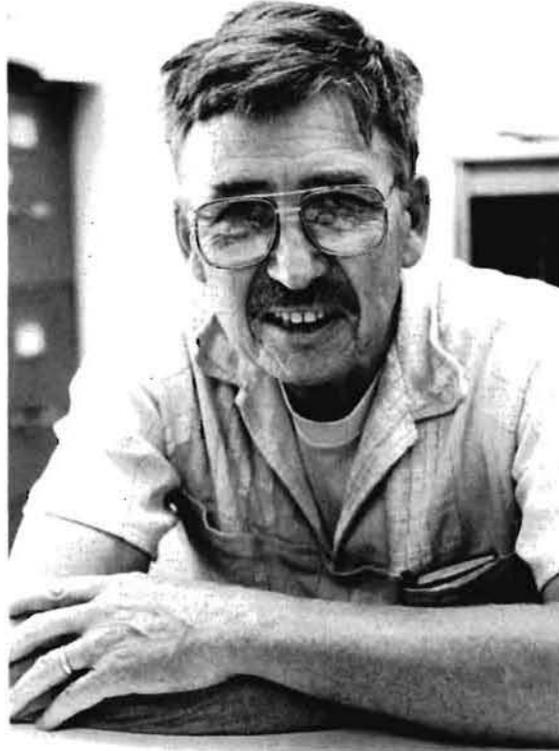


**Gopher Peavey
1986**

DEDICATION

Dr. Lawrence C. Merriam, Jr.



20 Years of Commitment

The 1986 Peavey is dedicated to a faculty member who has clearly devoted himself to the welfare of his students—Dr. Lawrence C. Merriam, Jr. Professor Merriam (Larry) has given consistent leadership and enthusiasm for education and research in forest recreation for more than 30 years—20 of those years at the University of Minnesota. He will be retiring in June of 1986. Professor Merriam provided the leadership in establishing the Recreation Resources Management (RRM) curriculum, the campus-wide Resource and Community Development Program and more recently, the Urban Forestry curriculum. He served as the Coordinator of the RRM curriculum until last year and he continues to coordinate the Urban Forestry curriculum. More than for this leadership, however, his students appreciate and remember him as a consistently challenging teacher and a faculty member who was genuinely concerned about students and their opportunities.

Dr. Merriam was born in Oregon and obtained a B.S. degree in forestry from the University of California in 1948. Prior to this study he spent three years (1943-1946) in the U.S. Navy. Subsequently, he worked in the timber industry in Oregon and northern California. Later he served as State Parks Planner and as State Park and Highway Forester in Oregon. He earned his M.F. degree from Oregon State University

in 1958 and a Ph.D. in Forest Management from the same institution in 1963. Dr. Merriam then served as a faculty member at the University of Montana. He came to the University of Minnesota as a Professor in 1966 and has been a very active faculty member since the day he arrived. He is a recognized spokesman for recreational land use on questions of land management and policy at state and national levels. Also, he coauthored two editions of the popular text *Recreational Use of Wildlands*. In addition he developed and regularly taught Management of Recreational Lands, Forest Recreation Planning and Recreation Land Policy. Especially significant have been his efforts to bring a strong historical perspective to his students. He has exhibited an untiring commitment to the welfare of students and their education. The open door policy he maintained further emphasized to students that they were important to him.

We owe Professor Larry Merriam our deep gratitude for these years of dedication, the many contributions he has made to academic excellence in our programs, and not least of all for the example he set for others. We wish Larry and his wife Kathie a long, productive and happy retirement period. They plan to live in Corvallis, Oregon, and will be missed for the personal and professional stimulation they so often provided.

Gopher Peavey

1986

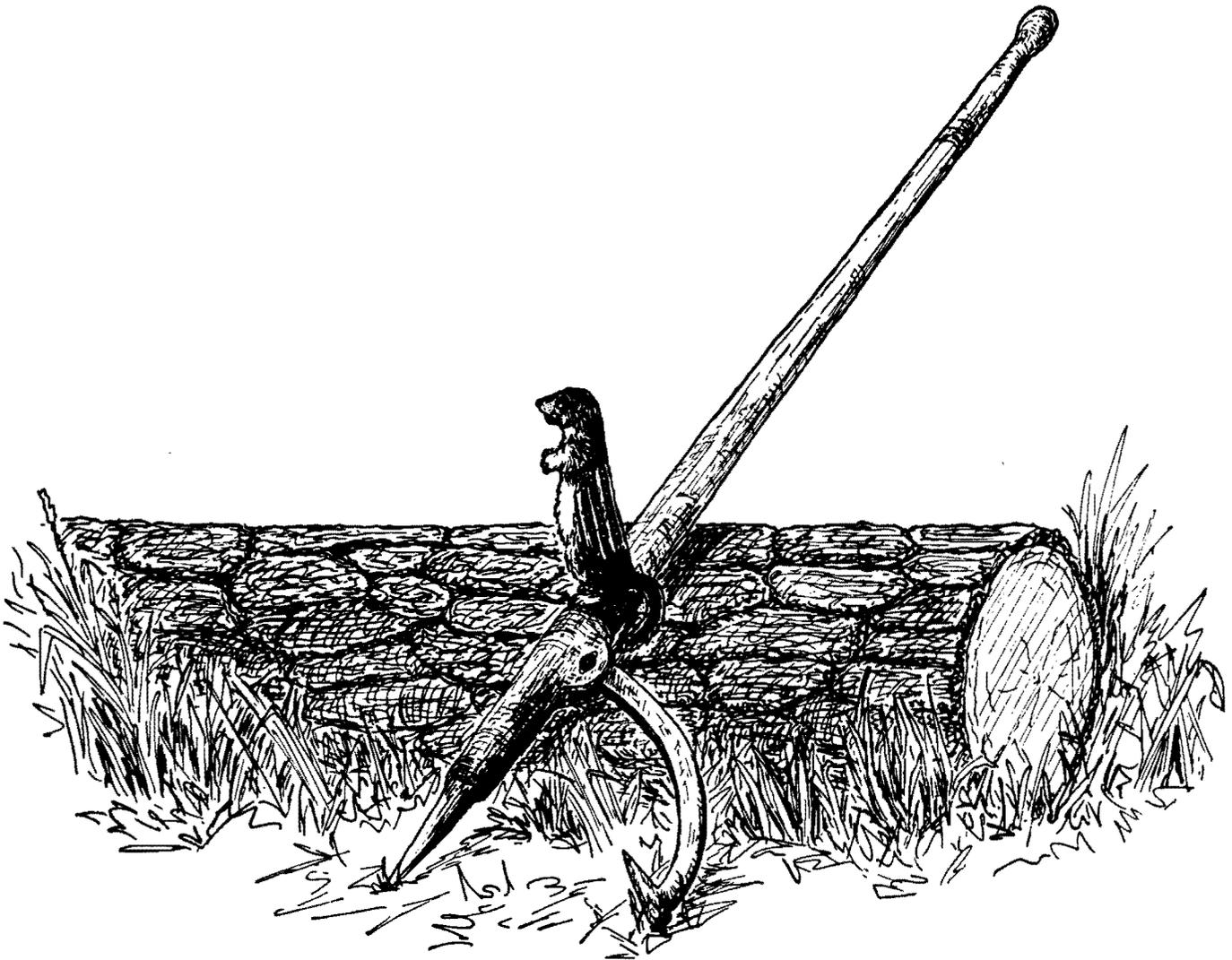


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The winning photo in our cover photo contest was submitted by Mark Reed, a Forest Resources Senior. It depicts an area that our honored Dr. Merriam has spent considerable time with — the Boundary Waters Canoe Area Wilderness. It is only fitting that our cover contains elements of Dr. Merriam's career here at the college.

COLLEGE OF FORESTRY



Dean Richard Skok



Dean Emeritus Frank Kaufert

THE YEAR IN REVIEW

1985-86 College of Forestry

Dean's Report

Richard A. Skok

There has been a good deal of excitement around the College of Forestry over the past year. Mostly it relates to encouraging developments that I believe reflect our dynamic programs and enthusiastic staff. We are in a changing environment within the University and even in terms of our traditional relationships with other private and public institutions in the broadly defined forestry community. I can assure you, however, that our commitment to natural resource programs and to the pursuit of excellence remains unchanged.

The 1985 Minnesota Legislature approved \$5.285 million of funding for the Phase I construction of the addition to Green Hall. This consists of a two story addition flanking both the north and south sides of the auditorium and a four story pavilion located between Kaufert Lab and Green Hall. The former will house a set of research and teaching laboratories for stress physiology, water quality, forest biotechnology, and wood chemistry and will tie to several laboratories presently in Green Hall. The pavilion will accommodate primarily those functions common to the several units of the College such as the Office of Student Services, the Computer Center, the Dean's Office, a Student Commons area, and the Forestry Library. It will also be connected underground to Kaufert Lab and via a two story atrium to Green Hall. The present schedule calls for construction to begin late spring of 1986 and for completion in the summer of 1987.

In the meantime we expect to be a part of the University's 1987 Capital Improvement Request for the Phase II \$5 million of remodeling funds for Green Hall. This was part of the original project before it was phased in two parts through a 1984 University decision. The Phase II Green Hall Remodeling is essential because this has been an interrelated project for space effectiveness from the beginning and remains so today.

Enrollment in undergraduate programs of the College showed further decline this past fall quarter. Nearly all of the decrease was accounted for in the forest resource management curriculum. Graduate enrollment was slightly higher. A summary is shown below:



Fall Quarter

	1984	1985	1985	
			Male	Female
CURRICULUM				
Forest Management	151	91	23	68
Forest Products	65	57	1	56
Recreation Resource Management	19	21	10	11
Renewable Resource Science	9	6	4	2
Urban Forestry	9	12	3	9
Fisheries and Wildlife	100	106	30	76
Adult Specials	10	15	6	9
GRADUATE PROGRAM ENROLLMENT				
Forest Resources	67	72		
Forest Products	16	16		
Fisheries	13	12		
Wildlife	23	28		
Totals	119	128		

Two major developments unfolding as this is written (February) will bring some change to the University and to the College of Forestry as well. The first deals with "Commitment to Focus", a plan for narrowing and further directing the focus of the University of Minnesota in recognizing it as the only graduate education research institution of higher education in the state. This proposal would seek concentration of effort on unique and priority program areas and strive for excellence in these. The plan in its present form is a broad statement of philosophy and has been generally well received in the state. Conversion to specifics will bring issues to the fore to be debated and resolved by both internal and external University constituencies. Some issues potentially impacting the College of Forestry are:

- Unified and increased preparation standards for students in the freshman admitting colleges
- Improving lower-division education at the University
- Designation of UM-Duluth as the land grant university for northeastern Minnesota.

The second element is the state and federal budget deficits. While it is too early to determine the actual reduction in funding we face for teaching-research-extension programs it appears to be on the order of magnitude of \$150,000-\$200,000 over the 1985-87 biennium. Research will be hardest hit and we are currently reviewing which programs will be reduced, eliminated, or put on hold. Because of the interrelated nature of the various functions in our program, cuts in research of this magnitude are significant setbacks to education as well as research.

A request has gone forward to change the name of the College to that of the College of Natural Resources. The faculty has been on record favoring a change in name for nearly two years. It now seems appropriate to bring this name change forward for consideration. We see such a change supportive of a strengthening of the College's programs and enhancing the University-wide focus and commitment to academic programs involving natural resources.

The College today has important teaching and research program commitments not readily recognized by many others under the title of College of Forestry. Examples of such are our present efforts in water, fisheries, wildlife, recreation, remote sensing, etc. Additionally, we are the only College in the University of Minnesota with a solitary commitment to academic programs dealing with the management, utilization, protection and conservation of a broad range of natural resources. We provide a strong core of experience and resources area and can provide the opportunity for others to build on our traditions and recognition for excellence.

The departmental units of this college are serving an increasingly important role in program identity for specific clientele. The College of Forestry title is redundant, in a sense, for some of our programs and not inclusive of others. A change in name to the College of Natural Resources would clearly embrace all of our existing programs, encourage program evolu-

tion and consolidation as appropriate, and enhance the dependency on departmental program visibility with specific resource groups and clientele.

A name change of this significance will be reviewed by the central administration of the University and, if agreed to there, must then receive approval by the Board of Regents. One, of course, also must recognize that once having proposed a change that other join as well in the shaping of any name change that may eventually emerge.

The College has received a grant from the Office of Higher Education to initiate an Assessment of Forestry Education: Future Issues and Needs. Declining forestry enrollments nationwide have raised concerns that need to be addressed along with the broader issues of what the structural changes in the forestry community at large mean to forestry education. Hopefully, this study will provide the impetus for a series of ongoing inquiries that will provide us a better basis to individually and collectively plan for the future. We have been fortunate in obtaining the part-time services of Don Duncan for 1986 to take major responsibilities for this study. Don taught at Minnesota from 1947 to 1965. He retired in 1985 after serving 20 years as director, School of Forestry, Fisheries, Wildlife at the University of Missouri. His experience and past national leadership in various organizations dealing with forestry education give him excellent qualifications for this undertaking.

Let me conclude by extending to you the annual invitation to visit when the opportunity permits. We also welcome your thoughts on our activities and programs if you wish to share these.



Department of Forest Resources

1985 in Review

Alan R. Ek

Professor and Department Head

The Department has seen a number of changes this past year in pace with the growing statewide interest in forest resources development. Our newest faculty member is Dr. Thomas E. Burk in the forest biometrics area. He is teaching Natural Resources Inventory and assisting with the Measurements course at Itasca. Tom comes to us from Virginia Polytechnic Institute and State University in Blacksburg, Virginia. He and Charles Blinn will also be developing a new course for undergraduates on microcomputer applications in forest management.

There are a number of new graduate students and research specialists, particularly in the areas of forest biology. This reflects an increase in research activity in that area under Drs. Bob Dixon, Ed Sucoff and Carl Mohn. The forest economics, biometrics and hydrology areas have also attracted a number of new projects and graduate students.

Special continuing education offerings this year included several Advanced Communication Workshops organized by Mel Baughman and sponsored by the Ruffed Grouse Society and several short courses. These short courses included "New directions in cross country ski trail development" led by Tim Knopp, "How to design field trials and experiments" conducted by Tom Burk, Rick Iverson, and me (yes . . . I still do regular work!), and "Forestry project analysis" by Dietmar Rose and Charlie Blinn. Mel Baughman also offered Forestry Tax Workshops and Scott Reed conducted a series of workshops for Minnesota loggers on Safety and Business Strategies. One especially positive result of these short courses and workshops has been increased interaction and feedback from professionals in the field.

The Department has increased its research efforts in the water quality area through a large new interdisciplinary project entitled "Management of the Lanesboro Watershed" led by Jim Perry and funded by the Legislative Commission on Minnesota Resources. The project will focus on southeastern Minnesota. Ed Sucoff and Bob Dixon have also initiated a large new project entitled "Quantifying response of tree growth and root function to soil aluminum" funded by the Electric Power Research Institute. This project and several others deal with the complexities of understanding the impacts of acid deposition. Bob Dixon has taken the lead in securing research grants in forest biotechnology with a large project funded by the Legislative Commission on Minnesota Resources. These and many other new projects have led to a doubling of outside research support for the Department in the past year and provide a major focus on forest regeneration.



The Remote Sensing Laboratory, led by Marvin Bauer has increased its capability to handle thematic mapper satellite data through acquisition of an ER-DAS geographic information system. The lab has also conducted pioneering work on the development and use of aerial infrared video sensors, largely through the work of Research Fellow Doug Meisner.

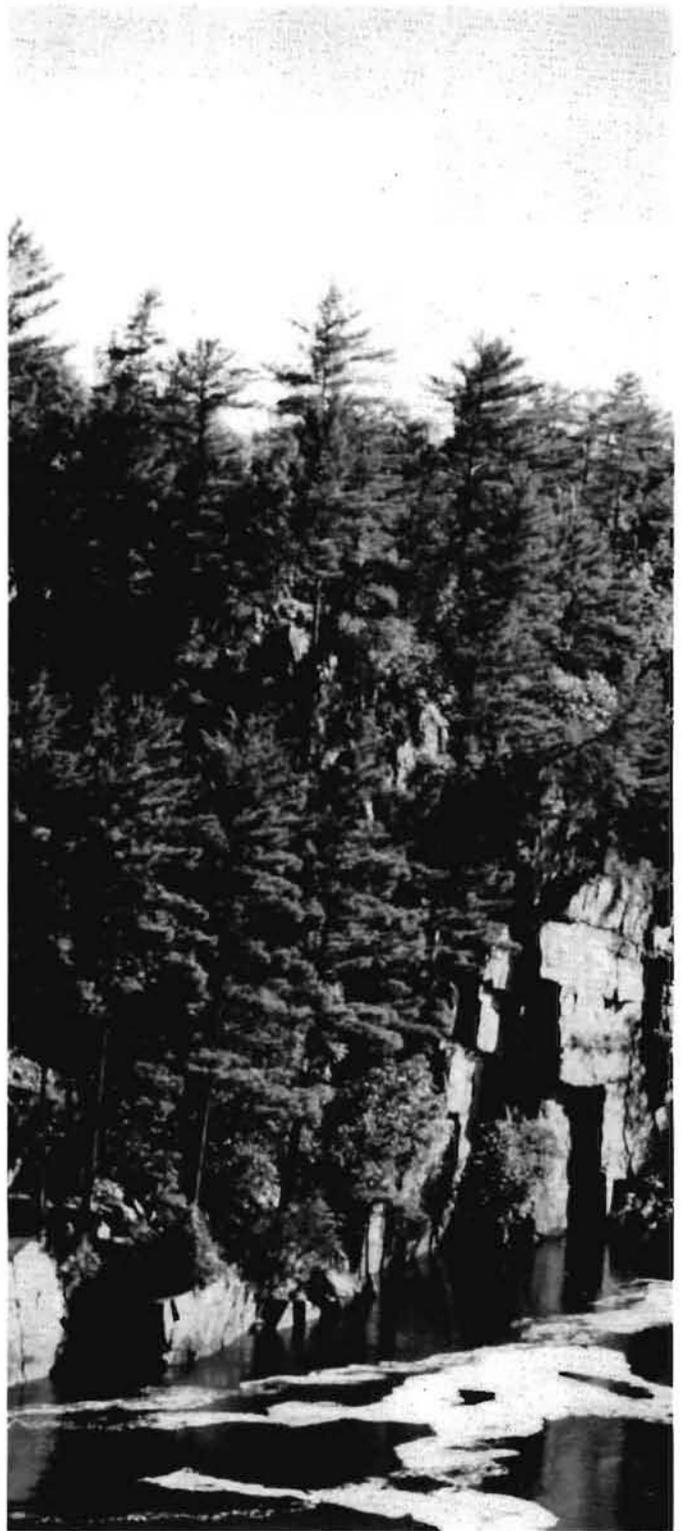
In the forest management area, Charlie Blinn has led a successful faculty effort to secure a large telecommunications grant to support the development of faculty expertise and capability in this area. We see this as having much potential for reaching outstate in continuing education. Dietmar Rose and Tom Burk have developed user friendly microcomputer software to calculate allowable cuts according to a variety of volume and area control techniques. This software is a product of many years of research and experience in harvest scheduling and should greatly assist forest managers in developing management plans expressing the true growing potential of their forest resources. Paul Ellefson has been very active in policy research and by his help in organizing the recent Governors Conference on Forestry. A report on that conference entitled "Forest Industry as a Force in Economic Development: Options for the Future" is available as Minnesota Agricultural Experiment Station Miscellaneous Publication 33.

The Forest Resources curriculum has changed during the past year in terms of a unification and restructuring of offerings in the forest biology area and a realignment of offerings in the forest economics, management and policy area. These changes are reflected in new courses, FR 5120—Introductory Tree Physiology and Genetics, the new content of FR 3104—Forest Ecology and its requirement in the Forest Resources core, FR 5226—Forest Economics and Management, FR 5240—Natural Resources Policy and Administration. The economics and policy courses have also been moved to the senior year to facilitate scheduling during the junior year. The Southern Forest Resource Tour has been formalized as a course offering, FR 3102/5250, and will be offered every other year. Ken Brooks has developed a new course FR 5702—Watershed Management Implications of Agroforestry Practices and Dietmar Rose and Hans Gregersen have developed a new course FR 3250—Role of Natural Resources in Economic Development. These new courses reflect growing interest in international aspects of forestry and the wide experience faculty have obtained in developing countries. A number of changes have also taken place in the Urban Forestry, and Recreation Resources Management (RRM) curriculums to reflect the changes in Forest Resources courses. The Forest Science curriculum has been renamed the Renewable Resource Science curriculum to reflect a new broader scope and greater number of options in that area. The Department has also established a minor in Forest Resources so spread the word to your friends who may be majoring in other areas, but have an interest in forestry and related natural resources.

Other notable events during the past year include the Cloquet Forestry Center's 75th anniversary and the retirement of Professor Merle P. Meyer. Dr. Meyer is now professor emeritus and remains very active in our program. This is also Professor Larry Merriam's last year on the faculty. In the spring he will retire and move to a new position at Oregon State University. Professor Merriam's contributions to the RRM curriculum and forest recreation research and education are enormous and we will surely miss him here. To facilitate this change Dr. Tim Knopp has been appointed coordinator of the RRM program. Dr. Bruce A. Brown also retired from his position on the faculty at Cloquet due to health problems.

The major event of the year was the approval of the funding for the first phase addition to Green Hall. This addition and the pending remodeling, phase II, will have a major impact upon the conduct and delivery of our educational and research programs in the coming decades. However, in the interim we will all have to live with noise, confusion and much crowding in our facilities.

We trust you have had an enjoyable year. It has been a time of change for us. We look forward to the future for strengthening your education and to the delivery of our research and extension programs to the people of Minnesota. We welcome your suggestion and support for doing so.



Forest Resources Faculty



Alan Ek Department Head and Professor
Teaches Remote Sensing, Forest Resources Inventory at Cloquet, Forest Resources Survey Design, and Seminar: Forest Resources. Research activity is in forest growth modeling and forest inventory design.



Alvin Alm Professor (Cloquet Forestry Center)
Teaches Silviculture and Senior Silviculture Seminar in St. Paul and Field Silviculture at the Cloquet Forestry Center. Advises a number of graduate students and conducts research in areas of regeneration and site preparation. Office is at Cloquet but often commutes to St. Paul.

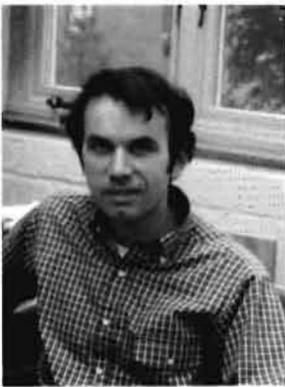


Egoľfs Bakuzis Professor Emeritus
Continues to work on the series "Foundations of Forest Ecosystems: Lecture and Research Notes."



Marvin Bauer Remote Sensing Laboratory Director and Professor
Teaches Advanced Remote Sensing. Research interests include measurements and modeling of the spectral properties of vegetation, development of spectral inputs to growth and yield models, and applications of quantitative remote sensing methods to inventory and monitor crop and forest resources.

Melvin Baughman Assistant Professor
Teaches short courses and workshops and writes publications for private woodland owners on forest management and taxation, arranges continuing education courses for natural resource professionals, and serves as Extension Coordinator in Forest Resources. Conducts research on forest land appraisal and management of non-industrial private forest lands



Robert Blanchette Assistant Professor
Currently teaches the Forest Pathology course in the Department of Plant Pathology. Active research projects include investigations of wood decomposition and industrial uses of fungi that selectively degrade lignin, biological control of soil-borne diseases in tree nurseries, screening trees for resistance to gall rust, and other studies involving forest and shade tree diseases.

Charles Blinn Assistant Professor
Co-taught Forestry Applications of Microcomputers. Major areas of interest are in forest management and economics, timber harvesting, marketing, and quantitative natural resource management.



Kenneth Brooks Associate Professor
Teaches Forest Hydrology, Advanced Forest Hydrology, Forest Hydrology-Field Applications, and developed and co-taught a new course, "Watershed Management Implications of Agroforestry Practices" Participated and served as editor of the proceedings of the Experts Meeting on Watershed Management in Kathmandu, Nepal, and participated in an FAO/Finland sponsored training course in watershed management held again in Kathmandu. Also participated in an ASEAN watershed management field study tour and a workshop on Education/Training Needs and Opportunities in Hydrology and Hydrogeology in Las Vegas (Technical Program Chairman). Now completing an FAO Guidelines document with Hans Gregersen and a textbook on watershed management with Drs. Folliott, Thames (University of Arizona) and Gregersen.



Thomas Burk Assistant Professor

Teaches Natural Resources Inventory, Forestry Applications of Microcomputers, and Forest Biometry. Research interests include development of forest growth and yield modeling methodologies, use of Bayesian concepts in sample survey design and analysis, microcomputer implementation of forest projection and planning systems, and statistical computation programming.



Robert Dixon Assistant Professor

Teaching responsibilities are Soil-Site Relations, Application of Silviculture in North American Forest Types, and Urban Forest Management. Research responsibilities include conducting research in the fields of tree physiology, silviculture, and forest soils. Current research projects include mycorrhizal relationships of Lake States conifers and hardwoods, photosynthesis and respiration of hardwood seedlings and impact of acid deposition on root structure and function.



Paul Ellefson Professor

Teaches courses in Natural Resource Policy and Administration. Serves as chair of the Society of American Forester's national Committee on Forest Policy and will Chair the Society's National Convention Program Committee in 1987—the year in which the SAF National Convention will be held in Minneapolis. In Fall 1986, traveled for three weeks in Ireland, Scotland and England studying forestry. Major research activities past year have focused on evaluation of state forest practice laws and assessment of statewide forest planning activities. Currently addressing issues regarding strategic directions for forest economics and policy research.



David French Professor

Lectures on three subjects in forest pathology and is involved in the Urban Forestry course. Research involves vascular wilts (Oak Wilt and Dutch Elm Disease), aspen cankers, dwarf mistletoe of spruce and jack pine, chestnut blight and other tree diseases.

Hans Gregersen Professor
Courses taught include Forest Economics and Planning, Natural Resources in Developing Countries, and Economic Analysis of Forestry Projects. Current research deals with forest and economic development of less developed countries, evaluation of forestry research and the process of technological innovation in forestry.



David Grigal Professor
Teaches Beginning Forest Soils and Advanced Forest Soils. Interested in forest vegetation-soil relationships, including plant-community classification, nutrient cycling, effects of disturbance (especially fire) on forests, biomass estimation, and the relationship of soil maps to forest productivity.

Alvin Hallgren
Cloquet Forestry Center Coordinator



Frank Irving Graduate Studies Director and Professor
Teaches Administrative Processes, Forest Fire Management and Techniques of Prescribed Burning. Research includes control and use of fire in land management. Also involved with Minnesota DNR Scientific and Natural Area Advisory Committee, Prescribed Burn Policy and Guidelines Committee, and Minnesota Chapter of the Nature Conservancy Board of Trustees.

William Johnson Research Fellow
Co-taught Introduction to Remote Sensing of Natural Resources. Research interests are in applications of remote sensing to natural resource and agricultural management. Also becoming involved in the application of geographic information systems for resource management.





Timothy Knopp Association Professor
Teaching courses in Recreation Land Design and Planning, Analysis of Recreation Behavior, and an interdisciplinary seminar in Resource and Community Development. Research interests are focused on policy and decision making in the allocation of recreation resources, outdoor ethics, and tourism. Has a strong interest in the promotion and development of trails for hiking, cross-country skiing, and bicycling.



Herbert Kulman Professor
Teaches Forest Entomology, Current Topics in Forest Entomology and part of Wood Deterioration in Forest Products. Research includes ecological studies on forest insects, especially defoliators of spruce, fir, aspen and jack pine.



Vilis Kurmis Associate Professor
Teaches Forest Ecology and Field Forest Ecology at Itasca. Current research deals with productivity, reproduction, and succession in Black Ash and White Cedar Communities of Northern Minnesota and vegetation changes in upland forests of Itasca State Park.



Douglas Meisner Research Fellow
Teaches a course on Geographic Information Systems and co-teaches the Remote Sensing course with Bill Johnson. Currently an image processing specialist in the college's Remote Sensing Laboratory working with computers and electronic camera systems. As part of this work, developed the first ever color infrared aerial video camera, which produces vegetation-sensitive images on standard video tape.



Lawrence Merriam Professor

Teaches Management of Recreational Lands, Forest Recreation Planning at Cloquet, Recreational Land Policy and Interdisciplinary Seminar for RRM students. Current research is Evaluation of BWCA Policy and Management (1966-1986).



Carl Mohn Professor

Teaches Dendrology, Introductory Tree Physiology and Genetics, and Forest Genetics. Research includes forest tree improvement through selection and breeding; hybridization in *Populus*.



Margaret Moore Instructor

Courses taught include Range Management, Aerial Photo Interpretation, and Remote Sensing at Cloquet. Research efforts include use of Lands at Satellite (both MSS and TM) acquired imagery for forest cover type delineation and classification in west-central Minnesota (places like Itasca State Park, Black Duck State Forest, etc.)



James Perry Associate Professor

Teaches Forest Water Quality Management: Ecosystem Perspectives and Meteorology and Climatology for Natural Resource Managers. Leads the Forest Water Quality Program which includes research on carbon cycling in labs and streams, acid deposition effects in aquatic systems, water quality monitoring designs, and international watershed management. Recent work includes travels through Thailand, Pakistan, India, Sri Lanka and Nepal. Results of these research efforts are translated to students and the public through published reports and through the above classes.

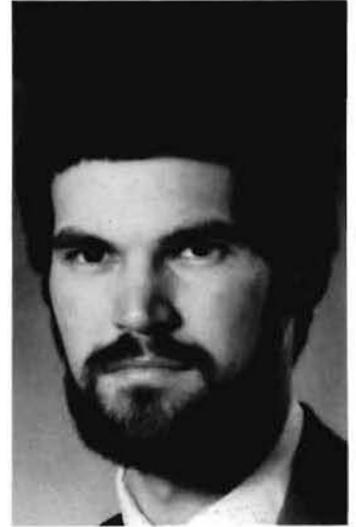


Philip Splett Instructor

Career Opportunities coordinator and Instructor. Teaches Conservation of Natural Resources, Field Forest Measurements at Itasca, and conducts the Forest Resources Southern (U.S.) Forestry Tour. Provides information and assistance to students and alumni seeking employment. Currently chairs the College of Forestry Scholarship Committee.

Robert Stine Research Fellow (Cloquet Forestry Center)

Directs the activities of the Minnesota Tree Improvement Cooperative, working out of the Cloquet Forestry Center. Genetic improvement work is being carried out on red, jack, white, and Scotch pine and on black and white Spruce.



Edward Sucoff Professor

Teaches and learns from a great group of students in Tree Physiology and Genetics, Tree Physiology Lab, and Field Ecology at Itasca. Current research examines how acid rain affects trees and the physiology of water stress. Also involved in the Forest Vegetation Management Program.

Carl Vogt Instructor

Courses taught include introduction to Forestry, Introduction to Minnesota's Natural Resources, Directed Study—S.E. Minnesota Hardwood Silviculture and Forestry for Teachers. Part-time Instructor and Extension Forester at the College of Forestry. Main areas of interest are Black Walnut management, maple syrup production, hardwood silviculture and Christmas trees. Manages woodlots and tree farms as a consulting forester and operates a nursery specializing in nut trees and hardwood seedlings. Very active in a number of forestry related organizations and professional societies.



Department of Forest Products

1985 In Review

Jim L. Bowyer

Professor and Department Head

The spotlight was on the paper science and engineering and marketing programs in 1985, and for the second straight year national examining teams traveled to Minnesota to review department activities.

In November, Dr. Robert Rouda joined the Department as Director of the paper science and engineering program. Bob came to us from the paper science and engineering program at the University of Wisconsin—Stevens Point. He has a B.S. degree in chemistry from the California Institute of Technology and a Ph.D. in physical chemistry from the University of Wisconsin. Dr. Rouda is a leader in the development and application of modular simulation software, both on large computers for the study of mill-wide operations and productions systems, and on microcomputers for interactive studies of process design, optimization, diagnostic, and control systems. He is the author of several microcomputer programs for the simulation of the operation and control of pulp and paper processes, included the "FlowCalc" program for interactive modular simulation. He has ten years of industry experience including work in the Process Analysis and Simulation Group of the Weyerhaeuser Company's R & D, where he studied and enhanced the physical properties package for the modeling and simulation of the pulp and paper processes. The addition of Bob to our staff marks the beginning of a concerted effort to build the paper science and engineering program. In fact, as these words are being written we are in the final stages of adding yet another faculty member to the PS & E group; we hope to have that individual on board prior to next fall quarter.

The Paper Science and Engineering program received another boost late last month when the Minnesota Chapter of the Technical Association of the Pulp and Paper Industry donated \$10,000 to the Department for the purpose of establishing an endowment for a PS & E scholarship. This donation follows a period of many years during which the Minnesota TAPPI organization annually donated scholarship funds. In accepting the funds on behalf of the University, Dr. Rouda noted that the endowment is especially appreciated as it insures the future availability of scholarship funds to students in the program. The Department now has eleven PS & E scholarships.

Early last summer the Marketing Program Advisory Committee put the finishing touches on a recommendation for revision of the marketing curriculum. These recommendations were subsequently acted upon by faculty and were adopted by the College in December. The new curriculum, which is described in the 1986-88 College of Forestry bulletin, features increased emphasis on business management, finance, and marketing/sales. Many thanks to advisory committee cochairmen Steve Weekes



(Weekes Forest Products, Inc.) and Randy Schwartzhoff (U.S. Plywood Corp.), and to committee members Tom Partridge (K. J. Clarkson Lumber Company), Don DeCoster (Knox Lumber Company), Gordon Jacobson (Reserve Supply Company), Bob McGregor (Industrial Lumber and Plywood, Inc.), Peter Miller (Shaw Lumber Company), Curt Solly (Weyerhaeuser Company), Herb Finch (Webster Lumber Company), Eric Canton (Canton Lumber Company) and Tom Scanlon (Interior Wood Products, Inc.). With the new curriculum in place, the Department is poised to launch a major effort related to the forest products marketing program. Watch for details in the coming months.

The final report of the Society of American Foresters—Society of Wood Science & Technology accreditation team is in and, as expected, the College of Forestry was reaccredited with a strong recommendation from the SAF review team. For the Department of Forest Products, the review marked the first time that the program has been examined for accreditation by SWST. At this moment, Minnesota is one of five programs nationally that has received SWST accreditation.

Following the SAF/SWST review of academic programs last year, 1985-86 brings a review of departmental research programs. In late April, a team of distinguished research directors and scientists from around the country visited Kaufert Laboratory under the auspices of the Cooperative State Research Service of USDA. A report will be issued by next Fall.

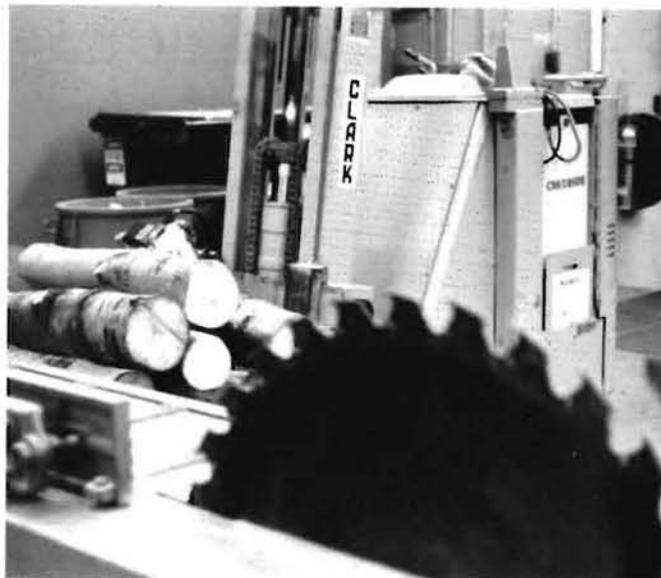
Equipment for use in teaching and research programs continues to be a major need in the Department. Industry is an important source of such equipment, and industrial donations to Forest Products in 1985 were valued at over \$38,000. Equipment donated included a blender from Weyerhaeuser Company for use in particleboard manufacture, a laboratory scale bleaching plant from Air Products Supply Company for use in the Paper Science and Engineering program, a large general purpose laboratory oven from Perkins Industries, and a stainless steel steam cabinet for use in accelerated aging tests of wood panel products from Blandin Wood Products Company. Any of you alums that know of up-to-date, but excess equipment around your place of business, keep us in mind. The U of M Development Office offers assistance in obtaining credit for such donations as tax write-offs.

On the faculty news front, there was far more activity than I have room here to report—so I'll hit only a few of the highlights. John Haygreen was presented the prestigious Distinguished Service Award by the Society of Wood Science and Technology at their national annual meeting in Orlando last June. John has also been selected as the 1986 program manager for the USDA competitive research grants program in wood utilization. As such, he will spend much of the summer in Washington, DC. Lew Hendricks began a second three-month stint in Madison, Wisconsin on April 1 as visiting professor at the University of Wisconsin. His job is to assist UW and the U.S. Forest Products Laboratory in developing and refining a national model for transferring wood products that are ready for technology transfer. Both Lew and John are having considerable impact upon forest products programs nationally. Finally, Bob Erickson is adding to his already extensive experience in wood drying and processing in tropical regions, with a sabbatical leave that will take him halfway around the globe. Bob is currently in Guatemala working with Madera Milpas Atlas, S.A., a major hardwood lumber producer. From there he'll travel to the Forest Products Resource Development Center in Bogor, Indonesia, then on to the South China Agricultural College in Guangzhou, P.R.C.

This year's crop of graduates appear to be entering one of the strongest job markets in some time—a continuation of the situation from last year. The summer job outlook is less clear, however, and I'd encourage any of you that are looking for top-notch summer help in your manufacturing plants, distribution yards, or research and development laboratories, to give us a call.

Speaking of jobs, final work on the 1985 survey of placement and salaries of forest products alumni is near completion and will be available in the near future.

So much for the news from the end. Be sure to stop by if you're in this part of the world. Changes you'll find if you visit this summer are an air-conditioned Kaufert Laboratory and a miniature version of the Grand Canyon out front between Kaufert and Green Hall. And if all this isn't exciting enough, we'll show you Harlan Petersen's latest bowling trophies!



Forest Products Faculty



James Bowyer Department Head and Professor
Teacher Wood in American Life, Wood as a Raw Material, Wood Structure and Identification and Structure and Properties of Important Tropical Woods. Research interests and projects include rates of technology adoption for forest products innovations, and technical and economic evaluation of new technologies that may be applicable to Minnesota forest products industries.



Robert Erickson Professor
Teaches Wood Drying and Preservation and Preservation Processes, Wood-Fluid Relationships, Wood-Frame Building Systems and Materials, and Advanced Topics in Wood Drying. Research focuses upon developing improved processes for the drying and overall production of lumber, the analysis of drying stresses and strains, moisture movement and its effects, and the analysis of perpendicular-to-grain creep in first-dried wood.

Roland Gertejansen Professor
Teaches Pulp and Paper Technology, Wood-Base Panel Technology, Pulp and Paper Process Laboratory and Advanced Topics in Panel Products Technology. Research is on utilizing Lake States hardwoods for structural panel products.





Henry Hall Sr. Scientist

Research activities include evaluating the effect of wax sizing on waferboard strength, the influence of wood preservative systems on structural particleboard biodegradability and strength, and use of the Minnesota Shear Tester (MST) as a means of evaluating particleboard bond quality.



John Haygreen Professor

Teaching Mechanical Properties and Structural design and Analysis of Production Alternatives. Research activities involve development of a compression drying process for woodchip fuels.



Lewis Hendricks Professor

During 1985-86 acted as a visiting professor at the University of Wisconsin on special assignment to the Forest Products Laboratory. Interested in improving energy efficiency of housing and moisture problems in lignid frame construction. Still conducts annual Lumbermen's Short Course (the 37th annual program was held in February).



Andrew Hyun Teaching Assistant

Ph.D. candidate in wood science and technology, majoring in wood mechanics and wood-base panel technology. Member of the Forest Products Research Society.



Timothy Larson Graduate Research Assistant
Teaches Mechanical Properties and Wood drying and Preservation Processes. Thesis research examines the effect of pre-freezing on the perpendicular-to-grain creep of redwood during drying.

Thomas Milton Assistant Professor
Responsible for designing and implementing Extension programs and materials for Minnesota's sawmill industry and wood product manufacturers. Co-editor of the *Minnesota Forest Products Marketing Bulletin*.



Harlan Petersen Assistant Professor
Extension programs focused on forest products utilization and marketing, consumer education and industrial/commercial use of wood for energy. Responsible for the undergraduate program in Forest Products Marketing, including teaching Wood Frame Building Systems and Materials, Forest Products Marketing and conducting the annual Wood Industry Tours course.

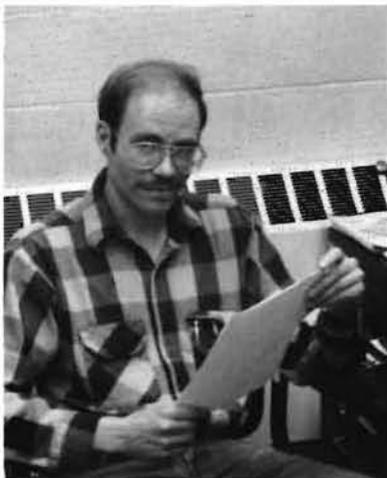
Robert Rouda Professor
Teaches Pulp and Paper Process Calculations, including the use of microcomputers for process modeling and simulation, and Paper Engineering Laboratory, including studies of industrial processes with the cooperation of local paper manufacturing companies. Interests lie in the development and application of modern computer process simulation technology to the improvement of pulp and paper process operations. This includes the development of computer simulation laboratories for graduate and undergraduate education seminars and workshops for industry, and associated computer programs for these purposes.





Simo Sarkanen Assistant Professor
Course instructor for Wood Chemistry I, Wood Chemistry II, Adhesion and Adhesives, and Graduate Seminar. Research is on physicochemical properties of byproduct lignins and chemicals and engineering plastics from renewable resources

Elmer Schmidt Assistant Professor
Teaches Wood Deterioration, Senior Seminar, Methods and Advances in Wood Protection and Mushroom ID and Ecology (Extension Course). Research is on control and application of fungi in forest products. Projects include: Fumigation of export oak, spore germination of wood decay fungi, preservative systems for wood composites, remedial treatment of decay, shiitake mushroom production on Minnesota hardwoods, biodegradation of kraft lignin components, and evaluation of new wood preservative systems.



Robert Seavey Graduate Research Assistant
Works as an instructor in two Forest Products courses: Wood Structure and Identification and Wood Drying and Preservation Processes. Responsible for information calls to the Department of Forest Products. Also works with putting on Extension Short Courses; assistant course coordinator for the 1986 Lumberman's Short Course.

Philip Steklenski Assistant Scientist
In the past year, provided assistance to John Haygreen and Tim Larson to help them incorporate microcomputer assignments into their Manufacturing Processes and Wood Drying and Preservation Processes courses. I plan to continue this work with other Forest Products courses in the future. Major area of research is the use of wood as an industrial energy source, specifically the evaluation of economic relationships of energy systems and the development of more efficient methods for processing wood chip fuels.



Department of Fisheries and Wildlife

1985 in Review

Ira R. Adelman
Department Head and Professor

This past year has been one of political involvement for the Department of Fisheries and Wildlife with faculty being involved with political issues on both state and federal levels. Most significantly, we reached an agreement with the Minnesota Department of Natural Resources to seek the establishment of a U.S. Fish and Wildlife Service Cooperative Research Unit and have begun to actively seek that goal through the political process. In December 1985, Senator Boschwitz introduced the motion in the U.S. Senate and although the motion was not approved at that time, we have subsequently gained additional political support from Senator Durenberger and Representative Frenzel. We hope to be successful in this session of congress. On the state level, faculty have been actively supporting the Reinvest in Minnesota (RIM) bill including testifying before legislative committees. This bill would authorize considerable funding for projects aimed at benefitting fisheries and wildlife resources in Minnesota. Other political activities included efforts to inform the Legislative Commission on Minnesota Resources of the research interests and capabilities of department faculty and consultation by faculty with the committee of the legislative auditor investigating fish management by DNR.

Two new faculty joined the department in September, 1985. Dr. Francesca Cuthbert and David Smith, wife and husband, were hired jointly to fill the position for wildlife studies in agricultural ecosystems. Dr. Cuthbert received her Ph.D. from the University of Minnesota, Department of Ecology and Behavioral Biology and was on the faculty at UMD. Her research interests involve the ecology and behavior of non-game birds, and management of threatened and endangered species. Dr. Smith received his Ph.D. from this department and conducted thesis research on tigers in Nepal. His current research interests include social organization, genetic structure and problems of small populations of mammals as related to their conservation. Dr. Boguslaw Bobek, from Jagiellonian University in Poland taught the large mammals course in place of Peter Jordan who was on sabbatical leave to study moose management in Sweden.

The new or ongoing research projects in the department indicate the broad range of fisheries and wildlife interests of the faculty and their graduate students. Dr. James Cooper is continuing his waterfowl studies with particular emphasis on management of the urban goose population. Dr. George Spangler completed an analysis of the Lake of the Woods walleye population and continues work on Great Lakes fish populations. Gordon Gullion, our



resident grouse expert, began new research on identification of chemicals produced by aspen which may function as defense mechanisms against ruffed grouse herbivory. Dr. Yosef Cohen is developing a computer model for forecasting commercial fish production in the Great Lakes and also examining the responses of aquatic ecosystems to herbivory on submerged macrophytes. Dr. Anne Kapuscinski has brought biotechnology to the department. In addition to her research on lake trout genetics, she is collaborating with faculty in other University departments in an attempt to transfer additional growth hormone genes into the fish genome to create a fast growing fish for commercial aquaculture. Dr. David Mech has begun new work on parvovirus in wild wolves and Dr. Thomas Waters is nearing completion of his book on the history of the North Shore.

Although students don't often come into contact with our extension specialists, these faculty are our most important link to the general public. Extension wildlife specialist, Dr. James Kitts, has been involved in training programs for volunteer woodland wildlife advisors who educate private landowners on management of wildlife on their property. He has been instrumental in incorporating wildlife management and conservation issues into the 4-H shooting sports program and has been involved in many other programs aimed at the transfer of information about wildlife to other professionals and the general public.

In the coming year we will offer our first Itasca field session to undergraduates. This session will provide early exposure for students to commonly used techniques in fisheries and wildlife. The Fisheries and Wildlife Student Conclave, which we will host in March, 1987, promises to be an exciting event and we encourage participation of all students.

Fisheries and Wildlife Faculty



Ira Adelman Department Head and Professor
Teaches Environmental Physiology of Fishes. Research is on thermal requirements of hybrid (striped x white) bass, the effects of environmental factors on growth and metabolism of fishes, and the effect of growth hormone on food conversion efficiency and metabolism of fishes.



Yosef Cohen Assistant Professor
Teaches Wildlife Ecology Management: Planning, Policy and Administration. Involved in ecosystem modeling and competition in aquatic ecosystems.

James Cooper Associate Professor
Teaches Wildlife Population Ecology and Management and Waterfowl Management. Research includes incubation behavior of North American waterfowl, ecology and management of Canada geese, and waterfowl ecology in an urban environment. Director of Wildlife Graduate Studies.





Francine Cuthbert Assistant Professor
Courses taught are Fisheries and Wildlife Orientation and Introduction to Fisheries and Wildlife Management. Research includes behavior, ecology, and conservation of non-game birds.

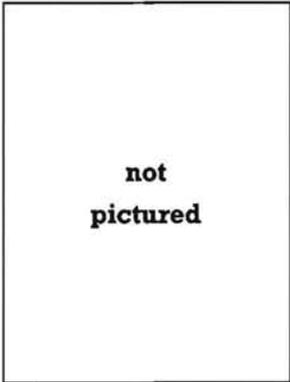
Gordon Guillion Professor (Cloquet Forestry Center)
Has been responsible for the Forest Wildlife Management course during the Cloquet sessions since 1966. Has participated in numerous forest landowner workshops in Minnesota and several other states. Has begun teaching a graduate course in Upland Game Management on the St. Paul campus in the fall of 1985.



Peter Jordan Associate Professor
On sabbatical in 1986. Will spend time in Scandinavia studying sodium relationships in moose and Poland learning about wildlife management and research there.

Anne Kapuscinski Assistant Professor
Courses taught include Aquaculture and Fish Genetics (starting Winter, 1987). Research is on quantitative genetics of fish, gene transfer in fish, and aquaculture of cold-water fish.

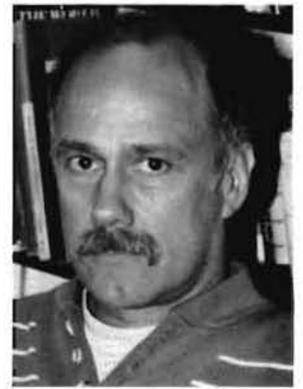




**not
pictured**

James Kitts Associate Professor
Teaches Wildlife Management for Non-Majors. Current research on small mammal distribution in ridge-tiled corn and soybean fields. Contributes to life skills of youth enrolled in the Minnesota 4-H Shooting Sports/Wildlife Project.

David Smith Assistant Professor
Courses taught include Fisheries and Wildlife Orientation and Introduction to Fisheries and Wildlife Management. Research is on conservation of small wildlife populations.



George Spangler Associate Professor
Teaches Ecology of Fish Populations. Research includes fishery population analysis and modeling predator-prey interactions.

Thomas Waters Professor
Teaches Fishery Management in Inland Waters. Research includes stream ecology and secondary production. Director of Fisheries Graduate Studies



Office of Student Services



John Bell, Director, Office of Student Services



Bill Ganzlin





Ann Mayhew, Assistant to the Dean



Forest Resources Staff. *Karen Kanda, Mary Ann Hellman, Gail Gangstee, Clara Schreiber, Janele Schandt, Karen Dewanz, Kathy Phelan, Ruth Davidson, Betty Schiefelbein*



Forest Products Staff. *Emily Sundeen, Carol Laffoon, Linda Prowatzke, Lynda Tucker*

SPECIAL SECTION: FIELD SESSIONS

For many, the two required field sessions for Forest Resources students (one at Itasca and one at Cloquet) are the most memorable experiences of their stay at the College of Forestry. The Gopher Peavey is proud to be able to print some of these memories. The following are impressions from various students who attended a field session recently and had the desire to relate their experiences. Thoughts about the two field sessions from their respective directors, Drs. Ed Sucoff and Al Hallgren, are also included.





The 1985 Itasca Session

by Ed Sucoff
Itasca Field Session Director

The University of Minnesota may be unique in requiring its forest resource majors to attend two field sessions: Itasca and Cloquet. At Itasca they learn what is happening in the forest and why and also learn practical measurements techniques. The two sessions together help students to understand the forest and to know field skills when managing forests.

The faculty at Itasca was therefore disappointed with the students during the 1985 session. These women and men were not the beer-guzzling, tobacco chewers of former years. There were Latin scholars who applied their genius to plants. They were archeologists who carefully uncovered and described soil-buried treasure. They were historians who preferred dendrochronology to hunting tales; they actually thought dnb referred to trees. Not least, they were statisticians who took their pet compasses for random walks through the woods.

Fortunately, the faculty in the 1985 session was better than usual. Mark and Eric, the TA's, partied regularly and painted Itasca red, sheet by sheet. Phil spent each meal telling bear lies that sent us all a quiver. Ed spent most the session in bed with a bad back . . . so he said. Scotty and Vilis spent their time in private tutoring sessions on the Lake, studying Shakespeare and Johnson. It will take 10 years for the lake to recover.

The coursework this year was enriched by a fire-fighting training program provided by the U.S. Forest Service. The students suggested a test fire using the ecology and measurements reports as suitable fuel. Not a bad idea!



Memories of Itasca

by Gregg Hove

For a freshman or sophomore, a college can seem large and impersonal, but after an experience like our Itasca summer session, all this seems to change. This is what I remember most about the month and a half I spent at Itasca State Park.

I transferred as a sophomore from CLA and entered the College of Forestry not knowing anyone. The Itasca Session actually forced me to meet fellow classmates and instructors on a day-to-day basis, and I'm glad it did. I found out that other students were just like me (well almost). They had the same interests, problems and dreams. I made many friendships up there that I'm sure will last a lifetime.

So I guess when I think back on it now, except for the poison ivy (luckily I'm immune to it), the three solid weeks of rain, the 30 page reports, the traverse through swamps and hazel brush, and the memorizing of over 100 trees and shrubs, I really did enjoy and get a lot out of my experience at Itasca.

Seriously though, a well-run field session like the one our college offers its forest resource students is a special experience well worth going through. So, for you beginning students, you have something to look forward to, and us upper-classmen have had something to be thankful for and remember.

Itasca Session '85

by Lois Pfeffer

Arrival at Lake Itasca: misty, cold, sandy volleyball game, meet the instructors, meet the rest of the class, 27 students in all. Listen to the Park Ranger, "When it gets dark up here it gets DARK and them big pines don't move!"

Day one: When a student first looks at a forest, they ask three questions: "Where'd all the mosquitos come from? How long is it going to rain? Will my boots ever dry out?" And . . . Ah, soils . . .

Day two: Botany, meeting the big pines that don't move. Ah, more soils. Meeting three soil pits, leaving deep imprints on our clothes and minds.

Day three: Another plant list? Measurements, learning about chains. How many chains does it take to get around the bog?

Day four: Our first day off!!! Only three weeks left!

Week one: Botany: trekking after Scotty . . . Where'd he go? Ecology: finding stands and digging soil pits—"This looks like a good spot." "Couldn't ya get a little further off the path?" Field trip to Beltrami County, learning about site prep, planting, releasing trees and the importance of beaver dams. Measurements: in most of our stands for every 100 chains there is at least one bog at least two links deep. Traversing: taping matches to the back of my compass, just in case . . . Canoeing to the headwaters and playing tourist on our day off. KP duty, fun times for all. And how 'bout that cod, eh??

Week two: Dear Mom & Dad,

I really love my boots. My raincoat has become one of my closest friends. See ya in 2 weeks. Enclosed is a *Rhus radicans* leaf. We get tested on it tomorrow. I hope I remember what it is by then. This year we had the unique opportunity to go through a fire training course thanks to the Chippewa National Foresters. Two days of films, lectures, taking a fire training test, getting our red cards, going out into the field and learning about building black lines, use of the tools, safety first, the pump truck and brown trout? Botany final: 40 of 136 plants fair game. YIKES!! Measurement reports. Visiting stands, counting trees, in . . . out . . . in . . . borderline, ah, in . . . Hold it now, which plot was the bear seen? LET'S GET OUTTA HERE!! Learning the finer points of fudging data.

Week three: Only one more week. If I can only hang on 'til Sunday! Learning the real meaning of Ecology reports—2 biggies. "How many chapters in your report?" Measurements final: "How many board feet will you have if you measure a Merrit Hypsometer with a prism?" . . . ah, Yes. Ecology: our last final. First in the field. The last visits to the familiar sites and stands. Getting the study group assembled for the written final . . . at the Northway.

When a forester first looks at a forest they ask three questions:

What is there?
What is happening?
Why?

Good-bye Itasca, the memories and friends made there will stay with me always.
Thanks for being a lake!



“When You Say Cod, You’ve Said It All”

by Laura Held

This is the story of 2 women who attended the U of M Forestry Field Session of 1985. Their names have been changed to protect the innocent.

Bianca: “Yeah, Claire? I’ll be there in half an hour, ok?” I hope she doesn’t have a lot of stuff to put in the car. Now, where did she say her house was? Oh yeah—one half hour goes by—“Hey, I sure hope you don’t have a lot of stuff”

Claire: “Naw, just my three duffle bags, a suitcase, 2 backpacks, that green army bag and my boots.”

Bianca: “Okay, load em up in the hatch”—another half hour goes by —

Claire: “There, all finished.”

Bianca: “Good, let’s go or we’re gonna be late—wait a sec. I think I locked your side. Wait a minute, my side’s locked too. Uh oh, I think we have a problem.”

Yes, as the two of them stood there the keys dangled in the ignition. Another half hour went by and finally, success, and they were on their way to Itasca, arriving shortly after 12:00 noon.

After unpacking and situating themselves in their cabin, they ventured outside to see who all was there.

Claire: “Hey, there’s some people playing volleyball—let’s go!”

Bianca: “But it’s raining. Oh, what the heck.”

So the two went and met a few more people and got some sand in their hair. Then came their first meal at the station and the meeting with faculty.

At this meeting they learned more about the station, what they’ll be doing for 3½ weeks and some of the rules of the park. The head ranger advised them to watch our coming back from the Northway, a local bar, because “those pines don’t move.”

After the meeting, they sat around “Club Moss”, otherwise known as the dining hall, and talked with new friends Candy, Josh and Kirk. Ten o’clock p.m. soon came and many went to sleep because tomorrow morning would come soon.

Soon, breakfast was over and the groups were out in the field for their first assignment. Every day was similar to this except that the assignments became a little more involving each time. The third day was when Candy and Bianca met the soil pits. This, in itself, was enough to motivate them along with several others to the Northway to quench some thirst. Here is where the students really got to know each other It was a little difficult for some to get up the next day.

At lunch the cook was complaining that someone had moved his car that night. Several other cars had also been similarly moved. No one knows or will tell what happened.

The next couple of days brought several botany tests. Claire and Bianca could be seen after dinner collecting beautiful specimens to decorate the walls of “Big Bertha on the Hill,” their cabin. Veronica, their cabin-mate, did tend to think the two were very strange.

Bianca: “Claire, Claire, guess what we start tonight. Oh for sure, K.P!”

Claire: “Like Omigod—really?”

Bianca: “Yup, no lie, I get to spray off the dishes.”

Claire: “No way, I do.”

Bianca: “How about if we trade off?”

Claire: “Oh, all right, but I get it first.”

Somehow the group gets through the evening either studying botany for another test tomorrow or drinking hot chocolate and sitting by the fire. The birth of a new day brought another botany quiz. But this quiz was not an ordinary quiz, something happened that one person at least will never forget, Wilfred, a knowledgeable person in the forest, did something that will go down in history. The teacher picked a very small plant with three roundish leaves, very green and shiny, for the 4th plant on the test. Well, Wilfred, being one that likes to attack plants and inspect them up and down before he writes down an answer, went at it. Bianca, a bit apprehensive at first, seeing Wilfred plunge at the plant, also went and touched the cute little harmless plant. As the group was finishing up and leaving the site, they walked past a washroom and the teacher suggested that those who had touched the last plant go in and wash their hands, because they had just touched poison ivy. Bianca never did the rash while Wilfred did, and Claire who wasn’t anywhere near the plant at the time ended up with the worst rash.

Soon the day that had been plaguing us arrived. It was traverse day! We all met in a group with our compasses and various other lifesaving equipment (matches) should we misplace ourselves. Most of us made it; a few got lost, but most came back no worse for wear. Even Candy got out alive.

Dateline: Saturday night, 7:30 p.m. Club Moss: Forestry student busily studying for last final of session. The door slams—Josh saunters up to the table where Bianca, Claire, Candy and Kirk were busily studying. He says “Come on ya babies, let’s go for the “c” at the Northway, huh?” Soon the group was off for an hour study break (ha, ha) in the rompin’ bronco and several other vehicles

The next day came, a matter of a test and then, freedom! Hard to believe, but we made it. Now we can look back on our experience and laugh with fond memories of the traverse, etc. As for Bianca and Claire, they made it back without locking the keys in the car.

Teaching to Learn

by Christopher Schulte

It was last fall when I attended the Itasca Field Session, eager to learn and hoping to do well. Three and a half weeks of six credits seemed easy enough. But for myself and 26 other budding foresters, those six credits were the most intense ones of our lives. My past two years at the university were spent in a sort of "academic dormancy". For some reason, re-learning all that garbage I learned in high school was a little boring and unexciting. Not that I'm knocking the basics of a forestry education, but all that rehashing meant "forget about studying." I had no desire to do well in those classes as I felt that they had no relevance to my forestry education. The point is this: going into Itasca, I possessed no study habits and not much learning drive.

Three and a half weeks later, I found myself to a much better manager of my time and, best of all, learning was fun again. Never in my life had I studied so intensely. Never in my life had I passed up opportunities to have fun to study. Never in my life had I learned anything after 4:00 p.m. And never in my life had I talked to a professor after the sun went down. These were all new experiences. There was no free time tomorrow morning to finish the assignment—it had to be done tonight. Yes, I studied and learned more than I did in my first two years, but did that mean that I did well?

Since the class was so small, grading on a curve was pretty much out. Actually, I did just about as well as everyone else. But the path traveled was rocky. Many were the times when we would get our Ecology papers back from Drs. Ed Sucoff and Vilis Kurmis (with help from Eric Kruger, the T.A.) with excessive red marks and low numbers on the top. These papers were labored upon for hours and we actually thought that we had a firm grasp of the subjects. Apparently, we did not. We also felt that we should get high marks at least for our time spent, but such was not the case. These instructors wanted some real thought and in the end, real learning. They wanted not just rote memorization and regurgitation of facts; our professors wanted us to know these facts and build on them for the next two or so years.

And they were truthful about our inadequacies. Terribly truthful. Vilis gave us a lecture on the proper way to write a report. Ed told us that most of us would not be able to get an "A" in his class. He told us to go for the "B's" and "C's". This, to most, was a poor attitude on his part. It also kicked off a lot of bitching and moaning. I, too, was a bit perturbed by this. I always thought that a teacher should strive to give all perfect grades and if he didn't, he wasn't doing his job.

But then I thought about it. And I thought about all those times when I thought I did "A" work and received a lower grade. Then I thought about what I felt like after getting those papers back. I was determined. Determined to do better. It was sort of a challenge, to see if I could do well enough to get a good grade from Ed. And it was this challenge, this contest from Ed and the rest of the faculty at Itasca, that made me want to learn and do the best I possibly could.

It was this continual "abuse", if you will, that kept me trying harder for the next time. I actually wanted to show Ed up, surprise him, put him in his place, by getting a perfect paper. That would teach him to mess with me.

And then, sometime after the session, it occurred to me. Ed had tricked me into doing the best that I could. It was his endless drive to get us to think, to reason, to not just give answers "like flowers in the wind," but to give answers with the best of our knowledge and stand by them. Never before was I so wrong when giving answers to an instructor but at the same time, never was I so unafraid to give a wrong answer.

It is my opinion that faculty like this at a field session like Itasca can only enhance the Forest Resources curriculum. It is this combination that, in my mind, makes the University of Minnesota one of the best schools in the nation to attend for a degree in Forestry.

Some of the students may still have ill feelings toward Ed. I guess that's the way it goes. For me, I'll never be able to express my gratitude to him for teaching me how to learn.



Cloquet Forestry Session

*by A. R. Hallgren
Cloquet Field Session Director*

I doubt that very many of the 34 students who attended the 1985 forestry session at Cloquet or the faculty who taught there paid much attention to the fact that their session occurred in the 75th anniversary year of the establishment of the Cloquet Forestry Center in 1910. Actually, those junior/senior sessions have been held at Cloquet on a full-time basis only since 1927, but they had their beginning at Itasca in 1909 — a year before the Cloquet center came into existence. The significant fact here is that the College has been conducting field sessions as a required part of its forest resources curriculum on a continuous basis since 1909. And, in addition to Cloquet, there is the required summer session at Itasca. No other forestry school in this country has such a comprehensive level of field training in its professional forestry program.

Is that good? Certainly, there was no question in the mind of Professor Green and his faculty in the founding days of the College that field training was a much needed part of the education of a forester. That is what brought about the State legislation which authorized the establishment of a forestry station at Itasca in 1909 and Cloquet in 1910. Evidently, the faculty members of the College since then have been in agreement with that because even with the many changes that have taken place both in personnel and curriculum there has been very little, if any, challenge to the continuation and support for the two field sessions.

The Cloquet session is where the students begin to translate the knowledge learned in the classroom into actual practice in the woods. It is what most students look forward to in forestry—the chance to work in the outdoors. We perhaps overlook another aspect of the session which is very unique in a college experience. Where else in the University does the entire student body of a particular class spend an entire quarter together learning and living in one setting? Most of our graduates will agree that Cloquet was the best and most memorable part of their college experience.

I have had the pleasure of being closely involved with about 20 of our field sessions, first at Itasca and more recently at Cloquet. How would I compare the 1985 Cloquet session with other years? Actually, while each class develops its own personality, I will have to say they are all pretty much alike and that means good. If I may paraphrase a quote from Will Rogers, I have never met a session I didn't like. I am sure that as with the students themselves, the field sessions will be the most satisfying and memorable part of my career with the College.

But there is another side to this story. Our field sessions, as essential as they are to our forest resources curriculum, tend to foster what I will somewhat facetiously call for lack of any better words, the everyday picnic in the woods syndrome. That is to say, the sessions can mislead us as to what forestry is all about by their satisfying exposure to what attracted most of us into forestry in the first place, our love for the outdoors. While that feel for the outdoors is an essential part of being a forester, our impact as a profession in managing forests and other renewable natural resources is not going to be measured by how much time we spend or how well we handle ourselves in the woods. In fact it may very well be the reverse of that. We need to recognize that progress in forestry is becoming increasingly dependent on forces outside the profession of forestry. We as foresters have very little control over those forces.

Our success as a profession in maintaining a position of influence in dealing with the direction of forestry in this country and the world as a whole will depend less on our woods know-how than it will on our ability to work with people in business, government, and volunteer organizations. That means we need to work at being more competent, articulate, and prominent in dealing with the administrators of the many organizations that are becoming involved with the management of our environment.

Those comments are not new to forestry. We as a profession have done well in the management of the forests of this country through their custodial and economic (timber) phases to the present environmental phase. In this environmental phase we have come under attack and we are open to criticism by many segments of our society. There are other groups out there waiting to take over what historically has been our domain.

Just a reminder then. Love those field sessions; we need them now even more than we did in the past. But we will have to come out of the woods to protect our interests. We can't let our love affair with the woods distract us too long from the less pleasant and more difficult task of working and getting involved with people where the decisions are being made. We need to recognize that forestry is no different in that respect than most other professions. If we choose to ignore that fact, someone less technically qualified will take over. There cannot be must satisfaction in gaining the woods if it means losing our stake in managing the environment which contains those woods. I am sure that Professor Green and his faculty would not have wanted it to end that way.

What is the meaning of Cloquet? "TO HAVE FUN! YES-SIRR-EEE!"

by a forestry student

Cloquet, no matter what the weather, was fun. Some people may think otherwise at this point in time, but looking back, they'll agree. For example, when they walked through Section 31 with water pouring over the tops of their bog boots and soaking their pants to the waist . . . if they'd think about it, it was pretty funny (how many times did they swear?). All that fun just to find a 40-corner marker for Margaret and Dr. Ek.

How about the fun that was had during Soil-Site Relations with Dr. Bob, such as bailing a four foot soil pit with pots and pans and trying to find enough equipment to do all the exercises? It was an entertaining experience, to say the least!

What about those bag lunches? Now those were good times—both the making and the eating.

Some of the other more "fun" learning events of Cloquet included: counting deer browse for Dr. Jordan; bus tours of northern Minnesota's back roads with Al, Scott and Gordy; waiting for bus tours in Cotton, Minnesota with Dr. Brooks; harvesting tours and seeing every kind of feller-buncher; a Duxbury tour in the rain with the DNR; going "bug-eyed" looking through stereoscopes to determine cover types for Margaret; compartment exams and cross examinations with Dr. Alm; redesigning the Cloquet Forestry Center for recreational experiences and figuring out what the "heck" to do with the "unsafe" fire tower; and changing crew partners because that "fun learning event" just wasn't being experienced.

How about the not so educational "fun" events? Being able to duck hunt before class; playing hacky sack and basketball between classes; Monday and Thursday at the Museum for twenty-five cent beers; Dairy Queen runs; Bridgemann's runs into Duluth; trick or treating; Nigerian Independence Day; "Bush Animals"; peat fights and playing king of the mountain; generic hot chocolate; freezing cold movie theaters; tacos; a pot of coffee on the table during lectures; the daily gorge of meat and potatoes; K.P.; croquet games; ping-pong; trips to Duluth to visit "Grandma"; deer hunting; and the periodic sessions with Al Hallgren and his response of, "You'll have to check with Bonnie on that."

Looking back, whether the experiences at Cloquet were educational or not so educational, they certainly were memorable. I know that I can honestly say that when I look back at Cloquet ten years from now, I'll remember the fun times, not the bad times—"YES-SIRR-EEE."



The Cloquet Experience, 1985

by Sharon Raetz

Cloquet, Cloquet . . . the culmination of the Forest Resource majors' education. September, 1985, found 37 students eager to learn what they could from the professors who were brave enough to come to the Cloquet Forestry Center and attempt to edify the students in their field of expertise.

Merle Meyer, having retired the previous year, had to give up his position as the Remote Sensing instructor—and to who better than Margaret Moore. After all, she lived through his course the previous fall. I'm still convinced that there were little gremlins in those stereoscopes who told Margaret what species were depicted in the photos because I don't think anyone else could honestly tell the difference between dark grey spruce/fir and very dark grey jack pine (or is that the other way around?) But we need not bother because the following week Dr. Ek was to come and then all we would have to really know was how to identify the marshes as to avoid putting plots 15 chains into an unproductive swamp. Does that man really believe that students for the past 50 odd years have really trudged through those marshes? (Okay Betsy, my fearless crew partner, so I led you on a "shortcut" one morning—I never did it again, did I?)

Dr. Alm came to our rescue the following week with a dry course—not wet that is. The course was fun because we got to "cut" the entire Cloquet forest and regenerate it to red pine, Dr. Alm's favorite species! Oh, all right, not all of us wanted to regenerate the stands to red pine, some of us wanted to regenerate the jack pine stands to aspen in order to provide a better grouse habitat—those were the multiple use students. Needless to say those students were already thinking in the Gordy Gullion way. That proved to come in very useful a few weeks later for wildlife class.

Perhaps one of the most memorable experiences for us was the Northern Hardwood's Silviculture tour in Duxburg, Minnesota. It was described to me by a fellow student as not being dull but being miserable. I seem to agree with him. I remember it being so miserable that the instructor, after declining that his hush puppies could not withstand the inclement weather, drove off and left us to deal with the man-swallowing puddles ourselves. But then, with all our experience with the swamps at the Center, at least one of us was skilled enough to pull out those engulfed by the mud. (We understand that Dr. Dixon had to attend an important meeting in St. Paul—we just wonder if it wasn't planned after it started raining.) Thank goodness that the following week we

learned exactly why this water had not infiltrated. We did, however, learn some pretty pertinent things from Dr. Brooks, like calculating exactly how long it would take to float down Little Otter Creek and successfully escape the hydrology final—none of us succeeded. We musn't forget about the peatland tour and getting stranded there. The busdriver took off with our lunches and left us in the cold with no food.

Scott Reed's harvesting course had to be the highlight of the session, though. No other course could even come close, for no other course had the miniature cable logging toy. If the safety officers were on the logging site that day, Scott Reed would have probably lost his job because he managed to drop three logs on a choke setter and hit a sawyer in the head with the fallblock. Perhaps it's a good thing that Scott is practicing in Minnesota and can stick to the tractor logging methods.

Finally, the last week of the 1985 Cloquet Session came. And we only had to deal with one more professor—Dr. Merriam. Well, we knew that this was to be his last year at Cloquet so we all went easy on him and carefully planned our recreation programs. All of us, that is, except Kevin. Kevin wanted a sliding hill at the Center. Dr. Merriam didn't think it was such a good idea, but Kevin wouldn't quit. Every once in awhile, I'll see Kevin and Dr. Merriam in the hall arguing. Could it still be about that sliding hill?



We were in Cloquet for ten weeks and you know that we didn't study all that time. Some may say that it was hard to find excitement, but for others, excitement was right out the cabin door. On the sunny afternoons, you could find students doing just about anything from hunting to playing croquet. Yes, croquet in Cloquet—now that was a site to see, fine college students hitting a little wooden ball through wickets that stood only as high as their knees. And if you looked up in the air on those sunny afternoons, you may have caught a glimpse of Phil flying overhead. Perhaps he found a new way to do cruise plots, from an airplane that is.

As the evenings came along, you could always find a game of backgammon to join if you were willing to let Nancy beat you or have a cold beer at the Museum. Some nights the entire center would be at the Museum; like on the Nigerian independence day when the Nigerian contingency enticed the rest of us to celebrate with them. But for most of us, we didn't need a special occasion; a football game on TV. was a big enough excuse to go to the bar. Some even used the excuse of reading the bar's newspaper.

But through it all, and in spite of our extra-curricular activities, we learned a great deal and many of the students still say that the best thing about the Cloquet session was the faculty. And I think they had just as much fun as we did.







SPECIAL SECTION: SUMMER JOBS

Summer jobs play an important role in the education of a forester. Applying classroom experience to practical field work can be an invaluable learning experience and in many cases, can be a stepping stone for permanent work within the forestry profession. The following is a description of summer jobs by the college's career opportunities coordinator, Phil Splett, and some impressions by students who held jobs this previous summer.

Summer Employment Opportunities

*by Phil Splett
Career Opportunities Coordinator*

Summer jobs are an important part of the overall learning experience for College of Forestry students. These jobs help to defray the high cost of tuition, but more frequently, they provide valuable "hands on" experience. This experience is especially important to students majoring in areas where a competitive job market exists, such as wildlife and forest resources. I am encouraged by the fact that, although the permanent job situation is competitive for forest resource majors, the summer job opportunities have been excellent. This is important because the critical factors that I see as having significant positive impact on a graduate's employability are:

- (1) **Grades.** Maintaining an above average record of B or higher.
- (2) **Related work experience** before graduation, e.g., summer forestry/recreation jobs.
- (3) **Flexibility** in where and for whom you are willing to live and work.
- (4) **Job search preparation** and professionalism including communication skills and interview performance.

Most students will have at least one summer's worth of experience before graduation, some will have two or more. (Note: many students enter the College of Forestry as transfer students beginning their junior year.)

In many cases the type of work that initially interested a student in the forestry, fisheries or wildlife professions is done on a summer seasonal basis. Wildlife census studies, back country wilderness guards, and forest fire control duties are all examples of the type of work performed by College of Forestry students.

The job locations have traditionally been in some of the more scenic portions of the United States including the Pacific Northwest and Alaska. More recently the opportunities in non-traditional areas of forestry such as urban forestry, have shown the greatest opportunity growth. Currently, the demand for qualified students to fill urban forestry related jobs in the Twin Cities area exceeds the supply.

Another area of change related to summer jobs is the use of volunteers. This is becoming much more prevalent with federal agencies such as the U.S. Forest Service and the U.S.D.I.' Fish and Wildlife Service as they continue to face budget cuts. These volunteer positions typically provide excellent experience but little, if any, monetary savings.



Cooperative Education Program

by Brian Kopas

"Earn while you learn!" I am sure that all of us have come in contact with that well-worn recruiting slogan used by the armed services. But, believe it or not, the military is not the only place in which earn while learning. The cooperative education program offered through the Department of Forest Products provides students with the opportunity to gain a working knowledge of their prospective field. This is done while receiving a paycheck, rather than applying for student loans. There are numerous other benefits, but first I will tell a little about the program itself.

A student wishing to participate in the cooperative education program meets with his or her adviser in order to make contact with one of the various manufacturers, distributors or forest products retailers throughout the area. It is also possible for the student to seek out employment which they feel to be appropriate. Once employed, he or she is eligible to register for the program, which is worth one credit per quarter.

The benefits to a student in the program are many. Beside the obvious financial rewards, the individual has the opportunity to apply classroom and laboratory knowledge to real world problems and situations which arise in the workplace. Not only does this help to solidify classroom learning, it gives the student a deeper understanding of the instruction which he or she has received. A further benefit is the opportunity one receives to make contacts with professionals in their industry. These contacts are invaluable since they often turn into possible job opportunities upon graduation. It is a proven fact that employers prefer to hire those with whom they are familiar. Also, this program gives the student a chance to get a picture of what responsibilities he or she might receive in their career of choice. Finally, the student is able to develop the professional poise and self-confidence which one doesn't ordinarily receive from flipping burgers.

The student's performance is monitored quarterly. At the close of each term, the student is required to submit a brief report on his or her work assignment and learning experiences. Upon successful completion of this report, a grade of S (satisfactory) is awarded. This report, in conjunction with a performance evaluation completed by the student's immediate supervisor, is used in order to follow the individual's work progress.

So now you have a brief picture of the Department of Forest Product's cooperative education program. Believe it or not, there is a way to learn outside of our library, classrooms, or laboratories. Even better, this can be done while putting a little extra change in your pocket, and credits on your transcript. More information about this program is waiting for you in your adviser's office. So, give the coop program a try. The experience which you gain, and the people you meet, will be an invaluable asset when it becomes your turn to mail out those transcripts and resumes.



Forest Service Volunteer

by Dan Groen

I spent last summer working on the Redfeather Ranger District in the Roosevelt National Forest in Colorado. My job title was "Volunteer Wilderness Train Crew Member", and my job description included making and repairing trails in the Rawah Wilderness, public contact work, and forest fire fighting. Since I was a volunteer, the Forest Service only paid me for fighting fires as well as just enough to pay for my food. In other words, I would have earned more by flipping burgers all summer. On the other hand, the fringe benefits were great. Every Monday morning, we would pack our gear, load up to llama (Tom Dooley), and hike into one of the most beautiful parts of the country to spend the week. The two guys I worked with were alot of fun, and that, combined with some good work experience, made it a great summer.



A typical day on the trail started at about 7:00 or 8:00 in the morning. We'd crawl out of our tents and start some water on our stoves. Then, to wake up, we'd dunk our heads in the nearest water (usually fresh from the snowfield), all the while wondering why we did it every morning. Then coffee and breakfast, throw some lunch into a day pack, load up Tom the llama, and go to work. We'd spend the day on the trails correcting erosion problems, horse damage, or building bridges that had washed out that spring. Machines aren't allowed in the wilderness so I learned how to use hand tools pretty well. It was hard work, but also a lot of fun. Once in awhile we'd quit early and run off to play. (I hope my boss never reads this). We climbed a couple of peaks, glissaded down snowfields, and swam in some of the alpine lakes, which sometimes still had ice on them.

After we got done with work, we were usually too tired to do anything but eat dinner and sleep, but there were some nights that were different. There's not much to do at night in the mountains except talk and look at the stars, and there had to be something special to talk about like the night some bighorn sheep invaded our camp or when we saw a herd of seventy elk or the night we stayed up to listen to the rest of the district on the walkie-talkie as they fought a fire. Most days, though, we had spent enough time talking to each other during the day and wanted lots of sleep.

Some of the best times I had out in Colorado were when we would come out of the wilderness to the ranger station. That first shower in days felt great (the trail crew members were nicknamed "Dirt Dogs" because of the way we looked by the time we came out), and after we'd relaxed for an hour or two the rangers and the Dirt Dogs would challenge each other to a volleyball match or drive into Ft. Collins to have fun.

I'll never forget those people or those mountains and I'd like to go back sometime to se them both. Even though I didn't come back to Minnesota with a lot of money, I came back rich. So if any of you don't want to be volunteers because of the money, think about it some more. It could be one of the best times of your life.

SCA Volunteer

by Gloria Zaiger

Last summer I had the opportunity to work as an SCA (Student Conservation Association) volunteer. I worked on a wildlife refuge in New Jersey located on the salt marshes along the coast. As a volunteer, I wasn't paid a full salary, but received money to get there and back, a free place to stay, food, and a uniform allowance. It wasn't a job to earn money for school, but was incredibly valuable for the experience. As an SCA volunteer, I learned not only job skills, but also about myself and just what a career in wildlife management may be like.

The list of job related skills I learned seems endless. Some of my daily tasks included: salinity and water checks, mapping of fire lanes, handling Canada geese and other waterfowl, supervision of YCC's and vegetation transects. I gained experience in canoeing, orienteering, mapping and bird banding. There was also office work; I was surprised just how much paperwork is involved in wildlife management. I got accustomed to filling out some of the many forms and even wrote a couple of my own reports. Many wildlife refuges use YCC's (Youth Conservation Corps) to do the more unskilled tasks. It was good to get experience working with them. Keeping 15 and 16 years olds organized and working can be a challenge. Overall, the work skills I gained will be valuable when looking for permanent work.

Another important part of my summer was what I learned about myself in relation to my chosen career. I found out that tourism is a big part of a wildlife refuge and dealing well with the public is an important skill. Experience in public speaking is valuable when looking for a job with many wildlife managers. Since much time is spent in the office (more than you would expect), I had to learn to be cooperative and work well in that setting also. Sometimes it takes patience to fill out a stack of forms when you would rather be working outside. One of the most difficult aspects, when you are female, is fitting into a male dominated field. At times it is hard to gain respect; it takes patience to put up with that aspect of the job.

My experience working on a wildlife refuge was one I'll never forget. It wasn't always fun or even enjoyable, but worthwhile. I have re-applied to SCA to spend another summer gaining experience before I go job hunting. It is a great way to prepare for a paid job. As a student volunteer, they know you are there to learn and gain experience. It was a fantastic experience, one I hope many of you will have a chance to have.



Back Country Ranger

by Nancy Johnson

Being a Backcountry Ranger on the Nezperce National Forest in Idaho during the summer '85 proved to be both a learning and trying experience. The duties of a Backcountry Ranger include hiking through wilderness areas for days at a time taking mental notes on the condition of trails, level of difficulty, distances to various camping areas and the availability of water. All of this information would later be compiled into a general recreation resource reference book.

Public contact, ranging from the casual wilderness conversation to trying to impress minimum impact camping in a non-threatening manner, took precedence in our wilderness excursions. In representing the Forest Service, we had to abide by our own rules. Since minimum impact camping involves the least amount of evidence of man's presence, we spent the bulk of our time cleaning and picking up the garbage that others left behind and packing it, often several miles, to where it would be picked up and taken out later. We tore down our share of man-made structures as well. Nails and wire fastened securely around trees was often the rule of a hunter's camp.

We were confronted with several trying obstacles every day. From campsite preparation and preparing meals to deciding which was the right trail to follow versus various alternative elk made routes. We often didn't follow a trail at all; trailblazing, often mountain-blazing, became the rule. Anything could go wrong and we often found ourselves adjusting our days around the inconvenience of weather and being foreigners in this land. But we learned to accept our anxieties and frustrations and learned to manage the land.







Student Activities

Forestry Student-Faculty Board

by William Olsen

Seven AM breakfast meetings are a regular feature of the Forestry Student Faculty Board. Aside from being the only time when everyone is available, they help us to keep our feet off the ground and our faces in the coffee. We are a forum for students to share with faculty members their concerns about the quality of their educational experience, and we pass on recommendations to others in the college. Membership of the board is made up of student presidents and faculty advisors from each student group in the College of Forestry.

One of our main concerns this year has been trying to make freshmen and sophomores more at home in the college so that they can start learning about forestry and sorting out their particular interests sooner. This winter we passed on a recommendation to the curriculum committee to offer an introductory course for entering freshmen which would introduce them to Green Hall, our faculty and their interests, students groups in the college, the new professional visitation program, a little bit about forestry, of course, and some strategies for getting the most out of school. We also are trying to hold an information fair to acquaint students with the range of student groups and activities in the college.

Officers for 1985-86

Student Co-chair	William Olsen
Faculty Co-chair	John Bell
Treasurer	Audrey Koltjes
Secretary	Laura Held



Society of American Foresters: Students' Trip to Convention

by Margaret Moore

On the morning of July 26, the last suitcase was squeezed into the back, the van doors were slammed shut, and a crew of seven University of Minnesota Forestry Students headed for the Society of American Foresters National Convention at Ft. Collins, Colorado. It was a fantastic journey across the Northern Great Plains . . . rolling prairie, antelope, and thunderstorms . . . across South Dakota to the Black Hills, down through eastern Wyoming to Colorado. Two days after our departure from St. Paul we arrived at Ft. Collins and joined with two more U of M student members.

The convention gave us an opportunity to attend professional talks in our area of emphasis and to mingle with more professionally established members. Dean Skok provided the students with a special treat by inviting us to the alumni breakfast. Over the four day stay at Ft. Collins and despite the busy schedule of meetings, presentations, and tours, the student members received a lot of personal attention and encouragement.

The trip was not without a few tourist stops, both on the journey out and on the return trip. We managed to visit Wall Drug, Mt. Rushmore, Custer State Park, Rocky Mountain National Park, Boulder, Devils Tower, and the South Dakota Badlands. We read of the geology, soils, flora, and fauna, did some hiking, took some photographs, and generally enjoyed ourselves. Upon returning to Green Hall and reflecting on the Convention week's activities, the experience left all of us with a very positive attitude toward the Forestry profession and its members.

The task of coordinating and funding this student attendance at the National Convention was not an easy one. I would like to take this opportunity to recognize several people for making this trip possible. Thanks goes to Phil Splett (Advisor) for his good advice and seemingly endless patience. Also, thanks goes to the Department of Forest Resources, Alan R. Ek, Head, and the College of Forestry, Richard A. Skok, Dean, for showing interest in the Student Chapter's attendance at the National Convention and for providing financial support for our transportation. They understand that this involvement in the SAF is not only important to our professional development as students, but also vital to the long term health of the profession.



Forestry Club

by *Bryan Pike*

President		Bryan Pike
Vice-President	(Spring)	Bruce Berger
	(Fall)	Dave Haugen
	(Winter)	Christopher (Chumpy) Schulte
Secretary		Audrey Koltes
Treasurer		"Tight-fist" (Phil) Stringer
Sergeant at Arms		Quintin Legler
Historian		Mary Lazor
Faculty Advisor		Dr. Edward Sucoff

The College of Forestry has gone through many changes during my brief three year stay at the college. The changes which I can recall include the merging of the Department of Fisheries and Wildlife into the College of Forestry, the change in department heads, the retirement of faculty members, the hiring for those vacant faculty and some staff positions, various curriculum changes, many research thrusts, and of course, the construction which reminds us that the Green Hall addition will soon be a reality. Without these and many other changes in the College, there cannot be advancement.

As for the Forestry Club, there have not been many changes. Does this mean we haven't made progress toward accomplishing our goals? I think not. For what are the goals of the Forestry Club? The goals are to provide leadership, professional experience, and give students the opportunity to meet other people with similar interests and participate in a range of ac-

tivities that are not only fun, but pertain to their education. In this respect, the Forestry Club has greatly surpassed these goals because others and myself attained these and many other aspirations while being a part of the club.

The Forestry Club still keeps very busy despite few changes by sponsoring many events held each year. Listed below are highlights of the Club's annual activities:

Spring Quarter

Arbor Day Tree Sales

It was a good year for selling seedlings (we actually made money). The 300 individually wrapped containerized seedlings which we bought from the Minnesota Forestry Association sold like hot-cakes. By middle of the week we were running extremely low and Arbor Day was still two days away. We were in desperate need for more trees and we didn't want to sell out before Arbor Day (Friday). Luckily, Carl Vogt came to our rescue (as he usually does). Carl donated (20 cents each) about 150+ bare-root stock of black walnut and assorted conifers. The demand for the black walnut was so great we increased the selling price in order to maintain a supply through Friday. Thanks Carl!

Spring Picnic

Friday, May 31, 1985 looked pretty dismal to have a spring picnic. It had been raining for two days and the morning of the picnic was cool, damp, and cloudy. Despite the unpleasant weather, Dave

Haugen and I were busy getting things ready for an afternoon of volleyball and softball. As soon as the preparations began, the clouds started to clear away—sunshine and rising temperatures were in the forecast.

The Wildlife Club brought their "secret-recipe" venison stew (which, like last year, could feed 400+ people). After stuffing ourselves with stew, rolls, and assorted salads, the undergrads challenged the few faculty present in a casual game of softball. Who won? Was anyone keeping score? Phil Splett still reminds us of the weak team we had. I think we should have a rematch next spring.

Fall Quarter

As past and present members of F-Club know, fall quarter is a very busy time of year. Responsibilities for the St. Paul Campus club officers can be very burdensome, especially when the President, Treasurer, and Sergeant at Arms are at the Cloquet Forestry Center. To make matters worse, Bruce Berger (Vice-President) did not return to school because of personal (financial?) reasons. Dave Haugen, the Assistant Vice President, was quickly promoted to Vice President, whose responsibilities were to be Acting President. Look-out when you give Dave Haugen responsibility! Actually, Dave handled it pretty well—he delegated most (all says Chumpy) of his authority. Since Dave was going to school part-time, he wasn't around to do much (he did nothing, says Chumpy). Between Dave and his helper, Chumpy, the meetings were held and activities were planned and organized.

Fall Bonfire

The bonfire was held the first Friday of Fall Quarter (since classes started on Thursday, preparations

were made rather quickly). The purpose of the bonfire is to present the opportunity for current students, staff and faculty to welcome and familiarize new students with the College of Forestry. Well, I hope the two freshmen that were present were inspired by the presence of all the faculty (I knew undergraduate enrollment was down, but that was ridiculous!) Despite the low number of students present, hot dogs were grilled followed by introductions by Dean Skok (who gave an update on the Green Hall Addition and mentioned Norman Borlaug's visit to the College last summer) and F-Club officers. After the introductions, bucksawing quickly began because of the need for substantial wood to keep the bonfire from going out. Dave Haugen said he would bring the wood, it's just that his two grocery sacks of wood products (scraps) didn't last long.

After the Fall bonfire, training began for the Mid-western Forestry Conclave. For an account of Conclave, Christmas tree cut, and Christmas tree sales, read the write-up for each.

Winter Quarter

As tradition has it, Foresters' Day was held in the beginning of Winter Quarter. This year the 51st Annual Foresters' Day was no exception. Included in the *Gopher Peavey* is a write-up by Mark Reed on the weekend festivities.

New club officers were elected as Winter Quarter ended. They are: President—Christopher Schulte, Vice President—Gregg Hove, Assistant Vice President—Audrey Koltes, Secretary—Laura Held, Treasurer—Paul Buck, Sergeant at Arms—Robb Collett, Historian—Amy Krieger, and Faculty Adviser—Bill Ganzlin. Congratulations everyone! Good luck and best wishes for 1986.



1985 Conclave

by Tim Kennedy (team co-captain)

The year was 1975. A schoolbus load of foresters were heading down to Southern Illinois University (SIU). This was my first conclave experience. The team was mainly seniors, and we took third place.

Now the year was 1985. A coach-load of foresters were heading down to SIU. This was my last experience. The team was mainly juniors, and we missed third place by one point.

The ten year gap between conclaves at SIU had some similarities and differences.

The similarities were:

- a short time to qualify and practice (less than 2 weeks)
- a very long bus ride down to Carbondale (more than 14 hours)
- a bunch of crazy men and women spectators and competitors
- a good time competing and meeting other students from other schools
- seeing a different part of the United States

The differences were:

- more women participating
- a two woman buck event
- a live band for dancing
- better accommodations (fireplace and showers)

Now for the story of the 1985 Conclave trip . . .



Everyone was in high spirits as the luxurious greyhound bus finally departed for SIU Friday morning (1:00 a.m.), even though most were sleeping. This year had few stops due to the handy receptacle found in the rear of the bus. There was a bathroom, also. Competition was as keen as ever. It started in St. Louis, Missouri, where we stopped to sightsee. The competition consisted of finding the tackiest souvenir that could be found for around a buck. Entries ranged from a lawnchair found by Busch Stadium to a glass coaster. The winner was Marty Cassellius with a beautiful coaster of St. Louis. His prize was also a beautiful coaster of St. Louis.

Finally, under the guidance of Kevin Sittauer (who worked in the SIU area), we made it to Carbondale anyway. After checking in, we started meeting competitors from the other schools and sat around a campfire singing and drinking (or was that guzzling, Matt?) One by one, people left to sleep and prepare for the next day's events.

Breakfast at conclave comes very early (6:30 a.m.) and as in 1975, nothing to get up for, anyway. The weather in 1985 was a carbon copy of 1975—cool and misty. The atmosphere given off by the competitors, though, shown brightly.

As the events began, Dendrology was controlled by the southern schools, and as in 1975, all the Minnesota entrants bombed out. Mark Reed and myself didn't get lost in the traverse and took 2nd and 4th places respectively. Our team had more to cheer about as I showed all the youngsters how to saw and still placed 3rd.

The weather affected our performances in the pulp toss event and being the first team to compete didn't help. But Kevin, Matt, Bryan, and Paul tossed, slid and bounced their way into fourth place. The matchsplit, log roll, speed chop, bolt throw, tobacco spit and wood identification provided our team with experience but no points. Chris Schulte proved that even in





using a spliced together chain, you can still place 3rd in the chain throw. That is, once Chris knew the right way to throw a chain (was that left hand over right, Chris?)

The bright spot of the day was the two-woman buck. Using our high-tech, teflon-coated M-tooth saw, we almost took all the prizes. First time sawing partners of Sharon Raetz and Lois Pfeffer sawed first and took first place overall. Our third place team of Lisa Allison and Audrey Koltjes just missed 2nd place by a few hundredths of a second. Amy and Laura, our third team, didn't place but looked "marvelous."

Then the rain started to fall, and so did our hopes of a top three finish. But that didn't dampen the spirit of our team in cheering on the final two events.

After watching Matt and myself saw out of the cant in the two man buck, Dave Haugen and Bryan Pike, sawing the opposite way into the cant, still took second. The special event of balancing a six foot pole in a three foot circle on your hands had everyone guessing as to who was foolish enough to try it. Gregg Hove surprised himself as well as the rest of the team by placing 2nd. He was the only one not cold and wet. It must be that beard. Our comeback fell short, though, and we missed third place by one point. There's always next year, though.

As in 1975, after the events and dinner, prizes were awarded and the socializing began. Dancing and drinking of the finest spirits that could be put in a keg began. But we had to call it a night early for our bus left at 1:00 a.m. This brought to a close our 1985 conclave trip and like in 1975, the enthusiasm and spirit of the team will continue for years to come.

I would like to thank my co-captain Lisa Allison, all those who helped to get this trip organized, the spectators who cheered their lungs out, and finally the competitors.



Forestry Club Tree Cut 1985

by Christopher Schulte

Preparation for the Forestry Club's Annual Christmas Tree Cut actually began in the summer when I visited Carl Vogt's tree farm near Cambridge, Minnesota. Being one of the few club members to be stuck working in the Twin Cities over the summer months, it was my dubious honor to be stuck with ordering the Christmas trees for the upcoming winter sales. This really meant that I was to deliver a sheet of paper that Bryan (club president) made out earlier as to how many trees we would need. I never actually tagged any trees and for the most part, the whole thing could have been done over the phone. But this would have broken Carl's heart as he would not have been able to give his annual sales pitch ("look at these beauties"). Not that his trees needed a sales pitch, though. Some of those white pine bordered on perfection—in the summer. But after a few weeks of lying under 2,000 other perfect white pine and then being frozen in this two-dimensional state . . . well, that's the Christmas tree business.

With the order made, everything was ready for the 1985 Christmas Tree Cut . . . or was it? Like the previous years, time was spent waiting that November Saturday morning in the student room. Why? The world may never know. It's one of those deep dark secrets of the F-Club—never start on time. Nevertheless, we finally loaded up and headed out. Approximately 15 Forestry Club members, willing and eager (and maybe stupid), made their way north into the low temperatures.

For the third year in a row, I missed the turn-off to Carl's tree farm. Apparently, so did Carl. Our tree farmer was nowhere in sight. Chaos soon erupted and Hacky Sack engulfed the entire crew. But finally, Carl arrived and put us to work. This meant we were to grab a swede saw and one other person (Swede, Dane, whatever). One person sawing and one hauling the tree would prove most effective . . . that is, if we had enough saws. As it turned out, our equipment was evenly spread over two or three vehicles and the one vehicle with Bill Roth (devoted alumnus) and Kevin Sittauer (devoted) had not yet arrived. Bill's pickup contained many items essential to our job. One was swede saws. Another, the water (frozen . . . great). The last was the club's tree baler. In all my years of tree cuts, never have I seen that thing working . . . and this year was no exception. The reason for Bill and Kevin's lateness was, yes, the tree baler. This monstrosity blew out one of its trailer-like tires in its valiant effort to make it to Carl's. It made it, finally, and as it turned out, was not used the entire time. We used Carl's . . . again (it needed some exercise, anyway).



Cutting trees was all very fun, and baling them even more fun, but the most fun was loading them into a semi. This was a new twist to the tree cut experience. Here Carl had all these young, cold-hardy souls just dying to load a couple of thousand trees into a semi. Thank Heavens he had the opportunity to come through for the club once again.

As anyone will tell you, the highlight of the tree cut experience is the bonfire in front of that little shed on Carl's farm where everyone ends up sleeping for the night. The never-ending stories that gush from Carl's mouth and always seem to start with, "This you gotta hear. I'll never forget the time . . ." are also a main attraction. But this year, something was different. Five degrees below zero (and dropping) weather in an uninsulated "shack" would prove to be too much for the brave crew who wanted to spend the night. Carl felt that if he let us stay, someone might do something stupid, like die. The arguments of diluting our blood with alcohol to withstand the cold fell on deaf ears. So after a while of eating perma-frost wieners and hot chocolate (with ice cubes, of course), the remaining group of die hard foresters made their way back to Green Hall. We couldn't sleep in our beds that night. That would be giving in and we would not be achieving that ever popular "hard working forester" smell (or that "look what's growing in my armpit" mystique). To solve that problem, we hard-cores slept in the student room. It never felt so warm before and our toes were much appreciative.

Waking up the next morning was less than pleasant, needless to say. The thought of driving back to Carl's to be living zombies for another 48 hour day was unbearable. The nice part was the breakfast Carl buys for all his new slaves. We were late and when we arrived, Carl was sitting alone at a table for



ten. His body language was saying, "I wonder if those suckers are going to show up?" Well we did, and after eating and listening to a few stories about Carl's childhood (grades 13-16), we launched ourselves into another day of fun.

The second day proved to be even better than the first. Most of the crew petered out and we were left with about five people. On this day, the second day of terror, we were lead to Carl's second tree farm where he made us cut and bale more trees for the glory of the club. And in classic form, Carl made us pose for pictures against our wills. I hear prison wardens do that to their inmates for laughs. One picture, though, stands out in my memory. Betsy was mindlessly dragging some trees to the baler with Kevin behind her and I behind Kevin. Carl said, "Smile everybody," and with that, Kevin decided that it would be a good time to twist his ankle. On the ground, writhing in pain, I gathered that Kevin was in no mood to smile. I knelt by his side to see the damage first hand (finally, a lawsuit against Carl—we're rich!) Carl, about fifty yards away, starting ranting and raving about, "Kevin, get up and smile for the picture!" I don't see why we should have smiled. In the picture we're just a blob. In the end, Kevin got up and everyone was saved from a day in court.

This year's tree cut was much like those in years past in that we accomplished many things. We had fun. We discovered our cold tolerances. We discovered each others' hard working smell. We learned about a Christmas tree farm/operation from the best. We learned to appreciate the labor that loads those semis full of Christmas trees. We got our picture in the Daily. We strengthened the bonds of our friendships. And most of all, we got to spend time with a person who has been a friend to the club for a long time. Thanks, Carl. Your service to the club is invaluable and irreplaceable.



1985 Tree Sales

by Marc Roberts

It all started on a cold, crisp, late November morning. Nine foresters, armed only with a few bow saws, a knife, a ball of twine, and about 1500 Christmas trees awaited with baited breath the inevitable onslaught of eager customers. These brave foresters withstood the attack, and 18 days and about 3150 trees later, it was all over.

Tree sales certainly did go quickly this year. By the 18th of December the braintrust of the 1985 tree sales (Kevin Sittauer, Diane Thomforde, and Marc Roberts) decided it was time to close up shop and call it a season. The fact that only about 15 trees remained greatly influenced our decision. (Kevin is shown below modeling the best of the what was left.)

Sales went well this year, and that is about the only way that this year was similar to last year. One big difference is that last year they decided to play a game called "The Mystery Chairman" up until the last minute when Bryan finally ended up doing the job with fourth-year sophomore Dave Haugen. This year, the matter was decided well before things got rolling, over a few pitchers of Schmidt at the Museum in Cloquet. The other striking difference between this year and last was the weather. Last year, for those who don't remember, our biggest problem was that a good share of our parking facility (a dirt field) had become a lake. Unseasonably warm weather and December rainstorms plagued the tree lot, but fortunately not the sales, or the spirit of the workers. I never once heard a forester complain about having to slish into ankle deep muck and water to push a customer out of our little Lake Larpenteur (at least not until the car was gone!) This year it was snow and sub-zero temperatures that prevailed. A snowstorm during the last night of November buried the trees, the



Waddy mean we ran out of balsam . . .



2000 more and we can eat lunch.



... there's plenty left.



"I'll take the six foot forester, but you can cut him down to a five-footer?"



Santa Legler with his fans

lot, and any hope of opening for sales that day. Once we got the lot plowed and the trees dug out and ready to go, arctic temperatures set in. Fortunately, as was the case last year, the weather didn't freeze the spirits of the workers and sales went great. I think the sub-zero temperatures and knee deep snow may have even pushed our sales along some. There's nothing like a fresh snow cover to put a person in the Christmas (tree buying) spirit.

Many people who normally cut their own trees visited us this year. More than once I heard someone say "you're crazy if you think I'm gonna plow through waist deep snow and freeze my — off just to get a Christmas tree!"

All in all, despite the deep snow, the frozen trees, the frozen workers, the frozen water in the coffee pot, a Santa Claus with a frozen beard, and many other minor setbacks, we managed to sell all but the ugliest of our trees (we even sold some of *them!*).

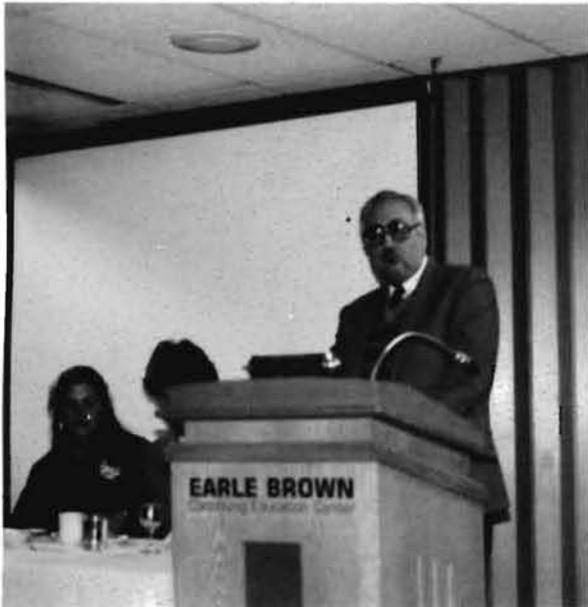
Thanks to a lot of enthusiastic help, we had one of the best years since tree sales began more than thirty years ago. My fellow chairs (Kevin and Diane) and I would like to thank the 45 foresters and the faculty members who contributed their time to tree sales this year. We would also like to extend a special thanks to Carl Vogt, who again this year was an invaluable part of our operation, right down to the last nip of his homemade brew he simply calls "Grog." (We still want the recipe!) We enjoyed working with tree sales this year and hope it goes as well in the future.

Forester's Day 1986

by Mark Reed

This year, Foresters' Day began Friday, January 24, with the Jack and Jill competition. After the dust had cleared, or shall I say donut crumbs, the winners were Bryan Pike and Sharon Raetz.

That night, the Foresters' Day Banquet and Awards Ceremony was held at the Earle Brown Center with Bryan Pike and Betsy Lowe as masters of ceremony. The guest speaker was Dr. Al Alm, who presented an entertaining look into the college's past. Forester of the year was Edwin Kallio. Uncle of Paul was awarded to Dr. Edward Sucoff, and the Son of Paul, this year, was awarded to Kevin Sittauer.





Forester of the Year Mr. Edwin Kallio

The University of Minnesota College of Forestry recognized Mr. Edwin Kallio for his dedicated work in Forestry and forest research in Minnesota. As a Project Leader for the Regional Economics of Forest Resources Project of the Forest Service's North Central Forest Experiment Station in Duluth Mr. Kallio collected information and developed economic models needed to assess alternatives for growing, harvesting and utilizing forest resources. These models provided direction to aid in improving the economic and social well being of people in Minnesota and the northeastern U.S. In addition, in his 15 years as Project Leader, Mr. Kallio initiated numerous research studies important to Minnesota citizens. Some of his most noteworthy work over the past five years include:

- 1) Income and expenditures of the forest products industry in Minnesota
- 2) Information for Timber Management planning
- 3) Opportunities for replacing fossil fuel with forest residues in northeastern Minnesota
- 4) Timber availability on nonindustrial forest lands

Mr. Kallio also helped to develop and was involved with over 20 cooperative studies with the University of Minnesota. These studies focused on Minnesota forestry and forest use problems. During his career Mr. Kallio authored or co-authored more than 50 publications that have benefited forest managers.

Saturday morning came (a bit earlier for some than others due to late skit practice) and the faculty whipped up some of their famous pancakes, even though no one had a recipe. The faculty put on a skit about the tree lot followed by a skit by the undergraduates (Mr. Robert's Neighborhood) about the faculty.

Then it was time for the field events which were kicked off by Jack and Jill cutting off the first cookie. The winners were:

EVENT	WINNERS
2-MAN BUCK	(1st) Quintin Legler, Tim Kennedy (2nd) Kevin Heikila, Jim Gustafson (3rd) Marc Roberts, Bryan Pike
2-WOMEN BUCK	(1st) Betsy Lowe, Sharon Raetz (2nd) Laura Held, Lois Pfeffer (3rd) Joanie Carlson, Diane Thomforde
JACK AND JILL BUCK	(1st) Phil Stringer, Sharon Raetz (2nd) Bryan Pike, Betsy Lowe (3rd) Jim Gustafson, Audrey Koltes
1-MAN BUCK	(1st) Quintin Legler (2nd) Phil Stringer (3rd) Marc Roberts
MEN'S SNOWSHOE	(1st) Bryan Pike (2nd) Kevin Sittauer (3rd) Kory Cease
WOMEN'S SNOWSHOE	(1st) Sharon Raetz (2nd) Sue Booth (3rd) Cindy Hopper
MEN'S KEG TOSS	(1st) Marc Roberts (2nd) Quintin Legler (3rd) Robb Collett
WOMEN'S KEG TOSS	(1st) Sharon Raetz (2nd) Betsy Lowe (3rd) Diane Thomforde
LOG ROLL	(1st) Quintin Legler, Bryan Pike (2nd) Tim Hanson, Steve Hodek (3rd) Robb Collett, Gregg Hove
TOBACCO SPIT	(1st) Marc Roberts (2nd) Don Mueller (3rd) Kevin Sittauer
MATCH SPLIT	(1st) Kevin Sittauer (2nd) Andre "The Giant" (3rd) Carl Vogt
TUG-OF-WAR	(1st) Andre "The Giant" (2nd) Kory Cease (3rd) Paul Anderson
SPECIAL EVENT	Team 1 Gregg Hove, Jim Radzak, Mark Reed, Robb Collett
(TIE)	Team 2 Cory Cease, Sharon Raetz, Bryan Pike, Jim Gustafson









The bean feed was held at the North Star Ballroom following the field events. After the bean feed, it was off to the Bel-Rae Ballroom for a little dancing to Wally Pickle.

Special thanks to those forestry students whose help and efforts made this Foresters' Day possible:

Tom Biltonen	Betsy Lowe
Marty Cassellius	Lois Pfeffer
Robb Collett	Bryan Pike
Dan Groen	Jim Radzak
Laura Held	Chris Schulte
Audrey Koltes	Kevin Sittauer
Amy Krieger	Diane Thomforde
Mary Lazor	

The forestry club would also like to thank those who donated prizes: *Midwest Mountaineering, Bullwinkles Saloon, Sgt. Prestons of the North, Twin City Saw and Service, Books Underground, Williamson Bookstore, Boise Cascade, Outdoor Store, Cruise-Master Prisms, Ben Meadows, Shakey's Pizza, and Art Works.*



Recreation Resource Management Club

by Erik Petersen

The RRM Club started 1985 off with a get-acquainted gathering at Dr. Knopp's house in September. We had a chance to meet and talk with alumni of the program. In February we had a re-organizational meeting and planned a ski trip. In March we went to William O'Brien State Park and braved high winds on the ski trails. Inside a smoky shelter, we discussed management policies with the park director. This spring we hope to do some volunteer work in Voyageurs National Park. A bike trip is also in the plans for this summer. This has been a year of reorganization for the RRM Club. The future looks bright for next year.



Technical Association of the Pulp and Paper Industry

by Mark Weber

University of Minnesota's TAPPI section slowly built a stronger foundation during the 1985-86 school year. The group was guided by a new faculty Director, Dr. Robert Rouda and a new host of officers: President Mark Weber, Vice President Robert Fleck, Secretary Matthew Iwen, and Treasurer Steven Ellertson.

Efforts were turned toward student enrollment and preparation for TAPPI's National Meeting, which took place in Atlanta, Georgia, March 2-5. Ten students represented the University at the meeting. They presented a slide show of University events and scenery, along with research and development projects from studies and summer internships. They also demonstrated computerized simulation software which was developed by Dr. Rouda for the Pulp and Paper Industry.

Other TAPPI events took place in early February with a speaker from Waldorf Corporation addressing the students on good interviewing practices. We also toured Waldorf Corporation, a paper recycling plant in St. Paul that produces food grade boxboard and corrugated medium.

The end of the school year was marked by the election of new officers and a senior send-off picnic and party.



Forest Products Scholarship Banquet

A total of sixteen forest products students received scholarships at a banquet held at the St. Paul Campus on October 15. The scholarships were awarded for academic achievement and professional promise.

Ten of the students received Paper Science and Engineering Scholarships. A Paper Science and Engineering Scholarship is \$600 per quarter or \$1800 per academic year. The students and their sponsors are: Anthony M. Belanger, Long Lake, MN (Potlatch Foundation for Higher Education); Steven M. Eilertson, Britt, MN (North Central PIMA); Robert J. Fleck, Willmar, MN (Sunds Defibrator, Inc.); Matthew L. Iwen, Minneapolis, MN (Blandin Paper Company); Brian A. LaBrash, Roseville, MN (Consolidated Paper Foundation, Inc.); Paul R. Olson, Minneapolis, MN (H.B. Fuller Company); Keith A. Sowada, Little Falls, MN (Potlatch Foundation for Higher Education); Mark E. Strohfus, Eagan, MN (Nalco Chemical Company); Mark J. Weber, Sheboygan, WI (Champion International Corporation); David H. Williams, Lauderdale, MN (The Beloit Foundation, Inc.)

Six students received Forest Products Scholarships; these scholarships are associated with the Marketing, Production Management, and Wood Science and Technology Specializations of the Forest Products Curriculum. The scholarship sponsored by the Forest Industry Fraternity of Minneapolis and St. Paul is \$1000 for the academic year. The scholarships sponsored by Andersen Corporation and WCCO AM/FM/TV are \$1500 for the academic year. Receiving scholarships were; Scott Johnson, Virginia, MN (Anderson Corporation); Tom Lochner, Chisago City, MN (Anderson Corporation); Kathryn Peters, Burnsville, MN (WCCO-AM/FM/TV); Gregory Schuyler, Coon Rapids, MN (The Forestry Industry Fraternity of Minneapolis and St. Paul); Donald Schwabe, St. Paul, MN (Anderson Corporation); and James Wurst, Shoreview, MN (WCCO-AM/FM/TV).

The high level of scholarship support for forest products students from industry sponsors is a reflection of the strong job market that graduates enjoy. Placement in professional level jobs within the forest industry is typically 95%+, according to Jim Bowyer, Professor and Head, Department of Forest Products.



Dayton Kirkham Scholars: David Peterson, Scott Dahl, Daren Purgill, Teresa Kuhens, Kristine Nelson, Not pictured: Sarah Jameson.

Dayton Kirkham Scholarship Program

by Philip Splett, Scholarship Committee Chairman

The College of Forestry, University of Minnesota, inaugurated a new scholarship program in the fall of 1982. This program recognizes and encourages high ability high school graduates to pursue a career in natural resource management. The program began with \$1,000 awards and has increased to six \$1000 awards in 1985.

These scholarships are a result of an endowment to the College of Forestry in Mr. Kirkham's will. The funds, including the scholarship monies, are to assist students and programs at the undergraduate level in the College of Forestry.

Dayton P. Kirkham entered the College of Forestry in 1925 and was interested and active in the Forestry Club and Xi Sigma Pi. Upon graduation in 1928, he accepted an appointment with the U.S. Forest Service and spent the next 17 years working for them. He is best remembered, however, for his help and guidance to South Korea while serving as a forestry advisor in that country until 1961. Kirk and other forestry advisors helped the country through fuelwood shortages, severe erosion and food shortages.

While an undergraduate student, Mr. Kirkham was awarded a \$50 scholarship to assist in the payment of his tuition and fees. He was so appreciative of that support, that he in turn vowed that if he was ever in a financial position to assist other undergraduate students in the College of Forestry, he would do just that.

The rest is history.

Green Hall Addition and Remodeling Project

The 1984 Minnesota Legislature approved \$656,000 to fund working drawings for an addition to the east side of Green Hall, and for remodeling a portion of Green Hall and a small area in Kaufert Laboratory. These working drawings are in their final stages of completion. The architectural firm working with us in this project is BRW (Bennett, Ringrose, Wolsfield, Jarvis, Gardner, Inc.)

The building project will provide updated laboratories for research and instruction, and needed office space and meeting room space. It would also allow for an expansion and consolidation of the Forestry Library and the Remote Sensing Laboratory.

The project will be completed in two phases. Phase I will consist of addition construction and some remodeling. \$285,000 has been appropriated for this phase. According to the project schedule, ground breaking for the addition should begin in May, 1986, and be completed in the fall of 1988.

The addition includes two stories of laboratories flanking the present Green Hall auditorium. These include laboratories for wood chemistry, water quality, biotechnology, mycorrhizae and tissue culture, and tree physiology. In addition to these laboratories, a corridor will lead from the north end of Green Hall to an addition located between Green Hall and Kaufert Laboratory. This addition will consist of four stories, one of which will be subgrade. Also, a tunnel connecting Green Hall and Kaufert Laboratory will be located in the subgrade level. At ground level will be a college computer center, and rooms for the student organizations (e.g., the Peavey office) and a student lounge. On the first floor will be the Office of Student Services and some office space for Forest Products graduate students. On the second floor will be the Dean's Office and a conference room. (For point of reference, the present Green Hall room 14 is on ground level; the auditorium is on the first floor; and the present library is on the second floor).

The funding request for Phase II of the project is part of the University's capital improvement request to the 1987 Minnesota Legislature. We are asking for about \$5 million to remodel the present Green Hall, which would include the Remote Sensing Laboratory, office space for Forest Resources faculty and graduate students, office space and a laboratory for Wildlife faculty, Forest Resource departmental offices, and the Forestry Extension offices.





Hubert H. Humphrey
Class of '39

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Lawrence Amell



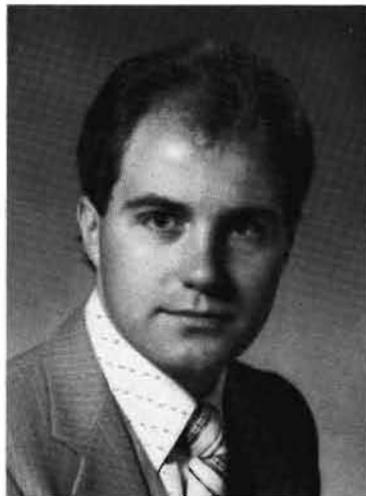
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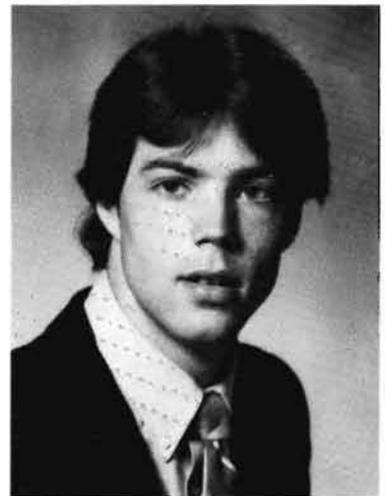
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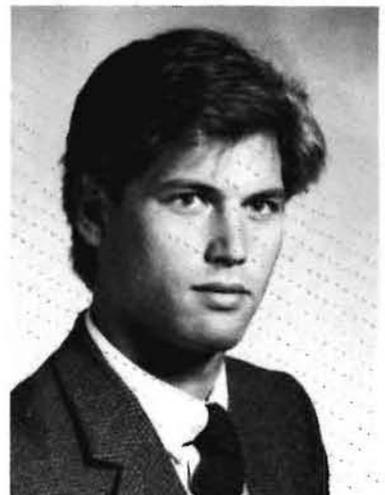
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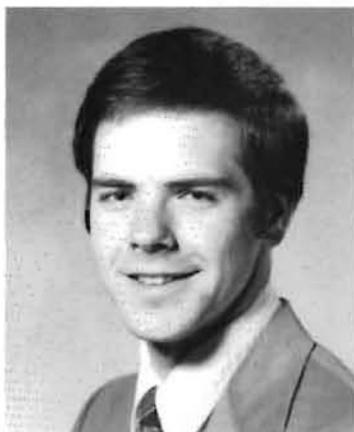
Robert O'Neill



Kathryn Peters



Gregory Schuyler



Keith Sowada



Mark Strohfus



Richard Warzeka



James Wurst

Forest Resources

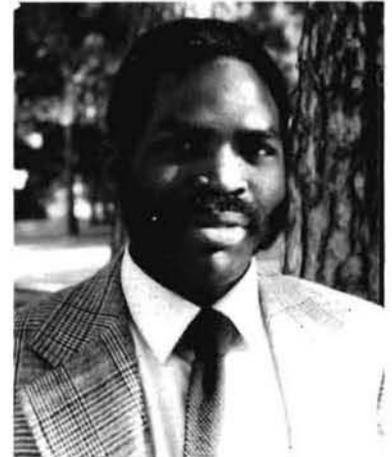
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Lisa Allison



Solomon Bankole



Karen Brand



Terri Brown



Scott Burns



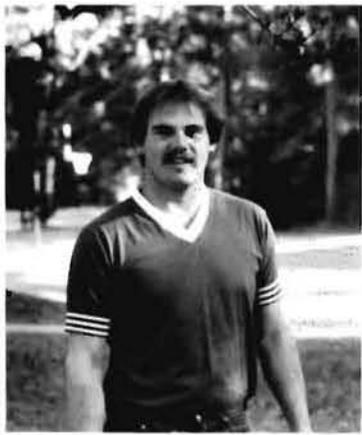
Nancy Butterfield



Joan Carlson



John DuPlissis



Timothy Edgeton



Gerald Fiedler



Annette Francis



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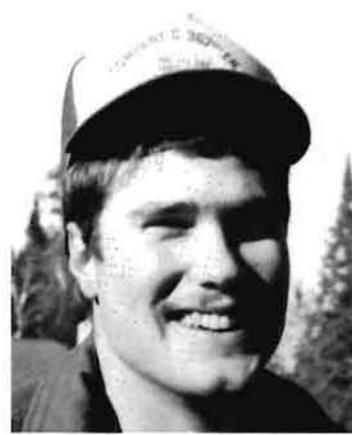
Janet Jarnefeld



Linda Johnson



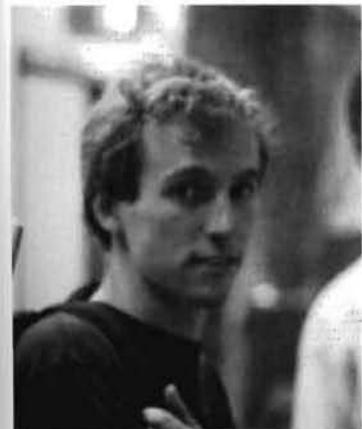
Kurt Kluegel



Quintin Legler



Elizabeth Lowe



Thomas Maertens



Zaccheaus Ogunfolami



William Olson



Bryan Pike



Sharon Raetz



Marc Roberts



Peter-Jon Rudquist



Kevin Sittauer

Not Pictured:

- Ojo Babalola
- Jeffrey Hipkins
- Nduka Omeoga
- Jeffrey Palmer
- Soren Petrek
- Jerry Richards
- Michael Ryan
- Jeffrey Shroeder



Diane Thomforde



Patricia Topley



James Veiman



Kathy Ward

Fisheries and Wildlife

Graduating Seniors

Not Pictured:

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Paula Berglund
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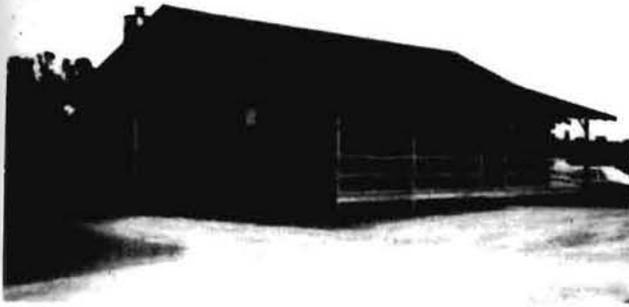


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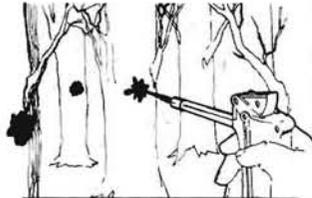


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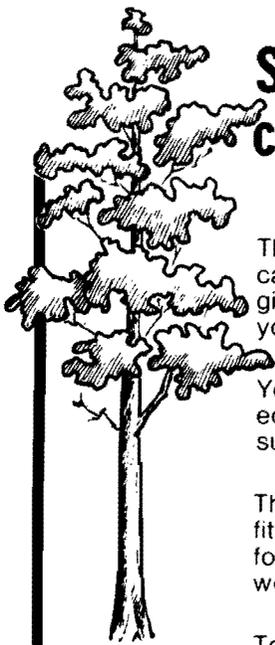
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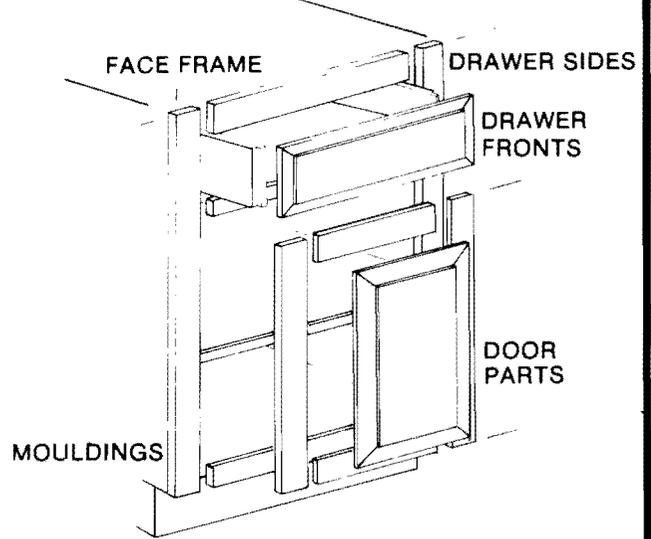
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The Gopher Peavey: A Note from the Editors

It's been a busy year. We have tried to accomplish many things in this year's yearbook. The first was to be as representative as possible of the college; all three departments getting equal coverage. This was a good dream, but hard to bring about. The problems were that some of the student activities in the FW or FP departments were minimal or non-existent. Not being very visible to us, it was very difficult to try and track them down to enter something into the book. Some student clubs actually did not want to put anything in the book because of lack of activities. This would appear to give the book a Forest Resources slant—something we were out to stop. In this regard, both of us have failed—the clubs and the Peavey.

Another item that we attempted to modify was the inaccurate faculty sections. We are proud to have been able to come close to complete faculty representation in this book. Faculty are a hard bunch to work with. It appears as though some do not appreciate being considered as part of the faculty as they are unwilling to complete a simple write-up on themselves or stop 30 seconds for one photo. It is our foolish opinion that the world's problems can surely be patient for another thirty seconds for a single photo. It is also our opinion that to be included in this annual is to be considered a tribute (and a responsibility) to their position. It is regrettable that in a school where the student's education is "job one" that some of the faculty are so unapproachable. We salute those faculty of all departments who unselfishly gave of their time (whether it was ten minutes or ten hours) to help our cause.

Our special sections were an attempt to make the book more enjoyable to read. By getting more people involved in the book, we hope to interest more people into the reading the book. Also, the section on the new building should be of some interest to the reader.

This may be a time capsule: some of our work was done on microcomputers. Their word processing programs can prove to be a useful, time saving tool. It is just one more instance where technology has stepped in to make our lives easier.

We would like to thank, foremost, the Student Services Office for helping us in our quest to put out this book. John Bell and his staff have had to be the most help to us. Over a year ago, John took us in under his wing, and transformed us into the mean editor types we are today. We offer a special thanks to those two expert typists and proofreaders in John's office. Sandy and Vicki have performed above and beyond the call of duty. Not only can they type, but they can transform the dirtiest of coal into the brightest of diamonds (not all the copy given to them was perfectly edited and legible). Behind every two editors, there are typists who are smarter than they are.

We would also like to thank all those who were contacted and wrote something for this edition. Dr. Ek was more than helpful on many occasions. Phil Splett lent a hand on various items, also. We would also like to thank last year's editors, Sharon Raetz and Betsy Lowe, for being around to answer our questions.

We would mostly like to thank our staff, and above all, Robb Collett. Robb was rustled into being business manager and, before he knew it, head photographer and a real idea man for the book. He did everything. He helped on most every aspect of the book and did far more than we ever should have asked. Thanks for being there, Robb.

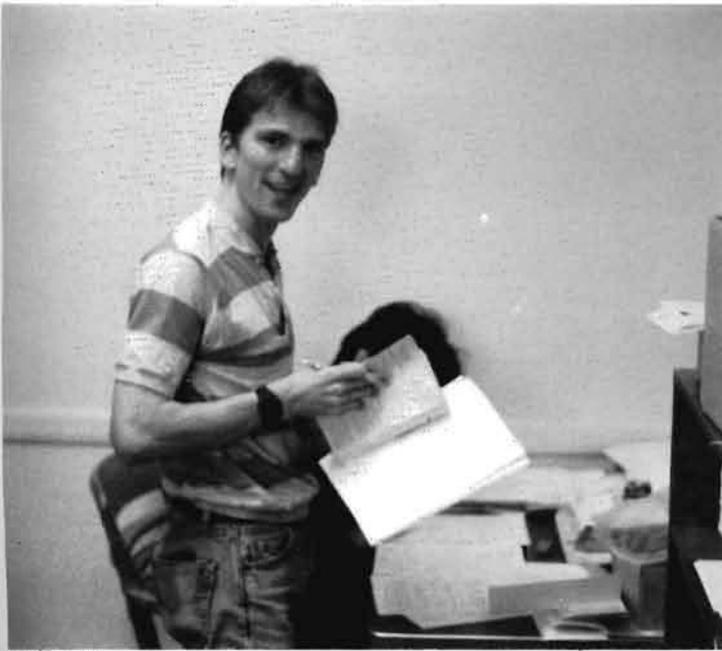
We hope you enjoy the book and we give our best wishes to the new editors and staff for 1987.



Audrey Koltres



Lois Pfeffer



Mark Reed



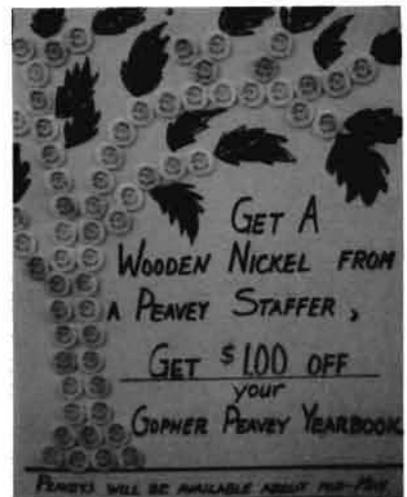
Laura Held and Robb Collett



Christopher Schulte and Thomas Biltonen

1986 GOPHER PEAVEY STAFF

- Co-editors: Thomas Biltonen
Christopher Schulte
- Business Managers: Robb Collett
Monte Rude
- Photographers: Robb Collett, Laura Held,
Betsy Lowe, Mark Reed,
Kevin Sittauer, Henry
VanOffelen
- Staff: Lyle Koenig, Audrey Koltes,
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A Look Back . . .



