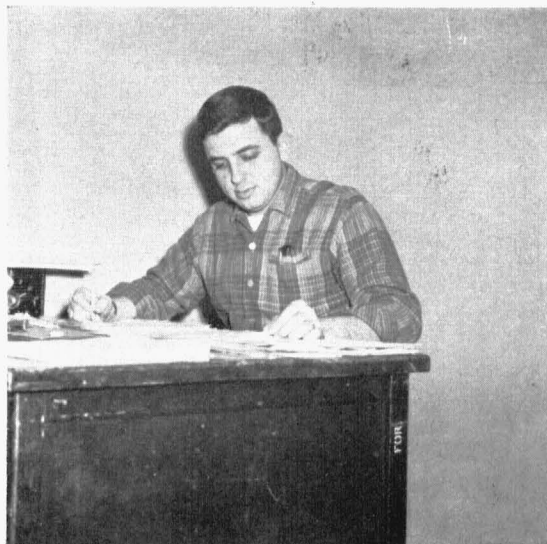
A PRELIMINARY INVESTIGATION OF RECREATIONAL IMPACT ON FOREST SITE IN THE MISSOURI OZARKS

An Abstract

TO STUDY THE INFLUENCE of concentrated recreational use on soils and vegetational characteristics typical of upland sites in the Missouri Ozarks, study areas were established in camping and picnicking areas at Lake of the Ozarks State Park during the summer of 1962. Recreational use has been steadily increasing on these sites since their establishment in 1946.

Initial results indicate that heavy recreational use has led to a marked decline in the physical condition of these sites. Protective ground cover and tree stand density were found to be greatly reduced, while the general vigor of the tree cover appears to be in decline. In lieu of past mortality records, it appears that reductions in stand density are due more to the failure in the establishment of reproduction than to present mortality. Surface compaction was significantly greater in used areas than in unused controls, while surface soil moisture was significantly lower. Determination of available moisture capacities at lower soil depths showed no significant differences between used and non-used areas; however, seasonal moisture trends at the 12 and 18 inch depths indicate a consistently higher level of moisture in recreational areas throughout the growing season. This is interpreted as a result of less competition for soil moisture in recreational areas because of the lower vegetational densities. Height growth was not significantly affected by recreation. Although diameter growth of white oak (*Quercus alba*) was not significantly affected, an initial decline on the part of black oak (*Quercus velutina*) suggests that the effect of recreation on diameter growth is being masked by the effect of decreasing stand density. Further investigation will be necessary to separate the true effect of recreation on diameter growth.

Master Degree



HENRY A. DEUTSCH

Memphis, Tennessee

B.S.F. University of Missouri, 1961

Forestry Club

Society of American Foresters

Major Field:

SMALL WOODLAND OWNERSHIPS

An Abstract

APPROXIMATELY 34% of the commercial forested land in the United States is in what might be considered small farm woodland ownerships. Because of their relatively small size (for the most part under 50 acres) some foresters in the past have considered these ownerships economically unmanageable. Much study is needed in this challenging field of small woodland forestry. The role of the small woodland ownership in the local and national economy holds great potential. The realization of this potential through effective timber management is the goal of many state and private forestry organizations.

Candidates

JOHN KENNETH MYERS

Kansas City, Mo.

B.S.F., University of Missouri, 1962
Forestry Club
Society of American Foresters
Xi Sigma Pi
Gamma Sigma Delta
U.S. Navy



Thesis:

MARKETING ACTIVITIES OF SAWMILL OPERATORS AND TIMBER PRODUCERS IN THE EASTERN OZARK REGION OF MISSOURI

An Abstract

THE BUSINESS SUCCESS OF A WOOD-USING INDUSTRY can be measured in part by the organization of the marketing process for its products. This study was undertaken to describe the prevailing marketing system for logs and sawmill products and to determine any major problems which adversely affect the marketing of these products in the fourteen-county Eastern Ozark Region. Included in this description of marketing practices are amounts, sources, and seasonal patterns of sawlog receipts, prices paid and received, costs, amounts of processed products and selling practices.

Analysis points out an informally organized marketing system, characterized by many sellers but relatively few buyers. The profit motivated sawmill operator is often at a disadvantage in selling his products because of a lack of competition among buyers. Timber producers have little bargaining strength and are poorly rewarded for their efforts.

The need for a better understanding of the marketing phase of the industry is apparent. Of primary consideration is the need for coordinating improvements in marketing practices with improvements in forest management on the privately-owned woodlands.

Senior Class of 1964



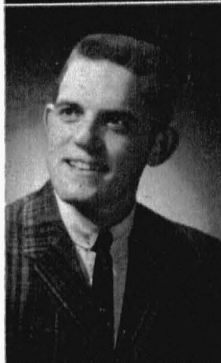
BROWN, EDWARD ALLEN
Perryville, Missouri

Forestry Club: '62-'63, '63-'64
Society of American Foresters
Experience: Missouri Conservation Commission, 1962



CAHILL, LESLIE VICTOR, II
St. James, Missouri

Transfer from Missouri School of Mines and Metallurgy
Forestry Club: '60-'61, '61-'62, '62-'63, '63-'64
Sports: Foresters Conclave '62, '63
Experience: U.S. Geological Survey, Missouri '59
Missouri Conservation Commission, Summer '63



CHESEBRO, JOHN WILLIAM
North Springfield, Virginia

Transfer from Orange County Community College
Forestry Club: '61-'62, '62-'63, '63-'64
Parliamentarian '63-'64
Xi Sigma Pi: Fiscal agent '63-'64
Gamma Sigma Delta
Headless Ax '63
Sports: Intramural Football, Volleyball, Softball
Bates House: Athletic Chairman; Scholastic Chairman
Experience: Forest Fire Control, Lassen National Forest, California '63



DeWALLE, DAVID RUSSELL
St. Louis, Missouri

Transfer from Harris Teachers College
Forestry Club: '61-'62, '63-'64
Xi Sigma Pi: Forester '63-'64
Alpha Zeta
King House: Social Chairman; Judicial Board Representative
Sports: Intramural Football, Volleyball, Softball, Track
Experience: U.S.F.S. Klamath National Forest, California '63

DRUMMOND, DAVID BORTHWICK

Columbia, Missouri

Forestry Club: '60-'61, '61-'62, '62-'63, '63-'64
Assistant Forester: Winter '63
Missouri Log: Business Manager '62-'63, Associate
Editor '63-'64
Society of American Foresters
Xi Sigma Pi
Gamma Sigma Delta
Experience: Air Force '56-'60
U.S.F.S. Clark National Forest, Salem, Missouri
'61
School of Forestry Technician '61-'63



FICK, THOMAS RANNEY

Oelwein, Iowa

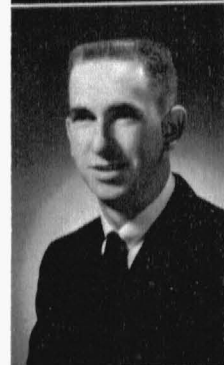
Forestry Club: '61-'62, '62-'63, '63-'64
Ranger '63; Assistant Forester '64
Sports: Intramural Football, Basketball, Volleyball,
Softball
Experience: U.S.F.S. Clarkia Ranger Station, Idaho
'63



FLOTO, LOREN ROY

Geneseo, Illinois

Forestry Club: '60-'61, '61-'62, '62-'63, '63-'64
Treasurer '63-'64
Missouri Log: Assistant Advertising Manager '62-'63;
Advertising Manager '63-'64
Society of American Foresters
Xi Sigma Pi: Assistant Forester '63-'64
Gamma Sigma Delta
Richard M. Higgins Scholarship '63
Westveld Senior Award
Jackson House: Lt. Governor
Experience: U.S.F.S. St. Joe National Forest, Idaho
'61
U.S.F.S. Klamath National Forest California '63
University of Missouri Film Library '62-'64



FLOWERS, ROYCE WILLIAM

Houston, Missouri

Forestry Club: '60-'61, '61-'62, '62-'63, '63-'64
Society of American Foresters
Experience: U.S.F.S. Clark National Forest, Missouri
'63





FOSTER, JAMES WARD
Kansas City, Missouri

Transfer from Kansas City Junior College
Forestry Club: '61-'62, '62-'63, '63-'64
Society of American Foresters
Xi Sigma Pi
Alpha Zeta
Experience: School of Forestry, Research Assistant '63



GEISLER, JAMES CHARLES
Cuba, Missouri

Forestry Club: '61-'62, '62-'63, '63-'64
Experience: U.S.F.S. Lewis River Ranger District, '60
U.S. Army National Guard '60-'61
School of Forestry, Physiology Lab Assistant
'62-'63



GOTTSCHALL, GLENN JOHN
St. Louis, Missouri

Forestry Club: '60-'61, '61-'62, '62-'63, '63-'64
Historian '63-'64
Missouri Log: Circulation Manager '63-'64
Dunklin House: Social Chairman; Judicial Board
Member
Sports: Forester's Conclave '61, '62, '63, '64
Experience: U.S.F.S. St. Joe National Forest, Idaho
'61
U.S.F.S. Shasta-Trinity National Forest, Cali-
fornia '63



GREENSTEIN, BOB MELVYN
Kansas City, Missouri

Forestry Club: '63-'64
Alpha Epsilon Pi
Sports: Intramural Football
Experience: U.S.F.S. Los Padres National Forest,
California '63

GREER, JERRY DEAN

Marshfield, Missouri

Forestry Club: '60-'61, '62-'63, '63-'64
Missouri Log: Assistant Photographer '63-'64
Society of American Foresters
Freshman Curators Award
Richard M. Higgins Scholarship
Woodson House: Lt. Governor
Experience: School of Forestry—Wood Technology
Assistant '61
Soils Department '62-'64
U.S.F.S. Kaibab National Forest, Arizona '63



HAWKINS, WILLIAM LEE

Carrollton, Missouri

Forestry Club: '60-'61, '61-'62, '62-'63, '63-'64
Sports: Intramural Volleyball, Football, Basketball,
Softball
Experience: U.S.F.S. at the University of Missouri
'63-'64
U.S.F.S. Mendocino National Forest, California
'63



JOHNSON, JAMES FRANKLIN

Mexico, Missouri

Forestry Club: '60-'61, '61-'62, '62-'63, '63-'64
Assistant Forester '63; Forester '64
Society of American Foresters
Missouri Federation of Women's Clubs Scholarship '63
Sports: Forester's Conclave '63; Rifle Team '60-'61
Experience: Missouri Conservation Commission '59-
'60
U.S.F.S. Medicine Bow National Forest, Wyo-
ming '63



KWADER, JOHN PETER

Fenton, Missouri

Forestry Club: '62-'63, '63-'64





MILEY, ROBERT LAWRENCE

Winona, Missouri

Forestry Club: '61-'62, '62-'63, '63-'64

Parliamentarian '62-'63; Forester '63

Xi Sigma Pi

Missouri Federated Women's Clubs Scholarship '63

Experience: U.S.F.S. Chippewa National Forest,
Minnesota '63



MOSER, JOHN FRANCIS

Brunswick, Missouri

Forestry Club: '60-'61, '63-'64

Sports: Intramural Football

Experience: Missouri Conservation Commission '59

U.S.F.S. Teton National Forest, California '62

U.S.F.S. Bridger National Forest, Wyoming '62

Missouri Conservation Commission '62-'63



NAY, ROBERT PERRY

Kansas City, Missouri

Forestry Club: '59-'60, '60-'61, '61-'62, '62-'63



NELSON, ROBERT EARL

Licking, Missouri

Forestry Club: '60-'61, '61-'62, '62-'63, '63-'64

Missouri Log: Assistant Advertising Manager '62-'63

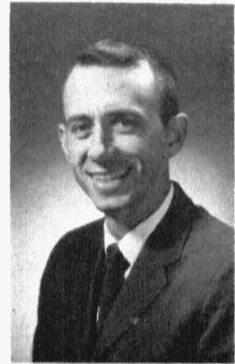
Experience: Missouri Conservation Commission '63

NEWBY, LOY C.

Dixon, Missouri

Forestry Club: '61-'62, '62-'63, '63-'64
Marguerite Krueger Conservation Club Scholarship
'63

Experience: U.S. Army '57-'59



ORR, CURT MINDEL

St. Louis, Missouri

Forestry Club: '60-'61, '61-'62, '62-'63

Xi Sigma Pi

Gamma Sigma Delta

Farm House Fraternity

Sports: Forester's Conclave '63; Intramural Volleyball, Baseball

Experience: U.S.F.S. Coeur d'Alene National Forest, Idaho '61, '63



SAMPSON, RICHARD KIMBALL

Columbia, Missouri

Forestry Club: '60-'61, '61-'62, '63-'64

Missouri Log: Assistant Advertising Manager '61-'62

Experience: U.S.F.S. Salmon National Forest, Idaho '61

Missouri Conservation Commission '63



SCOWCROFT, PAUL GEORGE

St. Louis, Missouri

Forestry Club: '61-'62, '62-'63, '63-'64

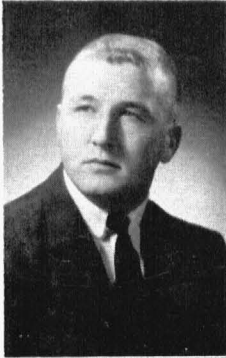
Xi Sigma Pi

Sports: Intramural Bowling, Tennis

Experience: U.S.F.S. Mohawk Ranger Station, California '60, '61

U.S.F.S. Malta Ranger Station, Idaho '63





SUMMERS, GLEN DEE

Lamar, Missouri

Forestry Club: '60-'61, '62-'63, '63-'64

Experience: Douglas Forest Protective Association,
Roseburg, Oregon '59



TEMPEL, CLYDE KENT

Higginsville, Missouri

Transfer from Elmhurst College

Forestry Club: '60-'61, '61-'62, '62-'63, '63-'64

Sports: Intramural Football, Basketball

Experience: U.S. Army Reserve '61



THIES, WALTER GENE

Florissant, Missouri

Forestry Club: '60-'61, '61-'62, '62-'63, '63-'64

Secretary '63

Missouri Log: Associate Editor '62-'63; Editor '63-'64

Society of American Foresters

Xi Sigma Pi

Gamma Sigma Delta

Alpha Zeta

Curator's Award—Sophomore

Marguerite Krueger Conservation Club Scholarship '62

Westveld Freshman Award, Sophomore Award,
Junior Award

Xi Sigma Pi Freshman award

Brown House: Lt. Governor

Sports: Forester's Conclave '63, '64; Rifle Club '61,
'62; Intramural Basketball, Football, Volleyball,
Tennis

Experience: General Botany Lab. Assistant '62-'64



SCOBIE, WALTER ROY

St. Louis, Missouri

Transfer from Southwest Baptist College

Forestry Club: '60-'61, '62-'63, '63-'64

Secretary '64

Society of American Foresters

Society of American Photogrammetry

Richard M. Higgins Endowment Fund Scholarship '61

Sports: Intramural Basketball, Softball

Experience: Simpson Timber Company, Washington
'63

HUTCHINGS, BRYAN KENNETH

Ballwin, Missouri

Transfer from Missouri School of Mines and Metallurgy

Forestry Club: '60-'61, '61-'62, '62-'63, '63-'64

Historian '62-'63

Xi Sigma Pi: Ranger '63

Alpha Phi Omega

Sports: Forester's Conclave '62, '63; Intramural Football, Basketball, Volleyball, Softball

Experience: U.S.F.S. Boise National Forest, Idaho '63
School of Forestry Research Assistant '62

OZANIC, CARL F.

Crestwood, Missouri

Forestry Club: '61-'62, '62-'63

Experience: U.S.F.S. Sisters, Oregon '59

Hannibal Woodworking Co., Missouri '62

THOMAS, HARLEY HASTINGS, III

Doniphan, Missouri

Forestry Club: '61-'62

Curator's Award-Freshman

Hoo-Hoo Club Award

Sports: Varsity Rifle Team; Flying Club

Experience: Curry Construction and Buliding Co. '62
Forestry-Aid, U.S. Navy—2 summers

THOMPSON, GORDON LEE

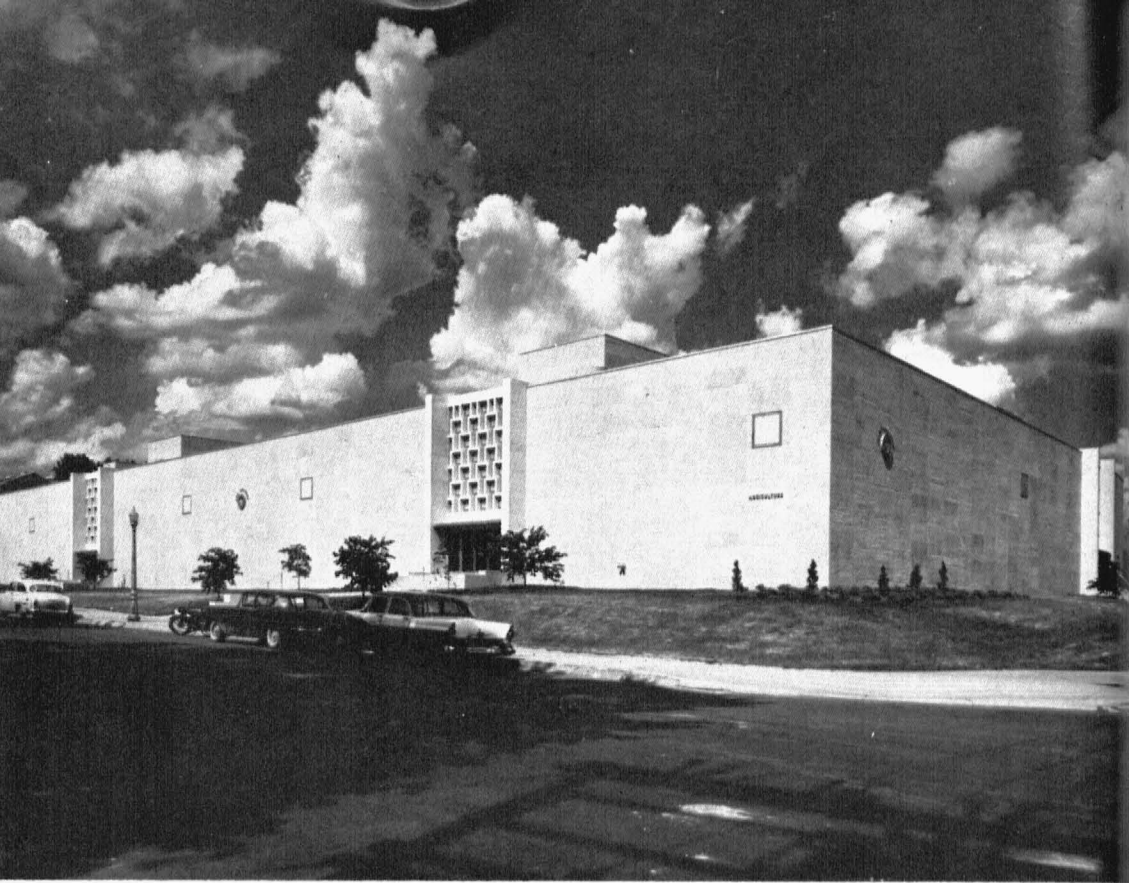
Columbia, Missouri

Xi Sigma Pi

Kansas City Hoo-Hoo Club Scholarship '62, '63, '64

Experience: Long Bell Lumber Co., Columbia, Missouri '62-'63

Windsor Pre-cut Homes Co., Knob Noster, Missouri '59-'61



Agriculture Building, home of the School of Forestry.

The Role of Research in Forestry Schools With Special Reference to the University of Missouri

R. H. WESTVELD

RESEARCH HAS ALWAYS BEEN A PART of the activities of colleges and universities in the United States. In many cases, faculty members pursued an investigation out of sheer interest in a problem; in other cases research was, and continues to be, an integral part of the job assignment, as in colleges of agriculture where research programs are extensive. The Morrill Act of 1862, and the Hatch Act of 1887 provided the basis for developing strong research programs in agriculture at the land-grant institutions. The federal funds provided by the Hatch Act and subsequent acts of Congress, and the state and private funds which now constitute nearly 80 per cent of the expenditures for research, served as an impetus to the development of organized research in agriculture. Consequently land-grant institutions be-

came known for their research in agriculture, but with few exceptions they were not well known for research in other fields. Federal support of research developed later in other fields, notably in medicine. Substantial federal support of research in fields other than agriculture at educational institutions occurred during and after World War II. The trend in increased emphasis on research in fields other than agriculture is demonstrated by the fact that in 1940 more than 40 per cent of the federal funds spent for research was in agriculture, but in 1960 it was only 1.7 per cent. During the 20-year period, 1940 to 1960, the federal government's expenditures for scientific research and development increased 100 times, but expenditures for agricultural research increased only four-fold. Following World War II, substantial sums of money have been distributed as grants to scientists at educational institutions by the National Science Foundation, the National Institutes of Health, and other federal agencies. This has resulted in substantial growth in research in many fields at colleges and universities, particularly in basic research since this type of research is particularly favored by the granting agencies. It appears as though research will play an increasingly important role in college and university programs because of its significance in graduate education which is expanding rapidly in all fields.

Research in Forestry Schools

Research in forestry has not enjoyed the same growth as research in agriculture even though 80 per cent of the colleges and universities having teaching and/or research programs in forestry are administrative units of land-grant institutions. As recently as 1962 only 2.4 per cent of the Hatch funds were spent for forestry research at the land-grant institutions (Westveld, 1963b). Numerous factors undoubtedly were responsible for the slow development of forestry research at educational institutions. The development of the regional experiment stations by the Forest Service—a different approach than had been taken in the development of the agricultural research by the U. S. Department of Agriculture—probably led many directors of agricultural experiment stations to the belief that research in forestry would be cared for adequately by the regional federal centers. During the period when the forest experiment stations were being developed, enrollment of graduate students in forestry was small (approximately 50 graduate degrees per year were conferred during the 1920's, mostly by three or four schools) and later, during the 1930's, forestry school facilities were so fully occupied by the heavy undergraduate enrollments brought about by the establishment of the Civilian Conservation Corps that any thought of research that faculty members may have had was quickly dismissed. Furthermore, few faculty members were well qualified to do research. Then as the forestry schools were beginning to recover from the impact of heavy enrollments in the middle and late 30's, World War II pushed forestry education and research into the background. With the termination of the War, both undergraduate and graduate enrollment in forestry quickly increased. As graduate enrollment increased from 251 students in 1940-41 (Guise, 1941); to 425 in 1946-47 (Guise, 1947); to 679 in 1957-58 (Marckworth, 1958); and to 1257 in 1963-64, the need for expanded research became apparent (Westveld, 1963a). The fact that candidates for doctor's degrees constituted a larger proportion of the graduate enrollment (15.5 per cent in 1940-41; 33.2 per cent in 1963-64) makes the need for expansion of forestry research even greater.

Even though the research budget of forestry schools had grown from \$256,525 in 1940-41 to \$1,199,710 in 1950-51, only eleven of the thirty-one accredited and non-accredited schools had budgets in excess of \$40,000 annually in 1951 (Westveld, 1954). By 1953 the budgets had risen to \$1,676,-600, quite inadequate for the role that forestry schools should be playing in training the research scientists of the future and in solving forestry and related problems in their respective states (Kaufert and Cummings, 1955). Although the research programs in many scientific disciplines were being greatly strengthened by grants from the National Science Foundation, forestry was given little recognition until later. Forestry school administrators were becoming increasingly aware of the acuteness of their problem and in 1956 began exploring ways and means of correcting the situation. The history of this development which led to the enactment of the McIntire-Stennis Act in 1962 is outlined by the author (Westveld, 1963a). The first appropriation of \$1 million under this act for fiscal year 1964 increased the forestry research budget at colleges and universities by about 12 per cent. Congressman McIntire and Senator Stennis are to be congratulated for their diligence in seeing this legislation through Congress. Since the act authorizes Congress to appropriate annually a sum not exceeding one-half the amount appropriated for Federal forestry research conducted directly by the Department of Agriculture for the preceding fiscal year, a basis has been established for substantial strengthening of institutional forestry research programs. Under current conditions, an appropriation of approximately \$12 million could be made.

The University of Missouri Forestry Research Program

Forestry research at the University of Missouri has followed a somewhat different pattern than that which developed nationally. With only a two-year pre-forestry curriculum offered in the Department of Horticulture and Forestry from 1936 to 1946 and with only one or two faculty members on the staff, forestry research was insignificant in the University's program prior to 1946. Soon after the Department of Forestry was established in 1947 (the four-year degree program was initiated in 1946) forestry research received greater emphasis, and progress since then has been somewhat faster than the average of all schools. Whereas the research budget in 1947-48 constituted approximately 10 per cent of the teaching-research budget, it constitutes approximately 56 per cent in 1963-64. In the latter year, 12 faculty members were engaged in research with their collective efforts being the equivalent of 7.5 full-time workers.

The forestry research program is oriented to serve several purposes. Its primary objective is to seek new knowledge and to solve problems confronting forest landowners and the wood-using industries. The discovery of new knowledge, of course, often leads ultimately to problem solution. The program thus involves both basic and applied research. The type of research carried on by an individual faculty member depends on his training and interests. The applied research furnishes information of particular value to the extension specialists in forestry and timber utilization and marketing, and to the forest landowners and wood-using industries owners.

The forestry research at the University of Missouri is valuable to the undergraduate teaching program since part of the research is carried on at the University Forest, the site of the forestry summer camp. The op-

portunity to see and hear the results of different types of forest land treatment and handling and processing of wood products makes forestry seem more real to the students. A side effect of using research results in undergraduate instruction is to give the student an early insight into research as a career.

Research is essential in the programs of most graduate students. The more able graduate students are employed as part-time research assistants, insofar as funds permit thus enabling them to earn as they learn the techniques of research.

A major objective of the School's research program is to coordinate its program with that of other agencies and to work cooperatively with other agencies whenever this is feasible.

Accomplishments in Research

Planning has played an important role in developing the School's program. Since the establishment of the Columbia Forest Research Center of the Central States Forest Experiment Station (U. S. Forest Service) in 1948, close liaison has been maintained between the School and the Center. Through the coordinated efforts of the staffs, research is in progress in 23 areas of study in 18 broad fields. One of the most significant activities of the two agencies which involved numerous conferences resulted in Bulletin 792 of the Missouri Agricultural Experiment Station, "Research—the Key to the Development of Missouri's Forest Resources and Wood-Using Industries (Columbia Forest Research Center and School of Forestry 1963)." Each of several two-man committees studied Missouri's research needs in a specific field and prepared reports which included recommendations on types of studies needed and priorities of work. After a review of the reports by the staffs of both agencies a series of staff conferences were held. The committees revised their reports on the basis of these conferences and the comments of the 26-man Missouri Forestry Research Advisory Committee. The final result was Bulletin 792.

The School of Forestry Advisory Council composed of 80 representatives of public and private agencies has, since 1958, offered guidance to the research program of the School.

Since the research program began in 1947-48 with a budget of \$4400, more than \$1 million has been spent for research. The results of a single project have already more than paid for the entire program. Research in Christmas tree culture and marketing which has demonstrated convincingly how high-quality Christmas trees can be grown successfully and marketed profitably, has increased the planting for this purpose from 6000 trees in 1956 to 800,000 in 1958. Within a few years Missouri lands will be producing a \$2- to \$3-million crop. Other projects have produced less spectacular results, but the information gained from the research has led to a better understanding of some of the forestry and utilization problems and to improved practices. The information from a study of the distribution of shortleaf pine has provided a guide to the forest manager in favoring or planting that species. A later study evaluated the productive capacity of different sites for shortleaf pine. This information provides one of the bases for determining the investment that the landowner can afford to make in managing shortleaf pine.

A better understanding of the tax problem of the owner of forest land resulted from a study of forest-land taxation and provides a basis for equitable taxation of forest land.

Research that developed improved techniques for producing oak paneling and demonstrated the economic feasibility of providing it opened new opportunities for using low-grade oak lumber.

All research does not yield as positive results useful to the forest landowner or the wood-using-industry owner as the foregoing examples. The research on oak wilt has been more or less negative in that it has not yielded satisfactory control methods. It has, however, demonstrated that the control methods that were thought to have promise were ineffective. This discovery kept landowners from spending money on methods that would have failed.

The foregoing examples indicate the variety of research that has been done. The complete list includes work in ecology, cutting-methods, tree diseases, economics, wood technology and products, watershed management, mensuration, protection, tree planting, recreation and marketing. Twenty bulletins, twenty research bulletins, one circular and several journal articles constitute the published results of the 16-year period.

The Future of Research

The research program of the School of Forestry, the only state agency doing forestry research, must be greatly strengthened if graduate education is to develop as it should, if the state is to meet its responsibility in developing a stronger forestry economy, and if the extension workers are to provide the land owners and wood-using industries with the best information. Work on projects dealing with tree diseases, ecology, regeneration, forestation, physiology, watershed management, recreation, economics and forest products marketing need to be intensified and expanded considerably so that new knowledge and solution of problems may progress faster. Research in forest soils and tree insects which are receiving no attention in the present program should be initiated at the earliest opportunity. The authors of Bulletin 792 estimate that orderly development of an adequate forestry research program will require an annual operating budget of \$750,000 by 1972, or nearly three times the present expenditure. The state's responsibility would be \$375,000 or more than six times its present expenditure. An expenditure of this amount would constitute only 0.3 per cent of the estimated \$125 million value of products produced from Missouri wood by Missouri wood products industries (McGinnes, 1963). The Missouri School of Forestry can expect substantial financial support from funds appropriated in support of the McIntire-Stennis Act since it receives approximately \$20,000 from each \$1 million appropriated. However, funds from that source must be matched by state and private funds.

Through the addition of full-time staff, faculty members could be released from undergraduate teaching for at least one semester, thereby improving efficiency and quality of both teaching and research. Greater use of part-time assistants and technicians is necessary also to increase the effectiveness of faculty members in research.

Greater emphasis on basic research seems desirable in the future because many problems can be solved only through the development of new knowledge. Within ten years probably at least 50 per cent of the research should be basic.

To develop the kind of research program that is envisioned for the future will require not only substantially greater funds to operate the program, but to provide adequate facilities. Investment of approximately \$1 million will be necessary to equip existing modern laboratories adequately, to provide for 8500 square feet of new laboratory and office space, and 10,000 square feet of greenhouses with supporting head houses and environmental rooms. To develop the University Forest to its potential for research in various phases of land use and utilization of the wood resource will require additional funds.

Land owners and wood-using industry owners have a sufficient stake in the land and the wood resource to justify their investment of funds in the School of Forestry's research program. Through the efforts of the School of Forestry Advisory Council this type of interest developed for the first time in 1963 when the School received gifts of more than \$2000 for research. As the value of the research program is more widely recognized such support should increase in the future.

More of the future research should be a team effort in which the talents of several scientists will be used to solve a problem. Knowledge is multiplying so rapidly that solution of many problems requires the specialized knowledge of several persons. Geneticists, physiologists, pathologists, entomologists, ecologists, meteorologists, and soil scientists will work collectively to gain new knowledge needed in timber production. Similarly, economists, wood technologists, chemists, physicists and engineers will work together to develop better and more profitable use of wood.

As new knowledge is acquired, as new technology is developed, and as the economy and people's habits and desires change, the relative importance of forestry problems will shift. It would, therefore, be unwise to try to predict the specific nature of the School's research program very far into the future. Research scientists will have to be alert to changes and shift their research emphasis with changing conditions and times. If this is done, Missouri's 15 million acres of forest will serve its people well in meeting the needs of the increasing population for more and better wood products, water, recreational facilities, and wildlife.

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Forest Service Research in Missouri in 1936-64

R. A. RALSTON, Project Leader

Timber Management Research
Central States Forest Experiment Station

"THIS IS THE DAMNEDEST DESERT OF KNOWLEDGE I have ever encountered," remarked Al Hall, former Director of the Central States Forest Experiment Station, on the occasion of his first visit to the Missouri Ozarks in the early 1930's. This was a fairly accurate statement at the time, since very little research had been carried out in Missouri and very little that had been learned elsewhere was believed to be applicable to the Ozarks. Since that time a lot of hard work and thought by many people has gone a long way toward solving many of the knotty timber and range management problems of the region. Many of the present crop of young foresters who use research results matter-of-factly or even unknowingly in their day-to-day routine are not aware that there ever was a time when such information was not available.

Looking at the situation as a *Pollyanna* might, one could say that this dearth of technical information was a good thing because the field was wide open for the first research workers to make their mark. Forest research by the University of Missouri and the Forest Service was started about the same time and has moved ahead over the years hand in hand. In fact, research in Missouri has always been a team effort undertaken cooperatively by the School of Forestry and the Central States Station, along with help from the National Forests, the Conservation Commission, and several private individuals and companies. Dr. Westveld has covered the activities of the School in a companion article in this year's *Log*, while my assignment has been to outline the work of the Station.

Chronologically speaking, federal forest research in Missouri began in the summer of 1936 when a temporary student assistant journeyed out from Columbus, Ohio, the headquarters of the Central States Station, to appraise "the prevalence, origin, and condition of oak sprout reproduction in the Missouri Ozarks." This is a locally significant event because this temporary student assistant remained with the Station, continued to journey out to Missouri in successive summers, and finally, when a field office of the Station was established in Columbia, became its first Leader. As you have guessed, his name is Franklin Liming. Dr. Liming was in charge of Forest Service research in Missouri until 1959 when he transferred to Washington, D. C. to the Division of Timber Management Research.

To get back to the early days, the Central States Station had been formed rudimentarily in 1927. But because of limited funds and manpower the Station was unable even to cross the Missouri-Mississippi River into Missouri until nine years later. The total regular appropriation for the entire Station was only \$35,000 as late as 1937. Almost all of the early research work in the State from 1936 to 1942 was financed by Region 9 of the Forest Service with Civilian Conservation Corps funds. There was a five-year hiatus during W. W. II when all studies were put on a maintenance basis for the "duration." The practice of stationing forest research personnel at regional experiment stations continued through 1947. From

these stations researchers traveled in the "field season" to their respective work areas to install studies, remeasure others, and then returned to their headquarters during the "office season" to prepare reports and publications. Meanwhile a plan was evolved in the South to establish field research centers on-the-ground at the grass roots level to serve the major forest types. In 1945 Congress appropriated funds to establish eleven such federal centers in the South. In 1948, by action of Congress, the Northern Ozarks Branch was established in Columbia, Missouri and shortly thereafter the Sinkin Experimental Forest at Salem, Missouri was set aside by administrative action.

In 1948 Timber Management and Range Management were the only functional lines of research represented in Missouri, with a total budget of \$30,000 and three technical men. In 1949 the Station's strip mine reforestation research project was transferred from Kansas to Missouri and shortly thereafter brought to completion. This made some additional funds available for Timber Management research in the Ozarks. Forest Fire research was added in 1951 when funds to finance one man were made available by R-9 of the Forest Service. This project has grown to a two-man proposition and, although R-9 funds are no longer available, it is being assisted by the Missouri Conservation Commission Forestry Division through an annual grant of \$1,000. Federal Oak Wilt research in Missouri was transferred to the Forest Service in 1954. One scientist each from the Division of Forest Insects and Forest Diseases was added to the staff at that time. In 1954 the Ozark Branch became officially known as the Columbia Forest Research Center. In 1956 and 1957, respectively, one-man Watershed Management and Forest Economics projects were started. In recent years the one-man projects in Pathology, Entomology, Watershed Management, and Economics have been consolidated in either Delaware or Columbus, Ohio where larger groups of individuals in each discipline are located.

Presently the Columbia Field Office, as the Research Center has become to be called, has four projects including Timber Management, with five technical and two non-technical men; Range Management, with two sci-

Office-laboratory shared jointly by the Sinkin Experimental Forest Staff and Clark National Forest District Ranger.



entists; Forest Fire Control, with two researchers and one technician; and Forest Wildlife Habitat, which presently is not funded. In addition, one forest pathologist from the Delaware Laboratory is assigned to Columbia and has been working on oak wilt and *Fomes annosus* in cooperation with the School of Forestry. This adds up to 10 technical men, 3 forestry aids, and 3 clerical workers.

Timber Management research emphasis by the Station is being shifted from shortleaf pine to oak-hickory silviculture with stress on value and volume growth and yield under management. An oak site study is underway. A replicated study of timber stand densities has been installed in 20- and 35-year-old black and scarlet oak stands. As wood markets develop and grow, the pressure for technical information on hardwood timber management will increase.

Much effort has gone into studying the origin and quality of oak sprouts and how to control undesirable hardwood trees and shrubs through the use of herbicides. All of this has indirectly contributed to the present relatively-high order of pine management in the State.

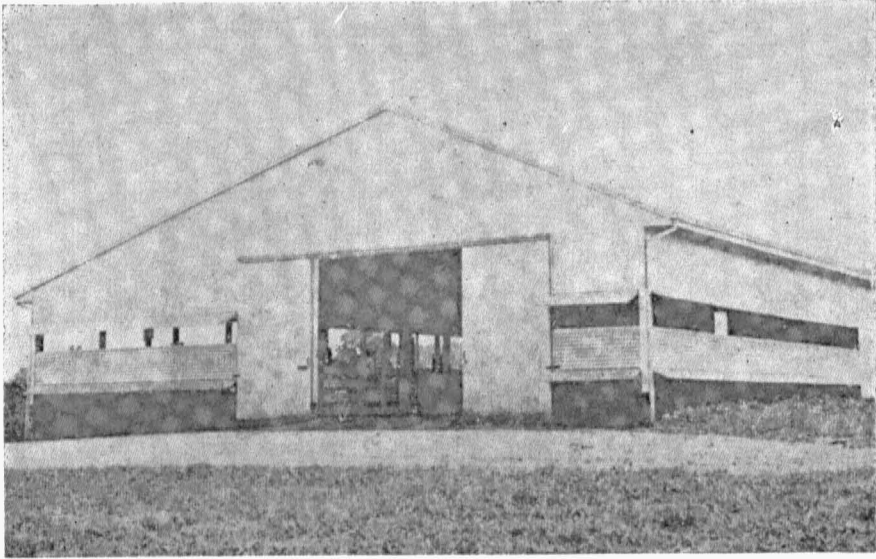
Past research on shortleaf pine management has resulted in numerous technical publications on such subjects as distribution, direct seeding, natural regeneration, planting, thinning, growth patterns, release, herbicides, and site. It is planned soon to bring all published material together into one technical bulletin on shortleaf pine in Missouri. It is said that people who previously burned the woods annually have finally recognized the potential of pine, and are beginning to keep fires out of pine stands. I am sure that this trend will progress eventually to our hardwood stands.

Range Management studies have demonstrated that range improvement and conversion of low quality timber sites could improve the livestock economy of the Ozarks. Growing hardwood timber and cows on the same acre is not only poor timber management, but also an uneconomic grazing practice. Techniques for getting the conversion job done have been developed and are being put into practice.

Fire research in Missouri, even though hampered by the small size of the program underway, has provided practical information presently used in fire control activities by both the Conservation Commission and the Forest Service. Current emphasis is being given to hardwood fuels and effects of fire on forestry values.

In summary, forest research in Missouri really never got started until the 1950's. As late as 1948 it was reported in the *Log* that only one-half of one man-year was being devoted to forest research by all agencies. The outlook is improving, however. This year the combined budgets of the School of Forestry and the Columbia Field Office amount to more than \$270,000. While this sum is less than one-third the estimated amount which will be needed by 1972 to carry on an adequate research program, it represents a considerable advance over the situation fifteen years ago. It is expected that the programs of the School and the Station will go ahead simultaneously and at about the same rate of growth.

Missouri is no longer a "desert of knowledge" but we still have a long way to go to solve the problems facing forest land managers today not to mention those that surely will arise in the future as forestry becomes more intensively practiced in the State. We believe that we are organized to do the job and, with state, federal and private interests pulling together, will rise to meet the challenge.



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THE KARKHAGNE

ED WOODS

Forester, Pioneer Forests, Inc.

EDITOR'S NOTE: *Mr. Woods, forester for Pioneer Forests Inc. and a well respected member of the Salem, Missouri community, is without doubt one of only a few living experts on the Karkhagne. It is said that the only way a Karkhagne can be seen by man is through the bottom of an empty "Old Forester" bottle. Perhaps Ed has seen a few. At any rate, a lot of time and thought has been given to the subject as can be readily read in the following.*

OF ALL THE WILD CREATURES that inhabit this globe, perhaps none has so cleverly and thoroughly escaped public notice as the Karkhagne. Karkhagnes have been with us for a long time as has been demonstrated by the early writings of the first trappers, traders and mountain men. The old time lumberjacks undoubtedly knew of the Karkhagne and had they been able to write, there would have been some exciting experiences handed down for posterity.

That the animal is shy is beyond question. There are rumors that when surprised in some embarrassing positions he will attack without hesitation. However, due to the fact that he wins all arguments and consumes the evidence on the spot, he leaves little opportunity for the details to become known.

So far as can be determined no historian or egg-headed researcher has made a project of assembling all of the little-known facts that have trickled down to us through the years in tales told by lumberjacks, trappers, cow punchers, prospectors, Indians and a very few of the more adventurous foresters who occasionally inhabit the remote back country.

That these facts are fragmentary is well understood when one realizes that few of these persons can read or write. The little we know of this fabulous beast has come down to us by word of mouth, usually told guardedly around campfires or in some secluded corner of a dark saloon. There is a legend that the Crees and the Blackfeet knew a lot about the Karkhagne but will tell it only to a full blood brother during the dark of the moon and then only after four hours in a steam and smoke filled sweat lodge, which is a darn poor place to write. This may account for the smokey flavor of what is written here.

The name of the Karkhagne crops up in the songs and stories of the French Canuck rivermen and Courier-de-bois along with such heroes as Paul Bunyan and Joe Muffraw. It may well have been the Karkhagne who spelled the doom of Paul Bunyan and his logging enterprise by his habit of eating section corners. It has been rumored that it was this lack of section corners with which to limit his cutting that caused Paul to finally give up in disgust and to retire to some back woods haunt to await the next re-survey by the General Land Office. Some say that he still runs a camp six weeks walk below Quebec where the weather is three shirts cold, up where the Little Gimlet emptys into the Big Auger. But others are equally loud in their claim that the camp is on the Stinking Fork of the Big Nasty. It is a known fact that the last time the Blue Ox was seen was



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during the Winter of the Blue Snow when Paul carelessly left him tied to the North Pole while he stepped inside Eskimo Ike's Alcoholic Igloo for a mug of his favorite "Whiskey Blanc." The next morning no sign of the Blue Ox was to be found except some blue blood stains in the snow which was packed with Karkhagne tracks. The Blue Ox must have put up a desperate fight as this is the only known instance of the Karkhagne leaving any tracks. It is known that ordinarily the Karkhagne travels backwards and continually brushes out his tracks with his stiff bristly whiskers which somewhat resemble those of an otter. It is claimed by some that this is because he doesn't give a darn where he's going but just want's to see where he's been. It is well established that the young Karkhagnes are born at least 40 miles from land or water and without hair, brains or teeth. The adults when pursued by some other carnivorous beast are known to completely engulf themselves within the recesses of their own hip pocket and chuckle defiance at their pursuers.

(Excerpts from the book *Karkhagne Country* to be written when I have nothing better to do.)

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THE FORESTRY CLUB

JAMES F. JOHNSON

Class of 1964

Fall Semester

Bob Miley
Jim Johnson
Roger Leonard
Tom Fick

Forester
Assistant Forester
Secretary
Ranger

Winter Semester

Jim Johnson
Tom Fick
Walter Scobie
Bill Stephenson

TreasurerLoren Floto
ParliamentarianJohn Chesebro
HistorianGlenn Gottschall
Faculty AdvisorLee K. Paulsell

"THAT SURE WAS A SHORT SUMMER." "Was that three months? It seemed more like *two*." These were the comments coming from the forestry students last September. That is, those who didn't attend summer camp. The lucky students who had the pleasure of spending 12 short weeks at "Ates' Hide-a-way" were saying: "Do you mean that was 12 weeks? It seemed more like 20. Man! I don't know if I can last another nine months on campus."

That's the way the semester started, with all new courses and all new instructors. A lot of stories and tales were being told about summer jobs and summer camp. This soon diminished after the assignments started rolling in.

The first event of the year was the bonfire with a record number of new members. The trip "over the river and through the woods" led by "Daddy Rabbit" will be remembered quite some time.

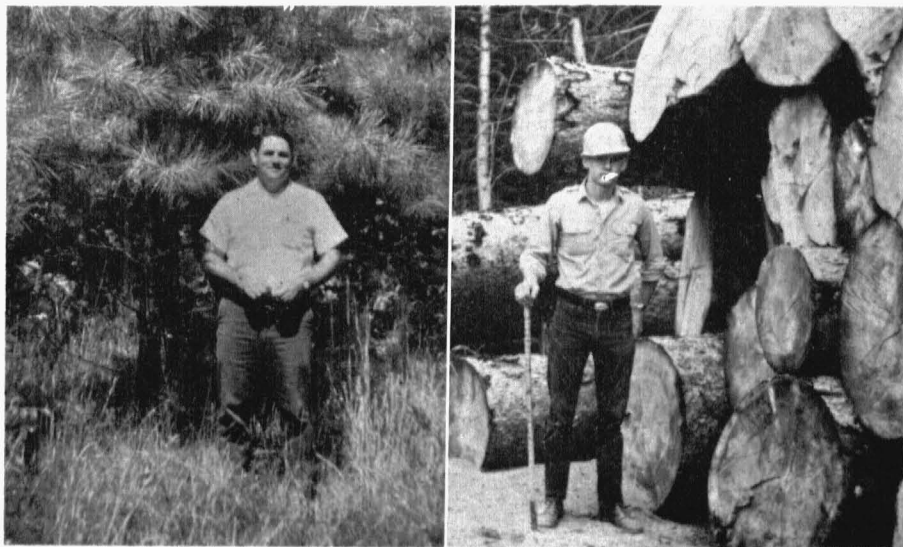
The football season got underway with the Club selling soda and sandwiches at every game. With the concentration of soda jerks and hotdog salesmen (about 1,000 per acre) the Forestry Club had some pretty rough competition. Well, maybe we'll do better next year.

The plantation cleaning took place with the new members (and some old) getting the usual amount of blisters and sore backs.

It seemed that there was a newly-inspired interest in the Bounce this year. As usual old Paul got a permanent, some freshly cleaned clothes, and a face make-up and lifting job. There was a good turnout for the Bounce and as usual a very pretty queen. A special word of thanks goes to the skit committee for showing the dates and wives just what takes place at a seminar. The Bounce, I'm sure everyone will agree, was the high-light of the semester.

No sooner had our backs recuperated from the "twist" at the Bounce than there were Christmas trees to cut. The thermometer dropped when we started selling which made the sales go pretty fast. It seems when the temperature gets down below 0°F. Christmas tree seekers make their choices much more quickly. We would like to say thanks to Don Janes who helped in loading and hauling.

The programs for the semester gave a variety of subjects. They included some slides and movies from summer camp, slides of a summer's work (with a side trip to the Grand Canyon); talks by Mr. John Coates from the Missouri Park Board, Mr. Delbert Mugford from the George O. White Nursery, Jim Port from the University Speakers Bureau, and Mr. Henry DeBruin, Supervisor of the Mark Twain National Forest at Springfield; and the film "The Mallard" by Charles Schwartz from the Missouri Conservation Commission. We appreciate the speakers taking time out of a busy schedule to speak for the Club. The information and enjoyment gained was very beneficial and gave the students a better understanding of what will be expected from them after graduation.



Foresters Miley and Johnson.

Plans are already underway for the '65 Conclave which will be held here in the spring of 1965. The committee is corresponding and making arrangements for what promises to be a very interesting event.

The Conclave this year will be held at Michigan State and many have already expressed the desire to attend.

The Christmas trees have been ordered and should arrive the last part of April. With careful care and planting, as in the past, the Club should soon start the new harvest.

The two remaining activities for the year are the Banquet and the Bar-B-Q. Plans for the Banquet are well underway and it should prove to be an event at which we can all be proud. The Bar-B-Q will climax the year's activities and we hope, due to the "ice-cream social" held after the contests, that the club doesn't have a baseball game that evening. Those who attended last years game will remember the score.

The executive committee wishes to express it's appreciation to those who worked on various committees and projects. A special word of thanks goes to Mr. Paulsell our faculty advisor.

It is the support and cooperation of both students and faculty which has made the Club. Keep up the good work.



THE FORESTRY CLUB

FORESTRY CLUB ROSTER

Ammon, Vern
Anderson, Bob

Barney, Steve
Boarman, Dan
Bredfeldt, Harry
Bretz, T. W.
Brinkman, K. A.
Brown, Ed
Brown, Larry
Brunk, Gary
Burns, Bob

Cahill, Les
Caughlan, Charles
Chesebro, John
Christoff, Gary
Claughton, John
Cox, G. S.

Decker, Jerry
Denney, Charles
Deutsch, Henry
DeWalle, Dave
Dowd, Walter
Drummond, Dave
Dyer, James

Ehrenreich, J. H.
Eisele, Bill
Ellis, Art

Fick, Tom
Floto, Loren
Flowers, Royce
Foster, Jim
Franke, Al

Geisler, Jim
Gisi, Don
Glock, Bob
Gottschall, Glen
Greenstein, Bob
Greer, Jerry

Harland, Jim
Hawkins, Bill
Holt, Francis
Houston, Bill
Hutchings, Bryan

Johnson, Gary
Johnson, Jim
Jones, Gary
Jones, Shelby

Kellmann, Harry
King, Clyde
Kirby, Lonnie
Koelling, Otto
Kohler, Bill
Kwader, John

Leonard, Roger
Logan, Ralph
Loomis, Bob
Lowery, Bob
Lumb, Ron

McCormick, L. E.
McCraith, Joe
McHardy, Dave
Miley, Bob
Moore, K. E.
Moser, John
Myers, Ken

Napier, Dan
Nash, A. J.
Nelson, Bob
Newby, Loy
Nichols, J. M.

Odell, Marshall
O'Neil, W. J.
Owen, Al

Palmer, Pat
Pastoret, J. P.
Paulsell, L. K.
Payne, Bill
Pennock, Jeff
Polk, R. B.

Ralston, R. A.
Robinson, Don
Roll, Bob
Ross, Gerald
Riggs, Dave
Ruppert, Dave

Sadowski, Frank
Sampson, Dick
Santhuff, Charles
Schnurbusch, Willard
Scobie, Walter
Scowcroft, Paul
Settergren, C. D.
Schafer, John
Slayton, Dick
Smith, R. C.
Stephenson, Bill
Stoewe, Russel
Suchland, Art
Summers, Glenn
Swiontek, Ted

Taliaferro, Gene
Taylor, F. W.
Teague, Neal
Temple, Clyde
Thies, Walter
Thornhill, Wayne
Tinsley, Dick

Vollmer, Roger
Vogt, Al
Vogt, Bill

Wagner, Dennis
Walters, Don
Weiss, Melvyn
Wells, John
Wendt, Bob
Westveld, R. H.
Williams, Lonnie
Willis, Jim
Wood, Bill
Wuenschel, Jim

Yoder, Bill

Zolk, Toms



Where's Al?

Annual Spring Barbeque

JERRY A. DECKER

Class of 1965

THIS YEAR'S BARBEQUE was held on a beautiful spring day in late April on a farm a few miles south of town. About 1:00 p.m. some strange looking people dressed in boots, Levi's and red hats started wandering out of the woods. Even the outcast of the McCoy clan was there again in all his finery. A joyous revelation resounded thru the hollows when some fine soul showed up with a barrel of "buttermilk."

The early afternoon was spent running the traverse, playing ball and sharpening up for the various events to come. Evidently Al Owens thought he could perfect John Chesebro's summer camp method for running a traverse. Once again it didn't work. They say the third time is a charm.

About 3:30 or so, the other events started. Lowery and Wagner heaved their way thru the log rolling course for first place; Moyes won the traverse and Geisler made the closest guesstimation on tree height. Wagner and Barney teamed up on the misery whip for first place in the 2-man bucking; Summers won the chopping by bludgeoning his way thru a log with a dull axe and Moser won the match splitting. Wells and Gottschall, both of whom showed in the conclave that they don't have to take second place to anyone, won the bolt throw and tobacco spitting respectively. This year's winners were presented loving cups instead of plaques as in the past.

After all that exertion, the cooks were prevailed upon to start serving chow, which they did after being threatened with mob action. Whereupon everyone proceeded to gorge themselves with chicken and pork steak washed down with liberal amounts of buttermilk.

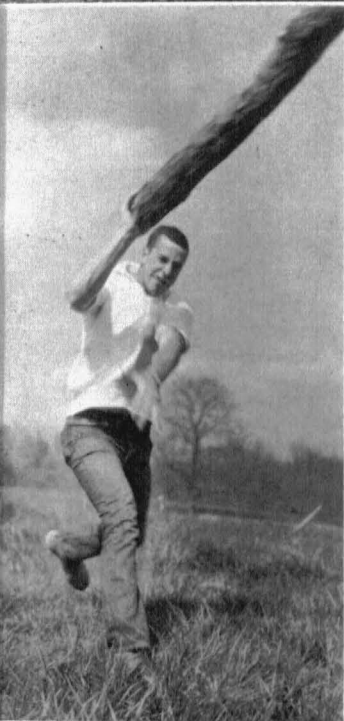
By the time the food had been allowed to settle, it was getting along toward dark. As the shadows lengthened, those strange looking men in the red hats started fading back into the underbrush. They knew that a great time was had by all and that they would be looking forward to next year.



Gather in small groups and DISCUSS forestry?

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Clockwise starting upper left:

Debris burning.

Fire boss. 10-71

Application of foam. 10-1

Full crew. 10-6

Experience isn't the problem! 10-30

Here, beat it out with this.





It's gettin' deep!

SCENES from the SUMMER PLACE

SMOKEY STEPHENSON

Class of 1965

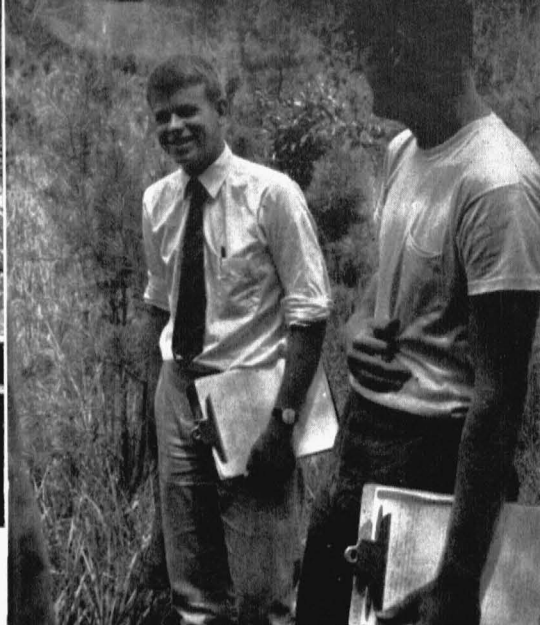
THE WEEKEND OF June 8, 1963 saw the infiltration of 33 eager young foresters onto the hallowed grounds of Forestry Summer Camp (Camp Horny-Ha-Ha). Cars were unloaded, and quiet gave way to bedlam for twelve wonderful weeks.

We got down to work at 8:00 a.m. Monday with forty new trees to learn in Dendro. We found out Tuesday why we had learned the bottomland species Monday. In the St. Francois river swamps you can't see the trees for the "skeeters"; however, being the brave individuals we are, we weren't scared off by fences, locked gates, or signs reading "KEEP OUT—MAN EATING HOGS." We trudged deep into the swamps carrying our "Beanie-Wienies" and quiz slips.

We kept busy for the one (only one?) week of Dendrology. Many people demanded more than one hour of credit, but when they saw their grades they retracted their demands realizing that their grade point averages would be lowered too much for comfort.

We spent Saturday in sorrow over the last week, and in eager anticipation of the coming two weeks of Engineering. We made our introductions to Ates and Aggies and had the usual good time consistent with Ates' ice cream and milk shakes. It rained all day so we had to stay indoors.

The next week we experienced our first few nights with no sleep. We all had insomnia from lack of exercise during the week. Monday and Tuesday we found the declination of Butler county was 7° East and not 2.5° East.



Wednesday, Thursday, and Friday we designed, and Gene Taliaferro constructed an expressway through Wapapello State Park.

The following week the "Magic Number System" became popular as we drew topographic maps and ran boundary surveys up the middle of Asher Creek. We had little trouble seeing the head chainman, but we did experience difficulty finding trees to blaze.

The first week of "Measurements" was rather short since July 4 came on Thursday. Dr. Nash felt kind-hearted and let us out *all day* Friday so we went home for a much needed vacation to gather our thoughts and recover from the chiggers.

Upon our return on Monday, July 8, we found our teacher was full of



Clockwise from upper left:

What trailer?

Prof. Browder.

She loves me, she loves me not.

Does everyone know "Rock of Ages?"

even more surprises. Our insomnia grew worse as we learned to spell our names correctly, use our erasers for fish bait, and that summer camp is in section 17, T. 26 N. R. 7E.

The “magic number” system became even more popular. Art Suchland donated a bell for the camp. It seems he was tired of missing meals and wanted everyone in the county to know when it was time to eat.

During another night of acute insomnia John Kwader and Ed Brown slept in the rafters while everyone else called pigs and split firewood. It seems John and Ed were tired of sleeping on our modern foam rubber mattresses and after drinking too many milk shakes decided sleeping in the rafters was a new challenge. What the heck! We had done everything else already.

Ralph Logan and Roger Leonard decided that they had had enough, so they went walking trying to get lost. They ended up at Ates’ which was very familiar by now, and figured they could get lost anytime. That night everyone’s auto kept backfiring. The next morning we were reminded that we were supposed to be in bed by 11:00 p.m., with the lights out, and quiet. We tried to explain our insomnia, but the instructor didn’t seem to understand.

We also had to abandon the magic number system, since the enemy leader broke the code. Oh well, the sixth week was almost over anyway. Our system would soon be of no further use.

July 22, 1963 dawned bright and clean. The air seemed fresher, the water was cleaner (when we had water), and the trees were greener.

For Dendrology, Engineering and Measurements were behind us, and we started a new line of study—Silvics and Silviculture.

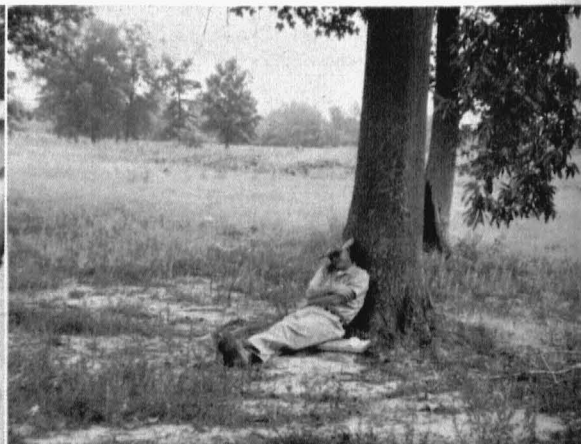
We no longer learned of trees in relation to species, number, or whether our survey line went around or through them: we learned whether one’s growth interfered with that of another. While studying environmental factors we broke (beyond repair) about \$200 worth of recording instruments. At least it appeared that way when we organized our data.

Roger Leonard remembers July 24 as the day he discovered Butler county grows rattlesnakes as long as 44 inches.

Glue it together and try again.

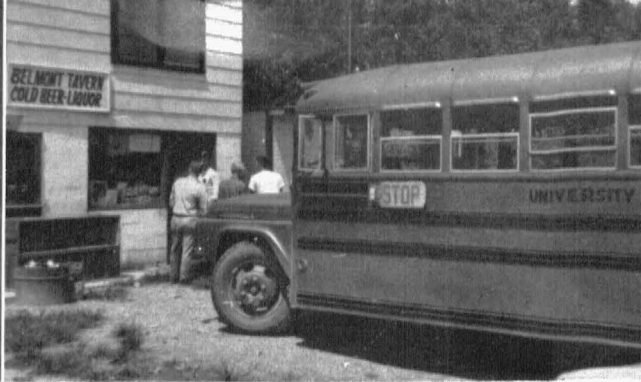


Again!!





All in a night's work.



"Tankin' up."

Next began our rounds with the now famous and ever-popular Paulsell field trips in the "Golden Stingray" provided by the University of Missouri Bus Lines. Between the trips to Pioneer Forest, Deer Run, Clark National Forest, and Sinkin Experimental Forest, the "Golden Number Five" shipped off onto unknown back roads many times to look at bits and pieces of this type of forest and that type of soil. The bus "rushed in" where jeeps would "fear to tread." But, each evening found us home again, none the worse for wear. Long hours in the "stingray" gave everyone a lingering thirst so the milk shakes from Ates' and the clean blue water of Lake Wappapello became increasingly inviting.

Ed Woods' good meal at Pioneer Forest preceded by a dip in the Current River was a welcome change from our usual sweat and cold beanie wienies.

We found our three weeks of concentration on Ozark hardwoods a waste of time when we were told, by Senior Webfoot Janes and Junior Webfoot Sanders, that "bottomland cottonwood" is the only tree. But, in the Missouri "Bootheel" the largest plants seem to be horseweed and poison-ivy. It only takes one day with Janes and Sanders to find out what a "B.S." degree means.

The first ten weeks of brainwork spent on the trees, changed to the use of brawn in taking our revenge out on the woody creatures. Under the protection of Don, Charlie, John and Al, the woods crew attempted to clear-cut the University Forest. With different types of chain saws, misery whips, and axes, trees fell or barber-chaired faster than they could be skidded. In the mill, most of the log was moved out with the sawdust conveyor, and a minute portion of each was stacked as "lumber." With the type of sawyers that handled the mill, is it any wonder that it was the mill's and Mr. O'Neil's last year at camp?

With all of the work going on, we weren't too busy to look forward to Ates' barbeque and ice cream.

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COMPLIMENTS OF

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Xi Sigma Pi

DAVE DeWALLE

Class of 1964

Forester	David R. DeWalle
Associate Forester	Loren R. Floto
Secretary-Fiscal Agent	John W. Chesebro
Ranger	Bryan K. Hutchings

The Tau Chapter of Xi Sigma Pi is the honorary forestry fraternity of the University of Missouri. Its members consist of men selected for their scholarship and leadership abilities in the field of forestry. In the 1963-64 school year ten men were accepted into the Tau Chapter. These men were James W. Foster, Robert L. Miley, John F. Moser, Paul G. Scowcroft, Gordon L. Thompson, Lonnie H. Williams, Walter L. Dowd, Roger Wm. Leonard, Don A. Walters, and Robert A. Roll.

After the initiation ceremonies in the Agriculture Building a banquet was held at Howard Johnson's Restaurant. Dr. Robert S. Campbell of the University of Missouri Zoology Department was the guest speaker. Dr. Campbell delivered a very enjoyable talk on his specialty, "Lake Succession."

One of the big functions of the Tau Chapter was planning and serving at the Annual Alumni Luncheon before the Tiger-Sooner football game this past fall. The luncheon was well attended and the food was appetizing. The alums gather each year at this time for an Alumni Meeting, the luncheon, and good football.

Things are still to be accomplished. The Tau Chapter must elect a new Ranger to replace graduated Hutch. Plans are also underway for the annual service project at the Rudolph Bennett Demonstration Forest at the Ashland Wildlife Area and the awarding of a Freshman and Senior award for outstanding scholarship.

Initiates: (top) Dowd, Thompson, Walters, Moser, and Roll; (bottom) Williams, Leonard, Scowcroft, Foster, and Miley.

Officers: Chesebro, DeWalle, and Floto.





"Rock of Ages . . ."



Progeny.

Annual Bonfire Initiation

JIM FOSTER

Class of 1964

THE FORESTRY CLUB ACTIVITIES for the '63-'64 School year got off to a good start with the Annual Bonfire Initiation. On the evening of Oct 8, 38 young neophytes gathered around a small fire at Rollins Spring, bravely awaiting whatever might lie ahead.

The mood of the evening was set by the singing of the Forestry Club "spiritual" and other old favorites, led by Bill Hawkins and Walt Scobie with their guitars. The initiates had looks of curiosity, suspense, and anticipation. Soon all fears of the future became justified as Tom Fick, with more than satisfactory enthusiasm, took upon himself the grave responsibility of testing the young foresters to see if they were indeed worthy of Forestry Club membership. He found that they were all well equipped physically, but that a few showed signs of having negative attitudes, a grave defect in forestry students.

All initiates were accepted, however, and were led to a large bonfire—a Royce Flowers special—where they were presented to Paul Bunyan and the Forestry Club members. Almost immediately, several shots rang out and into the clearing came the "Old Man of the Woods" accompanied by the "Babe," armed guards, and the "Devil."

After observing the group of neophytes that had been assembled, the Old Man commented on the dampness of the evening. He advised one initiate to get up on level ground and told a few others to tighten up their belts a bit saying that foresters shouldn't wear such baggy pants. The Old Man welcomed them to the club, and then explained to the initiates their responsibilities to the club, the school, and to their profession. Finally he asked the Devil to inspect the autographed logs for such things as signatures of wildlifers, signs of machining on the logs, and the proper number of signatures.

The Devil checked the logs closely and found several neophytes that he thought should be rejected. He was lenient however, and only sent them to the rear of the line for special consideration by the Babe a little later. After dealing with the Devil, each initiate was then sent to the Babe, who, after a little consideration, sent them on to the Old Man. The Old Man congratulated them and asked them to sign the official scroll after which they joined the ranks of the old members.

When his work was done, the Old Man of the Woods, with his companions, returned to the forest to go about in his secretive ways until next year's initiation. To officially finish the evening, the new members of Xi Sigma Pi were announced. Cider and do-nuts were enjoyed by all.

Left to right: Can you imagine this on your doorstep?; Go where?; Is my diploma there?



BARNETT'S DRUG SUNDRIES

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Columbia, Missouri

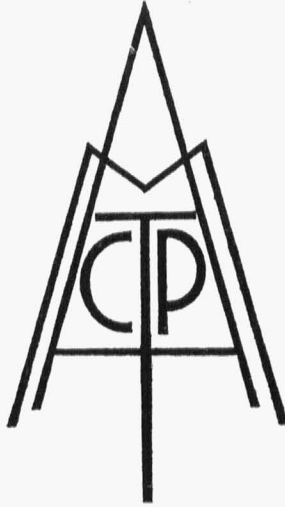
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SPORTS

BRYAN K. HUTCHINGS

Class of 1963 $\frac{1}{2}$

THIS YEAR, the Forestry Clubs' participation in intramural sports was in complete contrast to last year. Although handicapped again because of lack of players, the men who did play this year had great enthusiasm and ability as indicated by their very impressive records in all team sports. The team sports are volleyball, softball, football and basketball.

In the spring semester, the volleyball team, led by Tom "The Rabbit" Fick, Bill "The Hawk" Hawkins, Curt "The Sting Ray" Orr, and Bryan "The Hutch" Hutchings, chalked up a 4-1 record, with our lone loss going to the division champions.

The softball team ran into a little stiffer competition and bad luck. We won our first game, but the second game fell on the day of the spring barbeque. We arrived at the game on time with the soberest bunch of guys I could find. We showed it when we were leading 5-0 at the end of the first inning. However, at the end of the third inning, the score was 22-5, and not in our favor. That was the final score, thank goodness. I might add, the team that beat us went undefeated and won the softball championship.

With the start of the fall semester, football was the first sport to be tried. A team was organized and we went to work acquiring cut legs, bruises, and a 2-1 record which won our division championship and a spot in the play-offs. However, we ran up against a tough B & PA team who beat us 18-6. B & PA won the championship when they beat the next team they played.

The first of November was also the start of basketball season. Practice revealed that we had a starting five that averaged 200 lbs. per man and a great scoring potential. We showed it when we won the first game 51-28. The second game was against a strong Math Club team; however, we were able to contain them and won 40-38. The third game was completely different. Everything went wrong against the Vet-Med team, including the score, as they defeated us 33-26. Our fourth game was a must for us against B & PA. We had to win to tie for the division championship with the Vet-Meds who had lost one game also. B & PA had 2 men who were 6'7" and one 6'5". Our tallest man was 6'3". However, ball control, determination, hustle, and our heavy weight average brought the game to us 32-30.

At the time of this writing, we are anxiously awaiting the start of the playoffs feeling we can win the championship despite our lack of height.

The Forestry Club would like to thank the players who put forth their time and effort in participation in intramural sports. They have all had a part in making "Forestry" a recognized name in intramural sports during the past year.



Maybe France is hiring foresters.

TENTH ANNUAL CONCLAVE

LOREN FLOTO

Class of 1964

EARLY LAST MAY, seventeen foresters left the beloved campus at Old Mizzou and traveled to the Tenth Annual Midwestern Forester's Conclave at Purdue University, West Lafayette, Indiana.

Arriving at Ross C. E. Camp on Friday evening, we registered, paid fees, and claimed bunks. That night some of us retired early; some were celebrating prematurely with song, lacking wine and woman.

Traditionally, the first event Saturday morning was dendrology. Scouring the woods for identifying clues for the Tigers were Bill Vogt, Loren Floto, and Norm Alley. When the final scores were tallied, Vogt had missed only two of 120 points for second place and 3 team points. Floto earned 2 points in third place, and Alley finished in the top ten. While the dendro "quiz kids" went through the woods, Mizzou's compassmen Bob Stryker, Tom Fick, and Frank Wells were competing in the traverse. Stryker copped third place and two points.

In the topographic chain throw, Stryker, Fick, and Les Cahill competed to no avail. Michigan chainmen won it in 1:47. Teams of Glenn Gottschall-Norm Alley and Bill Hawkins-Tom Fick valiantly rolled the log but were unable to match the skills of Purdue, Michigan Tech. and Michigan State. The winning time over the 100-foot course and back was 1:42.6. We gave away the one-man bucking event for lack of a saw (and a capable sawyer).

After dinner, Jim Johnson, Cahill, and John Moser tried their luck at match-splitting only to be out-split by Michigan, Michigan Tech. and Iowa State. Finally Frank Wells ended our scoring drought by heaving a six-foot sycamore bolt 23 feet 9½ inches, edging out the "big boys" from Michigan State and Minnesota. Gottschall and Fick also heaved the bolt for Missouri. Wells earned 5 points with his monumental surge of strength.

Two-man bucking came. Again we were out of our element, although Bob Lowery-Bill Hawkins and Curt Orr-Tom Fick made valiant efforts to saw through the 14 by 18-inch red oak timber in quick time. The Purdue entry did it in 50 seconds flat, winning hands down. Try to do it in 3 minutes some time!

At last in mid-afternoon we were ready to spit tobacco. Missouri had excelled here in its short 2-year record, and '63 proved to be no exception. Gottschall achieved the most complete coverage of a paper plate ten feet away to retain his championship. Can he do it again in '64, his last year? Hawkins and Johnson spit with all the accuracy and volume at their command, but did not place. Gottsch's effort won us another five points.

Chopping through a little square timber of cottonwood can be harder and more time-consuming than it looks. Ask Johnson, Lowery, and Walt Thies. Again Purdue and State dominated the contest. The top axeman from Purdue did it in 1:20.

The last event of the long day was axe throwing, the special event. The target was a 20-inch tree cross-section with a 5-inch bullseye. If the axeman 25 feet away could hit the large circle and make the axe stick, he got 5 points. The bullseye was worth 10, and he got three throws. Cahill picked up our last two points with a 15-point target score. Wells and Gottschall also took aim and fired.

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Finally the points were tallied on the blackboard. The standings:

1 Michigan U.	28	5 MIZZOU	19
2 Purdue	25½	6 Minnesota	4
3 Mich. State	22½	7 Iowa State	1
4 Mich. Tech.	21		

We were disappointed, but we didn't show it. That night, after the banquet, everyone was up for the ice cream social, knowing this would be the biggest event of the day.

The Linden Conservation Club was very probably the "swingin'est" place in Indiana that night. When 80 foresters from 7 different schools are brought into close contact with a generous supply of the golden stuff, and catalyzed by two guitars and a banjo, the result is real action. Hawkins and Johnson were the music-makers from Mizzou, while a Purdue forester played the banjo.

What developed as a result of these ingredients has to be the wildest, funniest dance ever witnessed east of the Wabash. I would describe it as the football twist, since it incorporated elements of both, not to mention overtones of the Waltz, the Jitterbug, and the U.T. It was all good clean fun, and no one got hurt. Les Cahill, afflicted by a strangely common malady, became very rambunctious in the late stages of the party, to such an extent that Carl Settergren and Bryan Hutchings decided to cool him off. Les was "sucking canal water" for a while.

That Conclave is past, and as you read this *Log*, the '64 event at East Lansing is also history.

What of the '65 Conclave? Will it be the best in a series of twelve great events? Will it be a well-organized, efficiently-administered affair? Will it live in the minds of midwestern foresters as an unforgettable experience marked by sportsmanship, fellowship, and hospitality? These are questions which you, with all the leadership and energy you can summon, must answer.

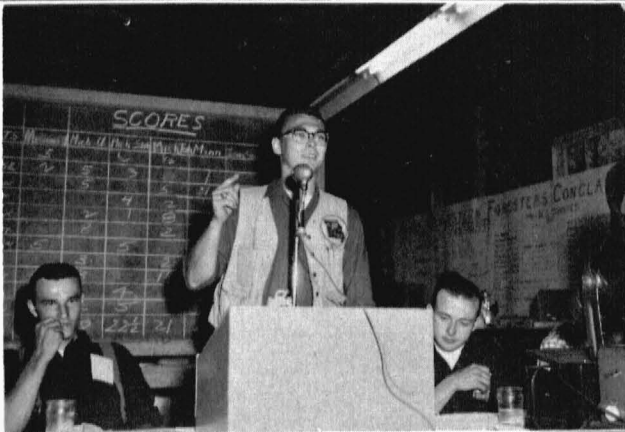
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Top left: Why not just send somebody back for paper plates?
 Top right: Why not just use the side of the box?
 Middle: Now if everyone will turn to page 392, "Rock of Ages . . ."
 Lower left: Fore!
 Lower right: A little over towards Aunt Nellie's, Hawk.

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The Paul Bunyan Bounce

JERRY GREER

Class of 1964

THE SEVENTH OF DECEMBER, 1963—a day like any other day in the year except that it was a cold, rainy, bone-chilling night which was cursed by many but staunchly praised by a small group. This small group was 126 M.U. foresters and their dates who braved the weather to attend the annual Paul Bunyan Bounce.

Despite having to use a piano with 5 dead keys, the Starlighters laid down some fine and pure notes. Action (dancing?) on the dance floor was fast and from my sideline position appeared at times to be somewhat dangerous.

During the intermission, the Queen Contest Judges interviewed approximately 20 young ladies. The final ballot of the judges determined that the very beautiful Miss Judy Hoepner of Stephens College would be the Queen of the 1963 Paul Bunyan Bounce. She was escorted by the very lucky Mr. Jim Dyer.

The evening was spiced (not spiked!) with much humor too. "Flash" Payne (after many subtle trials and an equal number of failures) finally managed to get a photograph of Dave Drummond eating.

The Senior Skit brought laughs from students and faculty alike. The skit was a presentation (under the direction of Walt "Hammerstein" Scobie) of the students impression of the "Perfect Seminar" or "There must be an easier way to earn one hour credit." Several members of the faculty were rather vividly and quite accurately portrayed by Bryan Hutchings, Dave Drummond, Bill Hawkins, Dave DeWalle, Walt Scobie, Jim Johnson and Jerry Greer. John Chesebro did an excellent job depicting the typical Italian foreign student that MIGHT be found on the M.U. campus. (Rumor has it that the University has adopted a policy which would protect the student body from something such as this).

Mr. Pickles.

"Queen Judy."



Mr. Nichols summed up the skit very well when he said, "Never have so many been needed by so few in so many ways."

Later on, Terry Twerell sang several folk songs during one of the bands breaks.

Perhaps the most important part (in many peoples opinion) of the Bounce often goes unappreciated much of the time. We owe a world of thanks to the Lumber Jills (Student Wives and Faculty Wives) for their help in furnishing sandwiches and cookies for The Bounce.



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FORESTRY CLUB BANQUET

WALTER G. THIES

Class of 1964

THE FORESTRY CLUB'S THIRTEENTH ANNUAL BANQUET was held Tuesday evening, March 10, in the large ballroom of the Memorial Student Union. Paul Bunyan, appearing for the first time in formal attire, joined 170 other members and guests to make this one of the best attended banquets of recent years.

The spirit of warmhearted fun and friendship was quickly established as club members and guests gathered for an informal get-together around the punch bowls. After the invocation by Professor W. J. O'Neil, a delicious meal was enjoyed by all.

Following the meal, guests at the head table were introduced by Toastmaster Jim Johnson. Guests at the banquet included Dean Elmer R. Kiehl, Dean of the College of Agriculture; Dean Jack Matthews, Dean of Students; Professor Charles M. Hudson, Department of English; Mr. Osal B. Capps, Missouri Conservation Commission State Forester; Mr. "Bus" Entsminger, Director of Development and Alumni Activities; Mr. Allan W. Purdy, Director of Aids and Awards; Professor Robert S. Campbell, Department of Zoology, and Professor Philip C. Stone, Chairman of the Department of Entomology.

Following the introduction of the guests, Bill Payne presented to Professor W. J. O'Neil an Honorary Lifetime Membership in the Forestry Club. This is the highest award conferred, and only the second granted by the club. Professor O'Neil was cited by the Club "in recognition of his long and active professional life and outstanding devotion to his country, his school, and his students."

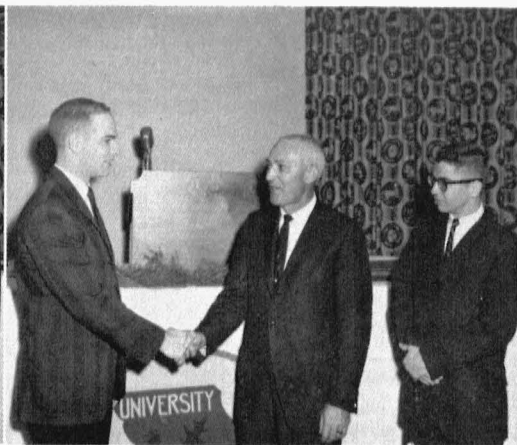
For the fourth consecutive year the committee in charge of "examining old skeletons" (Headless Ax Committee), found activities of two members worthy of special recognition. The faculty member who received the "Headless Ax" award was none other than Professor K. E. Moore. Mr. Moore distinguished himself by driving the bus at camp with the emergency brake

Westveld Award Winners.



Big Jim.





Upper left: Odell and Haley with Mr. Wm. Hickock of the Homebuilders of Greater Kansas City; Right: Dowd and Joiner are congratulated by Mr. Carlos Barnhart of the Mid Missouri Lumbermen's Association. Center: Jim Johnson flanked by the charming Mrs. Lawson Obermiller and Mrs. Dean Wilkinson of the Missouri Fed. Womens Clubs, Inc. Lower left: recipient of the St. Louis Hoo Hoo Club Scholarship, Roll; Right: Allen Purdy with Richard M. Higgins Scholarship Winners, Moser, Brown and Ross.



Left: Xi Sigma Pi award; Center: . . . and a bale of hay for my ox"; Right: "Headless."

on. A quick examination of old copies of the *Missouri Log* reveals that the first faculty "Headless Ax" award was given to Carl Settergren (1961) for driving the school's pickup with the emergency brake on. Last year Dr. A. J. Nash was given the "Headless Ax" award for torturing his car until it just gave up. Perhaps a mandatory refresher course in driver training would be in order for selected faculty.

The student "Headless Ax" award was given to Rich Slayton. It seems that Rich was able to walk 40 chains (without a compass) through the woods and end up at the exact spot he sought; however, when he tried to return to his starting position (using a compass) he got lost.

Following the "Headless Ax" awards, the "Hummingbirds," a well-known barber shop quartet, provided the musical portion of our program.

John Chesebro, Secretary-Fiscal Agent of Xi Sigma Pi, the national forestry honorary fraternity, presented the fraternity's annual awards for scholastic achievement to freshman Jim Willis and senior Dave Dewalle. Dr. Westveld presented the Westveld awards. The freshman award for high scholastic achievement was presented to Dave Barber; the sophomore award for activities in the Forestry Club was presented to Marshall Odell; the junior award for the highest scholarship in courses other than Forestry, was presented to Walter L. Dowd; the senior award for combined scholarship and service to the Forestry Club was presented to Loren Floto.

The speaker for the evening was Professor Charles M. Hudson of the English department. Professor Hudson presented "A Professorial Potpourri" — a rapid fire collection of humorous tidbits and a reading, demonstrating his great versatility.

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Jills Spring Picnic.

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THE UNIVERSITY OF MISSOURI Lumber Jills was organized in 1950 soon after the formation of the School of Forestry. The purpose of the club is to promote fellowship among wives of students, to promote better faculty-student relationship, and to become better acquainted with the profession of Forestry.

Our group meets monthly and has had an active membership of approximately 16 girls. Our officers have been elected on a semester basis for the first time this year.

	<i>1st Semester</i>	<i>2nd Semester</i>
President	DeAnna Nelson	Sharon Payne
Vice-President	Sharon Payne	Beverly Drummond
Secretary	Ella Geisler	Connie Newby
Treasurer	Karen Greer	Judy Deutsch
Parliamentarian	Connie Newby	Karen Greer
Bridge Chairman		Joyce Crawford
Advisor		Lois Paulsell

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Our programs this year have included Jim McGraw, from the Students Speakers Bureau, his topic was, "What's So Funny?"; Dr. Westveld whose topic was, "The Role of a Forester's Wife"; color slides featuring the Worlds Fair & Foreign Countries; and a demonstration on hair styling. We have also enjoyed our traditional Christmas party, Covered Dish Supper, and Spring Picnic. Of special interest has been our correspondence with other member clubs of the National Association of Forestry Student Wives, and receiving our official membership pins.

We have enjoyed having several of the faculty wives visit our meetings this year. Also a very special thanks goes to Mrs. Paulsell, our advisor, and to Mrs. Westveld, Mrs. Smith, Mrs. Cox, and Mrs. McGinnes, who have instructed us in bridge this year.

Card party and covered dish dinner.



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Class of '63: One Year Later

MELVYN WEISS

Class of 1963

ONE YEAR LATER the class of 1963 is spread from Rhode Island to California and from Alaska to Panama. Members of this class are now working for state, federal, and private employers in twelve states.

Not much word from EARL ADAM except that he got one of the many federal jobs available to our graduates. I understand it's with the Army at Fort Sill.

JIM ALLEY was on temporary appointment with the U. S. Forest Service on the Nezperce National Forest in Idaho until last November. The call of the sea and the U. S. Navy took him to Newport, Rhode Island.

LEWIS BRUSH spent last summer at Seneca, Oregon but expected to move to John Day, Oregon in August. Lewis took a U.S.F.S. job on the Bear Valley District of the Malheur National Forest and is working on timber sales.

LEE COONCE at last report was a J. F. on the Seiad Ranger District, Seiad Valley, California doing sales work. I am sure Lee has carried out his threat to do as much salmon fishing on the Klamath River as his time will allow.

No word from DAVE DUBROUILLET. Rumor has it that Uncle Sam's got him.

HELMER JENSEN, one of our more "distinguished" ROTC military students, has been taking advantage of the wonderful opportunity Uncle Sam has offered him to see the country. . . . Ft. Riley, Kansas; Ft. Sill, Oklahoma; Ft. Benning, Georgia; and finally Ft. Richardson, Alaska. How about that, a Forest Products graduate in Alaska.

FRED HODGEBROOM says the fishing and hunting on the Fortine Ranger District of the Kootenai in Montana are fabulous. I guess they make him work a little too. Fred has been on a six-month active duty stint with the Montana National Guard since January at Fort Ord, California.

PAT HUTCHISON has been employed by the Missouri Conservation Commission as Assistant District Forester on the Eminence District.

JERRY LAPIDAKIS seems to be too happy these days. I guess it's the fact that he married Karen Hayes of Akron, Ohio last September and avoided the draft. He really seems to enjoy his work with the Wisconsin

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Conservation Department. According to Jerry, the Menominee country where he has been installing C.F.I. plots has some of the largest volumes per acre east of the Rockies.

BOB LINDECKE is still single and "plans to stay single." Bob is in the Army as a member of the 5th Infantry Division (Mechanized), one of the *Strike* Divisions.

By the time the *Log* reaches press the Nash family will have increased by at least one more head. TOM NASH has a sales position with the United States Plywood Corporation in Nashville.

JERRY PELLY is presently working in St. Louis for the Pitzmann Company—Surveyors and Engineers, laying out subdivisions for contractors while waiting to be inducted into the Army Reserve Program. Jerry is engaged to a "Suzie" from Beverly Hills, California, Miss Jill Atterbury.

MARVIN PENNELL is an officer in the U. S. Air Force and is presently attending Aircraft Maintenance School at Chanute AFB, Rantoul, Illinois.

DICK RASSFELD was about to wind up his work for the Missouri Conservation Commission supervising a crew doing turkey habitat improvement work. He says it is very similar to T.S.I. except they save the wrong species. February 14 Dick began active duty with the Navy at Newport, Rhode Island in O.C.S.

JOE SALMONS is working with the Missouri State Highway Department in the photogrammetry section in Jefferson City. Joe drops in at the School now and then.

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MALDEN

BOB STRYKER doesn't seem to be lacking hunting and fishing prospects. He's on the Spotted Bear Ranger District, Flathead National Forest—Hungry Horse, Montana. How's that for far-away country? He divides his time between fishing, timber sales, deer hunting, timber management, and elk hunting. Poor fellow seems to be overworked.

“MAC” TOWNSEND ended a six-month tour of duty with the U. S. Army late in February and has been trying to find a position with private industry.

ELLY UNDERWOOD is a GS-7 Forester with the Bureau of Indian Affairs at Bemidji, Minnesota where he seems to be having trouble adjusting to the sub-zero temperature. He writes that he is still single and that his selective service classification is 2-A.

After working with the Missouri Conservation Commission on a temporary appointment for a few months, PHIL VIETH is presently employed by the Minnesota Department of Conservation as a Forester Trainee and is stationed at Effie, Minnesota.

Poor MEL WEISS had enough brains to get his bachelor's degree but doesn't have enough sense to pack his bags and get out of school. He is presently working under the direction of Dr. Bretz toward his Master's degree.

JOHN WOOD is forester on the Harrison State Forest in Indiana. Acting on a rumor, he discovered an old cache of dynamite in a sack on the forest. It was probably stored there about 1935 when the camp was used by the CCC. John must be some type of hero. I knew he would make his mark someday.

PAT ZEORLIN, after working a short time under Ray Bruns (1951), with Union Electric, left for active duty in the Artillery. When he completed training Pat expected to be shipped to Panama. I hope he can straighten things out down there.



Standing: Louise, Maggie, Judy T.; Seated: Judy Z.; 10-43, 10-87.

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Alumni Day

A SUCCESSFUL, PROSPEROUS GROUP OF FORESTERS returned to the campus November 16, for the twelfth annual meeting of the Forestry Alumni Association. Handshaking, backslapping and animated conversations were the order of the day as friends and former classmates got together prior to the business meeting. Alumni President Biswell found it necessary to interrupt these impromptu gatherings to get the business meeting underway. Meanwhile, the wives met at the Westveld's home for the now traditional coffee and conversation.

Upon adjournment of the meeting alumni and their families moved down the hall to the cartography lab for lunch. Despite the rather unorthodox surroundings, Xi Sigma Pi served an excellent meal of barbeque beef sandwiches, potato salad, coleslaw and accessories. Seventy-five people enjoyed the meal and the opportunity to renew old acquaintances.

The day was far from over as the group moved on to Memorial Stadium for the crucial Missouri-Oklahoma game. Alumni were treated to fine football weather and an excellent game as the Tigers scored a near upset before losing to the favored Sooners.

The lack of a victory did little to mar a highly-enjoyable day, however.

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TOAD GOES TO THE MOUNTAINS

DAVE DeWALLE

Class of 1964

IT WAS A DAY OF MIXED EMOTIONS as the yearly exodus to the West left Columbia in the form of a four car train. All of us were happy to finish another school year, anxious over our prospective jobs, and maybe a little sorry for leaving home so soon. I was to report to the Klamath National Forest at Yreka. My position involved the installation of continuous forest inventory plots. The trip was dry and uneventful except for an incident with a cold nosed black bear in Rocky Mountain National Park. Some poor campers lost a breakfast steak that morning. As we neared northern California you can't imagine our empty feeling. Yreka sets in a grassy valley with the California sycamores in front of the hospital showing the only sign of woody vegetation around. That is *Platanus rachemosa* for you dendrologists. After I reported, they assured me I would see some rugged country. They were right.

SMITH STUDIO

Leon Smith, Photographer

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I spent the first week in fire school, cleaning equipment, filling out forms, and living on the Forest Service in the Yreka armory. The next week I met Glen Hendrix (Arkansas A. & M.) and Warren Ristow (Humbolt State) with whom I spent the summer in an old, dirty apartment. The second week all three of us along with our fearless leaders Jim Broce (Oklahoma State), Frank "God" Waldo (Syracuse) and Harry "Jesus" Frey (Syracuse) went to C.F.I. training school in Mt. Shasta, California. After learning the basic techniques of plot installation during the week we headed back to Yreka on Friday.

Our first week on the job we divided into two crews of three men each. I hope someone eliminates Oak Flat Creek from all topographic maps because this is where we spent our first working day. This creek is only six miles from the renowned town of Happy Camp, California. Happy Camp is a metropolis of cigar smoking loggers, Modoc Indians, and a few die hard foresters. That is where Jim Broce is located now. Power to you Jim! This country was so steep you had to dig a hole with an increment borer to sit and eat lunch.

This is the way our summer went. On weekends we lived in an apartment in exchange for cleaning and painting it. This work, the rodeo, the state fair, Mrs. Hedin's chop suey, the Jolley's Club, and a book called Ishmael kept us smiling all summer. The work wasn't dull by any means, each day we worked in a new area. We went from desert juniper to timber line Brewer spruce.

One Saturday on the urging of Waldo, the crew, for fun, decided to climb Mt. Shasta. We rented ice grips for our boots because the second highest peak in the continental U.S. has plenty of ice even in July. We were informed the normal person takes from four to six hours to climb to the peak, we took 11½ hours. Not bad really considering we climbed up the wrong side and took no extra food or water. I'll say right now you can't quench your thirst by eating snow. As you gloriously reach the summit the thin air is polluted with fumes from sulphur springs and this is where you wonder why you tried this on your day off. Nevertheless it was a thrill, I think, although we were all "skin heads" for a week from snow reflection.

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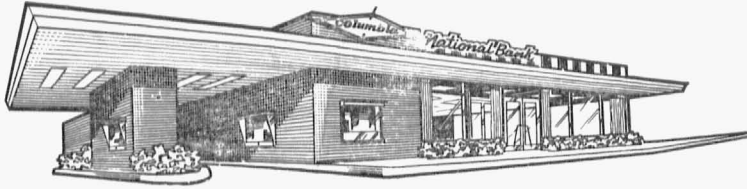


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Another little episode I must relate is the day “God” Waldo and myself took a helicopter ride 17 miles to install a plot. The trouble was we couldn’t get a ride back and 1849 Gold Rush wagon trails looked like our only way out. It seems as though the bear trails were more conspicuous than the original trail but thank goodness they ran in the same direction. We started hiking out at ten o’clock in the morning and ended on a logging spur at nine o’clock that night. I lost about six pounds that day.

I have to say something about the type of work we did. Basically we established circular 1/5 acre plots from pin pricks on aerial photos with an accuracy of ± 30 feet on the ground. The trees on this plot were measured for d.b.h., tagged with a number, and plotted on a sketch map. This was to facilitate latter remeasurements. Tree condition, species, type, crown classifications, area plantability, stocking of adjacent areas, and growth impact were noted for each plot. Probably our most interesting work involved re-measurement of plots established in 1949.

I can say the summer offered a lot in the way of experience on and off the job. One disadvantage, I feel, was working the entire forest out of the headquarters were there were no room and board facilities. This forced us to stay in costly motels until we found our apartment. The big advantage to this type of job for me was seeing the variety of vegetation types and terrain we worked in. Since this was my first summer out west, I certainly got a good look at the opposite side of the coin being a flat-lander, myself.

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"OUT WEST"

JIM JOHNSON
Class of 1964

THERE IS A FAMOUS QUOTE that goes like this; "Go west young man, go west," so I did.

On June 6, 1963, I left Columbia headed West. I arrived at Laramie, Wyoming the next day at 2:30. I looked up the Forest Service office and talked to Mr. Iver Love. Mr. Love is the District Forester of Foxpark District of Medicine Bow National Forest. Mr. Love told me I would be stationed at Keystone, Wyoming at the Keystone Guard Station, and that I should see Mr. Richard Davis (Forester for the Foxpark District) at the Keystone Ranger Station to get my keys, vehicle, and additional instructions.

I stayed that night (June 7) in Laramie and left the next day, loaded down with groceries, for Keystone. Keystone is 47 miles from Laramie and is located about half way up a mountain. Mr. Davis wasn't at the Ranger Station so I went on through the metropolis of Keystone (population: from 10 to 30, depending on the weather, 30 in the summer and 10 in the winter). After taking one wrong turn I finally arrived at the Guard Station. It was a 4 room log cabin set back into a hill with a bunk house on one side, a barn on the other side, and a creek flowing through the front yard.

My "crew" was supposed to arrive the next week. He did. Saturday the 15th of June, Lou Marquis, a Botany major from Penn State, arrived as my crew.

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We scaled for the first 2 weeks until we caught up with the skidders. We then marked trees on a commercial thinning and in general were "handymen" when we didn't have scaling to do. We cleaned, pruned (at the Ranger Station), layed out new cutting blocks, fixed signs, built signs, greased vehicles, checked sheep, checked cutting areas, and—well, you name it, we did it.

The assistant Ranger, Mr. Richard Fletcher, was located at Foxpark, Wyoming. Foxpark is about 13 miles from Keystone and 15 miles from the Colorado line. A logging town, Foxpark also has the only large sawmill around. The sawmill cuts around 50,000 fbm. a day. The headsaw, powered by electricity, does only the slabing. The mill has a gang saw to saw the dimension lumber. The main species cut are lodgepole pine, engelmen spruce, and subalpine fir. Lodgepole makes up about 85% of the total.

The fire protection, on the Foxpark District, was very efficient with only 5 small fires, mostly lightning strikes. I didn't fight any fire but I did go chasing a couple of false alarms.

My wife and 2-year-old son, Kenny, came out by train the first of July and stayed until I came home. They enjoyed "roughing it" as we had no electricity or running water, except in the creek flowing through the front yard.

Lou and I sat up nights, Abe Lincoln style with lanterns, and added the scale books.

Trout fishing was great in the streams and beaver ponds. I fished a lot in the evenings and we ate fish about once a week.

Other wildlife was plentiful also. There were deer, elk, bear, antelope, beaver, squirrels, rock chucks, and chipmunks. The deer were everywhere, I saw around 200 throughout the summer.

It was a very interesting, enjoyable, and educational summer, but it was nice to get back to *good old Missouri*.

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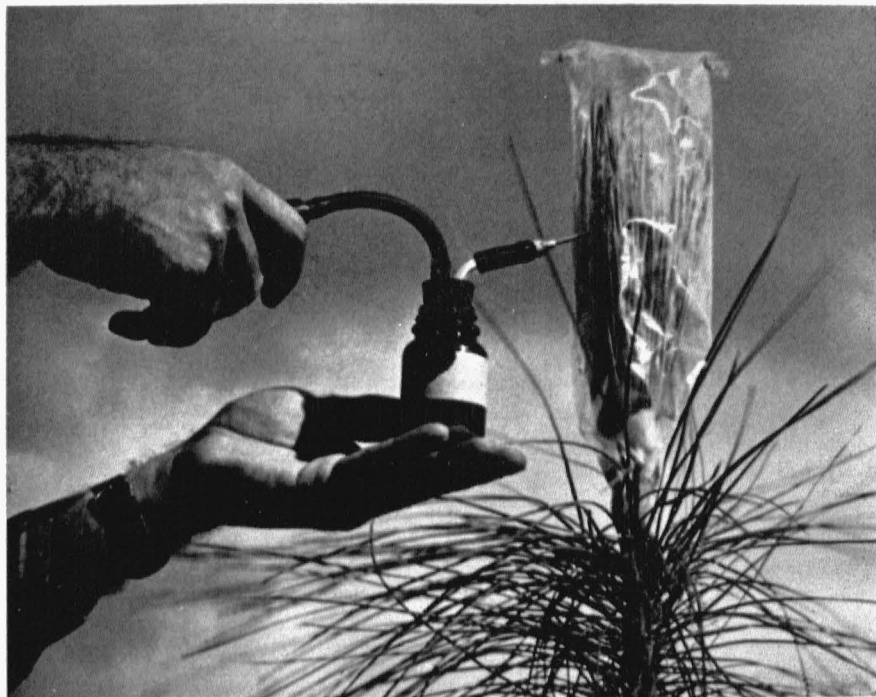
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And when you major in Forestry,
there's lots of things to do.

We study math and history,
trying hard to make a "C."
We then have trig and chemistry,
darn! we came here for forestry.

Finally 2 years have gone,
and then we have a brand new home.
To summer camp we make a date,
where every week we'll be at Ates'.

We finally leave camp and the lake,
gosh! we're going to miss old Ates'.
Now we study forestry and we're glad,
we've even got a course that's taught by "dad."

The year we've been looking for rolls around,
and at last we can leave this town.
But on the job with many things to do,
I'll bet we'll sure miss ole Mizzou.

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ACKNOWLEDGMENTS

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THE MISSOURI LOG STAFF

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