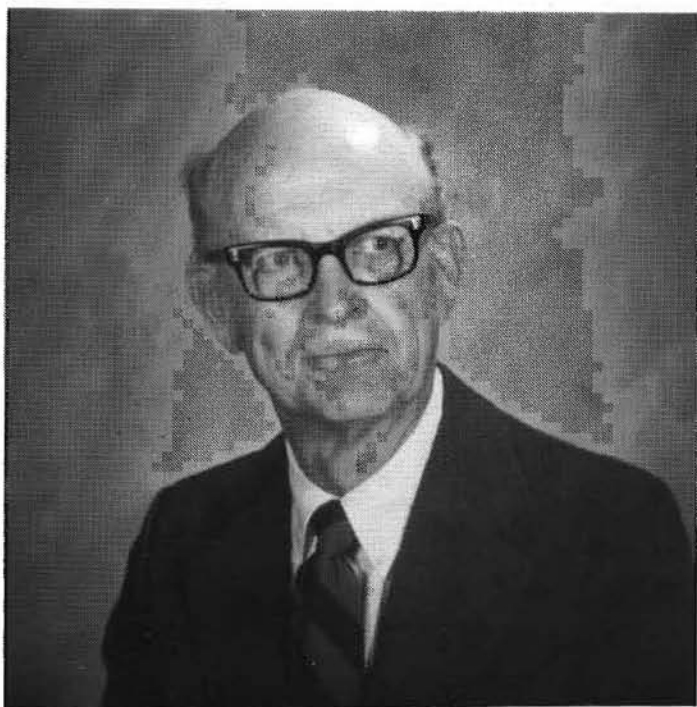


Gopher Peavey 1987

I went into the woods because I wished to live deliberately, to front only the essential facts of life, and to see if I could not learn what it had to teach and not, when I came to die, discover that I had not lived.

Henry David Thoreau
From *Walden*



Dr. Alvin R. Hallgren

Dr. Alvin R. Hallgren, Coordinator of the Cloquet Forestry Center, will be retiring June 30, 1987 after nearly forty years of service as a forester and forestry professor. Born and raised in St. Paul, Minnesota, Dr. Hallgren received his BS in forestry (with distinction) from the U of M in 1949, after having served in the U.S. Navy from 1942-1946. He went on to receive his MS from Yale University in 1950. From 1950-1959 he worked as a forester and superintendent of wood procurement for the Crossett Company in Crossett, Arkansas.

Dr. Hallgren returned to the University of Minnesota in 1959 to pursue a career teaching forestry. He received his PhD from Minnesota in 1967. As a College of Forestry faculty member he taught courses in introduction to forestry and timber harvesting, and conducted research in timber management, management alternatives for northern Minnesota forests, and timber harvesting. In addition to being the Coordinator of the Cloquet Forestry Center, a position he has held since 1975, Dr. Hallgren also spent time administering the College's job placement program and directing the Itasca Forestry Session.

Dr. Hallgren and his wife Dorothy have two children and four grandchildren. Their son Steve also pursued a forestry career and is now on the forestry faculty at Oklahoma State University. Their daughter Kathy (married to a forester) is pursuing a teaching career and lives in New York State. It is too early to tell if any of the Hallgren's four grandchildren will head into forestry also!

Over the years Dr. Hallgren has been very active in several professional and service organizations such as the SAF, the MFA (of which he is currently a Director), and the Cloquet Kiwanis Club. He also served on several important committees including the Forestry Committee of the Arrowhead Regional Development Commission, the Minnesota Timber Law Committee (as chair), and the Carlton County Rural Area Development Forestry Committee.

Dr. Hallgren is an avid outdoor enthusiast! He enjoys gardening, wilderness backpacking and cross country skiing. He is even known to have tried winter camping when temperatures dropped to +60° F! Dr. Hallgren also enjoys reading and photography.

Dr. Hallgren views his forestry career as having been pleasant and enjoyable. The highlight of his career is being a faculty member at the University of Minnesota's College of Forestry. His advice to those wanting a career in forestry academia is this: break away from the classroom for awhile to gain some experience before continuing on in school.

Frank Irving is a native of Plainfield, New Jersey. He received a B.S. degree in agriculture from Rutgers University in 1948 after several years of service in the Marines during WWII. He then came to Minnesota where he completed a B.S. in forestry in 1949 and a Master's of Forestry in 1950. Frank joined the Wisconsin Conservation Department in 1950 as a District Game Manager and worked in that organization until 1955. At that time he returned to the University of Minnesota to pursue work on a doctoral degree in forestry. He served as instructor in the School of Forestry from 1955 to 1960 when he received his Ph.D. and was appointed assistant professor. He was promoted to associate professor in 1963 and professor in 1965. He served as head of the Department of Forest Resource Development from 1973 - 1974 and as Director of Graduate Studies in Forestry from 1975 to 1987.

Frank taught many courses during his time on the faculty in the College of Forestry. Most prominent among these were the fire course, forest administration and forest policy. He served on many college, Institute of Agriculture, Forestry and Home Economics, and University committees and governance bodies over the years. He has always been interested in students and their educations as resource professionals. Many present and former students as well as colleagues on the faculty have benefited from Frank's insights and experience in analyzing issues and problems of a professional and sometimes personal nature. Not one to believe in pat answers he has often sought to help others reason through to answers that they felt comfortable with as solutions.

Always sparkling with sage sayings, there is seldom a situation for which Frank does not leave one with some thought provoking comment. Perhaps one of these most remembered pieces of advice is that, "It's not what you don't know that hurts you as much as what you think you know that just ain't so."

Service to the professional and natural resource organizations has been a hallmark of his career. Frank has been active with the Minnesota Department of Natural Resources as a consultant on civil service matters, examinations for resource professionals, and in the selection of individuals for important administrative posts. He also has been advisor to a number of organizations on the use of fire in resource management. He recently assisted both the Minnesota DNR and the Superior National Forest on just such matters. He has been active over the years with the Minnesota Chapter of Nature Conservancy.

Frank and his wife Jean have three daughters and six grandchildren. He and Jean recently bought a cabin on Deer Lake in Wisconsin and have spent the past summer and many weekends there. Frank enjoys many kinds of hunting, trap-shooting, and marksmanship with a rifle. He also likes to fish in a non-competitive relaxed manner just enjoying the outdoors.

He is a most interesting companion to be with on an excursion in the field for he has a vast knowledge of plants and animals to go with his understanding of forestry and forest practices. Widely read and interested in the general as well as the specific, he is an interesting conversationalist as well.



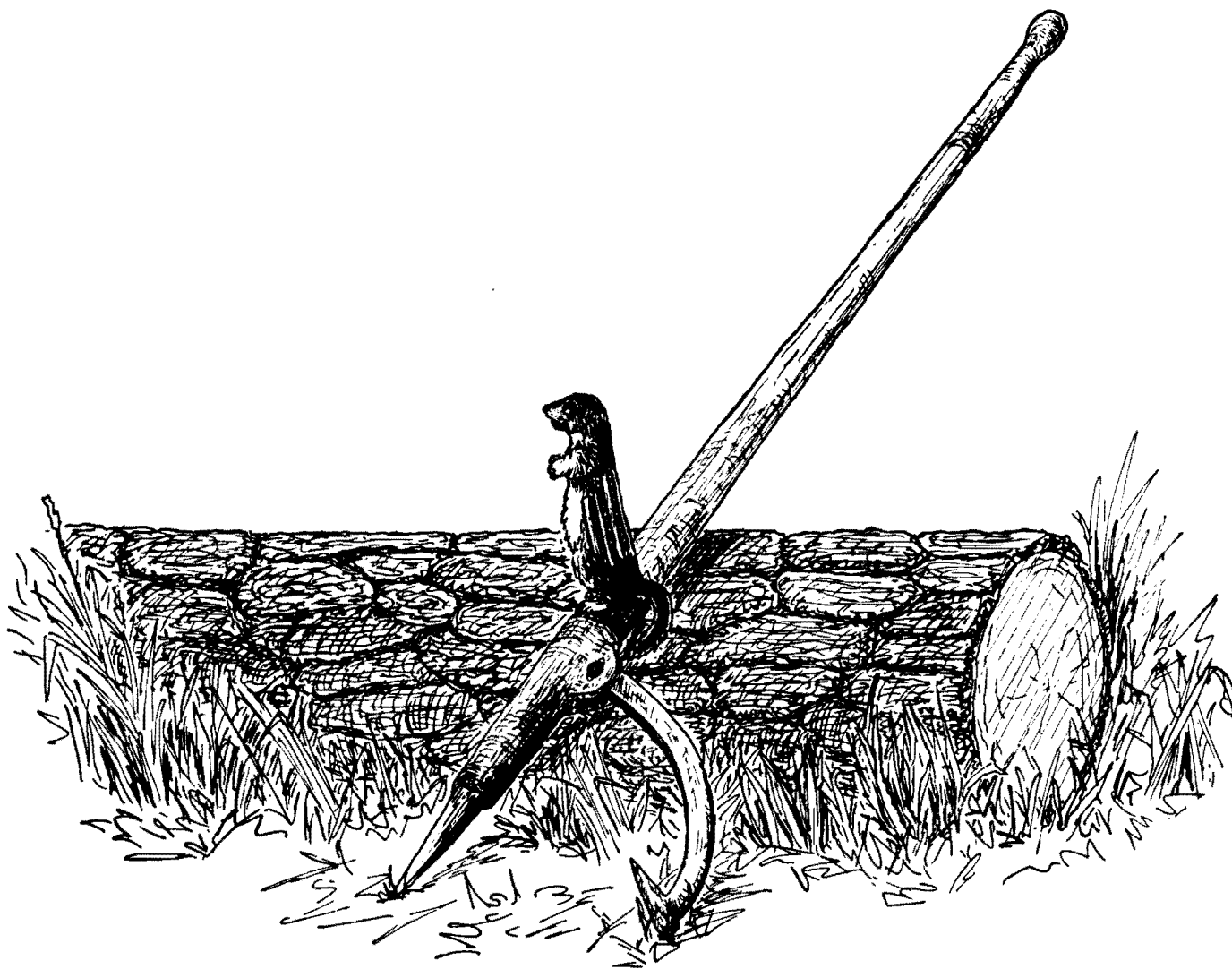
Frank D. Irving

The winning photo in our cover photo contest was submitted by Michael Anderson, a Fisheries and Wildlife senior. This photo was taken at the University's Lake Itasca Forestry and Biological Station.

Gopher Peavey 1987

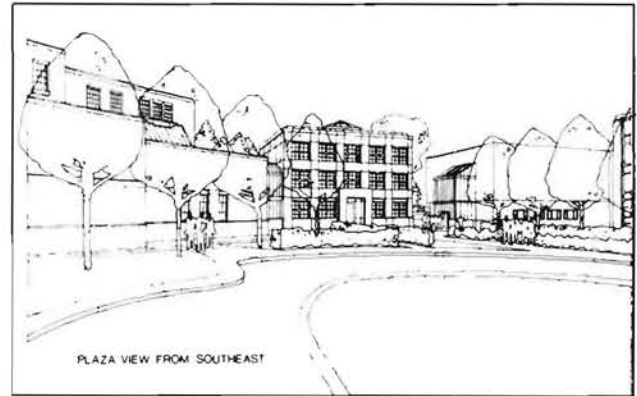
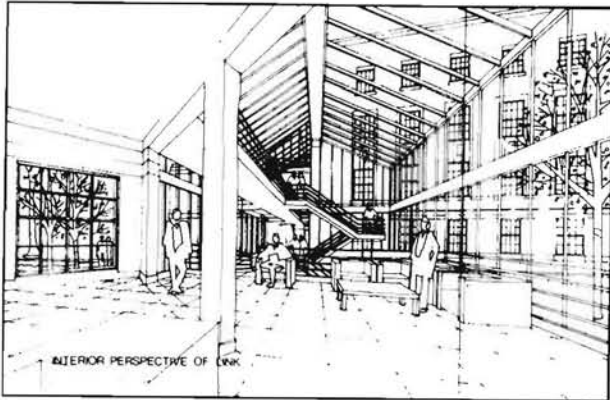
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GREEN HALL ADDITION

College of Forestry • University of Minnesota • Ground-Breaking Ceremony • October 28, 1986



Green Hall project

Total Cost of Project		
Working drawings – \$656,000 funded 1984	Phase I – \$5,285 funded 1985	Phase II – \$4.76 million requested 1987

Rated as one of the top three forestry schools nationwide, the College of Forestry has earned its reputation through the contributions of its faculty, staff, and graduates to science and practice in the fields of forestry, fisheries, wildlife, and forest products.

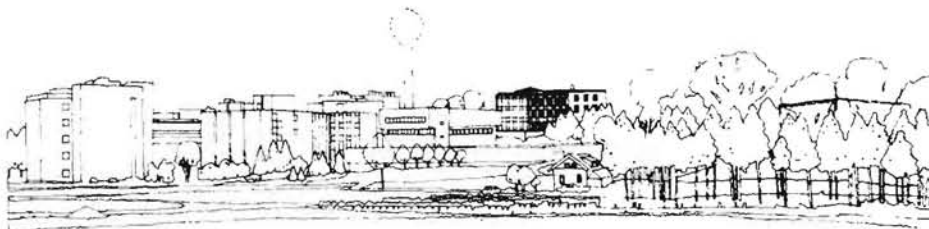
The only institution in Minnesota that offers a bachelor's or graduate degree in those fields, the College of Forestry currently enrolls about 325 undergraduate and about 120 graduate students. About half its graduates practice their profession in Minnesota; the quality of education they receive will be reflected in the way Minnesota's forests and forest industries are managed.

The expansion of college research programs – particularly developing more laboratory-based research projects in fields like forest hydrology, silviculture, tree physiology, and forest genetics – and the increased reliance on computers, remote sensing, and other specialized equipment make modern research laboratory a necessity for the college to meet current and future forest management research needs.

Quality laboratories also increase the college's ability to teach students state-of-the-art concepts and techniques and to attract and retain outstanding faculty.

Forestry outreach efforts of the college and the Minnesota Extension Service provide continuing education for forest professionals and other education for forest professionals, and other education programs for nonindustrial private forest land owners (who control about 40 percent of the state's forest land), loggers, small sawmill owners, wood products marketers, teachers, and special commodity demand exists for forestry outreach, but currently the college doesn't have enough space for an expanded extension program.

Constructed in 1938, Green Hall served as home to nine faculty and staff members of the Division of Forestry. Currently the College of Forestry with its three departments – forest resources, forest products, and fisheries and wildlife – employs more than 50 faculty and staff. The Minnesota Extension Service forestry unit with offices in Green Hall has grown from one specialist to six specialists. These increases in teaching, research, and service activities magnify the need for more space and other building improvements.



The Green Hall Addition is the first part of a two-phase addition and remodeling project for the College of Forestry. The addition will provide new research laboratories for water quality, biotechnology, wood chemistry, stress physiology, and hydrology/soils; an expanded and consolidated Forestry Library; a collegiate computer laboratory; and offices and meeting rooms for programs and activities central to the college.

Designed by BRW, Inc., the new structure will encompass approximately 19,904 square feet of usable space and will be connected to Green Hall and the Kaufert Laboratory of Forest Products and Wood Service. The research laboratories will be two stories high, flanking the present auditorium on the east side of Green Hall. The computer laboratory, offices, and meeting rooms will be enclosed in a three-story building connected to the north end of Green Hall by a walkway and to Kaufert Laboratory by an underground walkway. The new Forestry Library will be one level below ground, also connected to Kaufert Laboratory by an underground walkway.

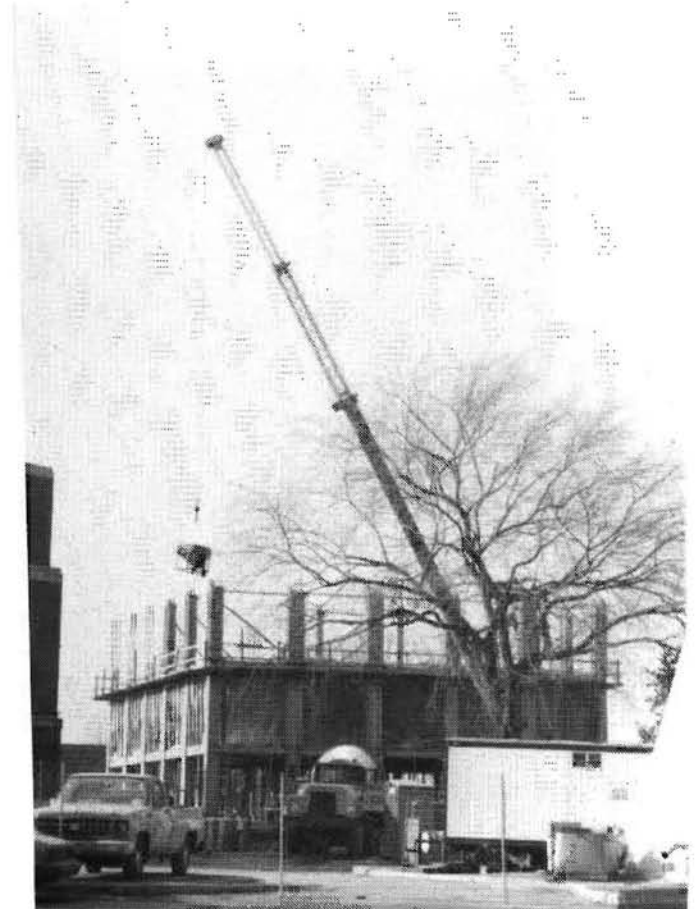
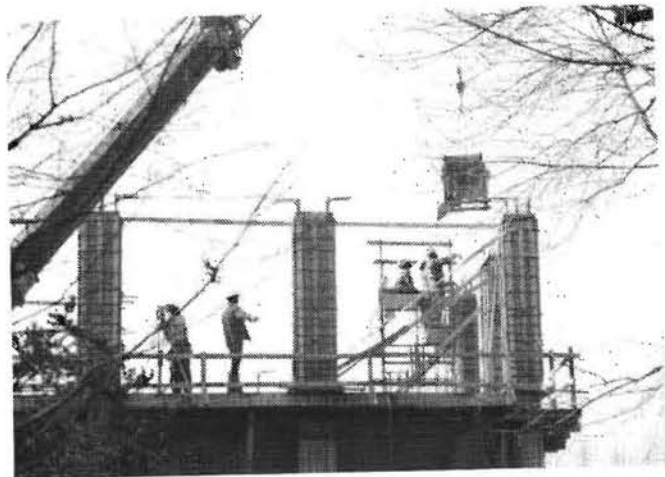
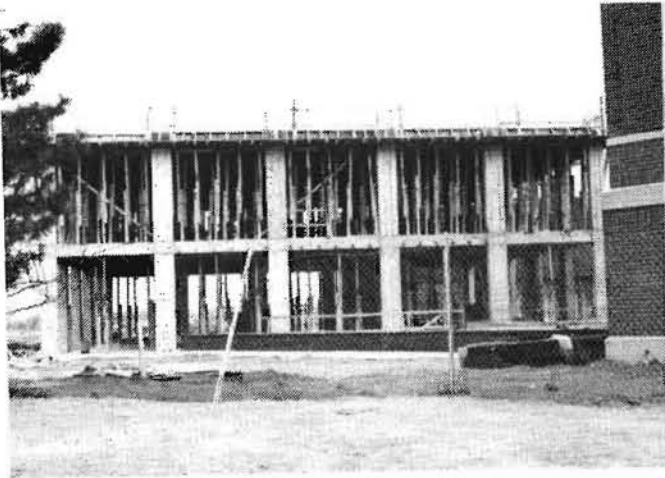
The Green Hall Addition and Remodeling Project was a University working drawing, capital request item submitted biennially to the Minnesota Legislature beginning in 1973. Working

drawing funds of \$656,000 for both the addition and remodeling were appropriated in 1984. The University decided to phase in the construction and remodeling portions of the project beginning with the 1985 - 87 biennial request. Phase I was funded by the Legislature at \$5.285 million in 1985.

Construction of the Green Hall Addition began this fall. Completion of Phase I is expected during late 1987. Linda McCracken - Hunt is the project manager. The general contractor is Loving Associates, Inc. Members of the Building Advisory Committee are Richard Skok, Alan Ek, Edward Sucoff, Kenneth Brooks, and Ann Mayhew.

Phase II will provide more laboratory, support, office, classroom, and conference room space for College of Forestry students, faculty, and staff, as well as consolidate and modestly expand the Remote Sensing Laboratory of the Institute of Agriculture, Forestry, and Economics.

Crucial to effective use of the space gained by Phase I, Phase II involves remodeling approximately 30,000 square feet of space in Green Hall. Phase II funding of \$4.76 million is a priority in the University's 1987 - 89 Capital Improvement Request. The estimated completion date is late 1989.



1986-87 COLLEGE OF FORESTRY DEAN'S REPORT

Dean Richard A. Skok



This past year has been a building year at the College of Forestry. And this time we mean it literally. Construction actually began in mid-October 1986 and was heralded with a groundbreaking ceremony on October 28 attended by nearly 200 friends of the college. The brief program featured Lieutenant Governor Marlene Johnson and Regent Wenda Moore.

At this writing in mid-April the new building situated between Kaufert Lab and Green Hall has been topped off (with a white pine, I might note) and the slow process of mechanical and electrical installation is underway. The two lab wings on the back (east side) of Green Hall are about one-half completed in terms of exterior walls. We are told that we will be able to occupy the facilities by the end of 1987.

The main building will house the Forestry Library, college computer center, student commons, student organization offices, office for student affairs, one conference room and one seminar room, the dean's office, and the overflow graduate assistants from Kaufert Lab. The lab wings will include two forest biology research and teaching labs, a water quality lab, a wood chemistry lab and a biotech applications lab.

Phase II of this project is nearly complete on the architect's drafting table. The request for the remodeling of Green Hall itself is before the 1987 Legislature and we should know the outcome within the month. Assuming the Phase II request is funded, then remodeling will begin in the fall of 1987. This means everyone will be moved from the building for a year in order to expedite the work of remodeling. No one looks forward to such a disruption but the end result should prove worthwhile.

Strategy for Focus has been a major planning activity of the University this past year. Each collegiate unit was asked to develop a planning statement for the five year period 1987-1992. The guidelines were established partially in the University's Commitment to Focus Plan that has been widely discussed inside and outside the University. There were also budget level assumptions that established reallocation and retrenchment boundaries.

The planning process will not be completed for another 6 to 8 months but our initial document has been submitted. It proposes integrating the two separate undergraduate majors in fisheries and wildlife into one common major. It also proposes that the college become an entry point for undergraduates with an interest in natural resources but who have not yet settled on a major field.

The University is still debating the issue of entry for high school graduates. At this time there are seven "ports" of entry on the Twin Cities campus; the College of Forestry is one of these. There essentially have been seven sets of

entry requirements as a result. The goal is to reduce this number. One proposal suggests that Forestry along with two other colleges move to a senior college, professional program status. That would mean that entry to our majors would occur once a student attains junior status and the required prerequisites.

The University has also moved to uniform standards of preparation for all undergraduate students. This includes two years of foreign language in high school as well as specified math, science, and English requirements. Entry will be permitted without these courses but graduation requires they be made up during the college years. These new requirements for all entering undergraduates will be in place by 1991.

Frank Irving has decided to take the University early retirement option effective July 1, 1987. This will be bad news to all the fish and hutable wildlife in Minnesota and Wisconsin. Frank has served for over 12 years as Director of Graduate Studies in Forestry and has taught courses in administration and fire since the 1950's. His service in many ways to the college and University has been exceptional, and an essential ingredient to the excellence of the programs with which he has been associated. His counsel and experience will be difficult to replace.

Al Hallgren who has served as Coordinator of the Cloquet Forest Center for 10 years and has been a member of the college faculty for over 25 years has decided to retire on June 30, 1987. During Al's period at the Center the pro-

grams in research and professional continuing education have substantially expanded. The early part of his period as coordinator were the high enrollment years at the Cloquet forestry sessions with as many as 120 students accommodated in the double fall and spring offerings. Al's tenure at the Center has seen that location increasingly become an attractive and welcome site for graduate assistant and faculty research. The Cloquet Forest during this time has also come under a long term management plan in support of the research and teaching mission of the forest with the guidance of Ron Severs. Al also has helped establish a Cloquet Forest Advisory Board to provide counsel and guidance to the increased service from the Center.

New staff additions are highlighted in the reports from department heads.

One final exciting item to report is the completion of the endowment for the Frank B. Hubachek Sr. Chair in Forestry. This Chair is endowed at in excess of \$1.6 million. We are now in the process of beginning the search for a person of distinction in the field of forest ecology, as the first holder of this Chair, F.B. Hubachek, Sr., for whom the Chair is named, passed away in December, 1986. He was a long term supporter of the college's programs in wilderness research and of the Wilderness Research Center near Ely, Minnesota.



DEPARTMENT OF FISHERIES AND WILDLIFE

1986 in Review

Ira R. Adelman, Department Head and Professor



Teaches Environmental Physiology of Fishes. Current research is on thermal requirements of hybrid (striped x white) bass, the effects of environmental factors on growth and metabolism of fishes and effects of nutrition on lake trout reproduction.

In 1986 the U.S. Congress authorized the establishment of a U.S. Fish and Wildlife Service Cooperative Research Unit in the department. The cooperative research units are a three-way partnership between the state fisheries and wildlife management agency (in our case the Minnesota Department of Natural Resources), the U.S. Fish and Wildlife Service, and the University. The Fish and Wildlife Service provides the personnel, the University provides an administrative framework and academic departmental home and facilities, and the state agency provides research funding. The co-op unit concept is a mechanism for coordinated efforts to solve common resource management and conservation problems.

The considerable support given to the proposal by conservation organizations, alumni and others through their communications with the Minnesota Congressional Delegation was instrumental in getting the authorization through Congress. The Delegation gave its unanimous support to the proposal for a Minnesota unit and although it failed in the House of Representatives, Senator Durenberger was able to get it accepted in the Senate. Unfortunately, no appropriation was provided for personnel. During the coming year we will again seek help from all interested groups and individuals to pressure Congress to provide this funding. Please lend your support.

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. He also received a grant due to begin in July, 1987, from the Legislative Commission on Minnesota Resources (LCMR) to study the impact of mosquito control on waterfowl. Gordon Gullion, our resident grouse expert, is continuing his research on identification of chemicals produced by aspen which may function as defense mechanisms against ruffed grouse herbivory. He is also studying the effect of changes in forest habitats on wildlife, particularly ruffed grouse, with the intent of developing guidelines for commercial timber harvesting that would enhance grouse populations. His thirty years of research at the Cloquet Forestry Station is world renown. Dr. Yosef Cohen uses modern mathematical and computer techniques to study both fish and wildlife communities for the purpose of optimizing management and predicting future changes in abundance. He has recently completed an analysis of the ten waterfowl species in the midwestern flyway and is working on an analysis of the relationship among the fish species in Lake Superior. He is also examining the responses of aquatic ecosystems to herbivory on submerged macrophytes. Dr. Anne Kapuscinski and a team of molecular

biologists and geneticists from three other University departments are attempting to transfer extra growth hormone genes to fish, hopefully to achieve very rapid growth. Initially these rapidly growing, genetically engineered fish will be beneficial in controlled aquaculture situations for the production of food fish. After considerable testing to insure no detrimental effects on natural populations, these fish may be valuable for gamefish stocking. This research will be supported for two years starting July, 1987, by a grant from LCMR. Dr. Thomas Waters has been studying streams throughout Minnesota gathering data on how productivity of fish and of their food supply is affected by environmental factors and using those findings to improve stream management. Valley Creek near Afton, has become a world renown stream through Dr. Waters' 25 years of pioneering research. In addition to game species, department faculty have a strong interest in non-game wildlife. Dr. Francesca Cuthbert is studying biology and conservation problems of Forster's tern, piping plover and osprey in northern Minnesota. Dr. David Smith is concerned with dispersal patterns and genetics of tigers on wildlife refuges in India and Nepal. He is also attempting to develop techniques to increase game and non-game wildlife in agricultural lands in Minnesota. This work is in conjunction with the agriculture set-asides in the 1985 Farm Bill and Reinvest in Minnesota legislation. Dr. George Spangler has undertaken a new study funded by the Minnesota Department of Natural Resources to address the relationship between the degree of satisfaction experienced by anglers and their expectations of fishing success. Understanding this relationship will then enable an estimate of the effect of a limited public information effort to provide the public with realistic information about the fishery. Dr. Peter Jordan is studying the relationship of food resources to population trends of moose in Superior National Forest. During the past year he has been on sabbatical studying the similarities of moose management in Sweden in comparison to Minnesota, and in Israel developing a collaborative research project on the ecology of the desert porcupine.

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. The Fisheries and Wildlife Club has been active in the organization of this event as well as being involved in other educational and social activities.

DEPARTMENT OF FOREST PRODUCTS

1986 in Review

by James Bowyer, Professor and Department Head



Teaches 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.

In addition to the big construction project, this past year was marked by several changes in faculty and staff, the formation of a new housing technology center, expansion and reorganization of the Paper Science and Engineering Advisory Committee, and the launching of a major fundraising drive to support a larger and redirected forest products marketing program.

In October, John Haygreen, Professor and former Head of the Department, left Minnesota after a 23 year tenure to become an Associate Dean of the School of Forestry at Auburn University. The folks at Auburn evidently recognized what we have known all along – that John is about the best administrator to be found anywhere. What they apparently didn't recognize was that John would take our winter with him and then send Alabama's winter warmth back to St. Paul! John's departure followed by two months that of Henry Hall, a Senior Scientist and wood composites specialist. Henry left the University in August to pursue a chiropractic degree that he hopes someday will lead to the opening of his own practice.

On the plus side, several new faces can be found around Kaufert Lab. David Ritter joined the Department in October as an Assistant Scientist in the wood composites project. David comes to us from the University of Idaho where he is completing a Ph.D. degree in forest products. Our most recent faculty addition is Bruno Frank, a specialist in structural design and mechanics of materials. Bruno is in the final stages of completing a Ph.D. in Civil Engineering at the University of Minnesota. He has previous degrees in Civil Engineering from the University of Minnesota and the University of Liege, Belgium, and has three years experience as a structural design engineer. Bruno will teach the wood mechanics and structural design courses previously taught by Haygreen.

Speaking of new faces, two new forest products faculty and several graduate students will soon be in place. The 3½ year positions resulted from establishment of a new Cold Climate Housing Information Center that is jointly administered by the Department of Forest Products and the Minnesota Extension Service. The center was established to collect, catalogue, evaluate, and disseminate information relative to housing performance and technology in cold climates. Activities of the center will focus on energy efficiency of building systems, long-term performance of wood-based and other construction materials in highly insulated structures, indoor air quality, and impacts of various heating/ventilating technologies on energy use and building performance.

Under the direction of paper science and engineering program director Bob Rouda the paper science and en-

gineering program is being readied for a significant expansion. As a first step, the long-standing Academic Advisory Committee was incorporated into a new Paper Science and Engineering Council that includes financial and marketing committees. With an active membership of industry representatives from over twenty companies, the Paper Science and Engineering Council is helping to lay the groundwork for an expansion in student numbers, possible shifts in program emphasis, and increased funding of the program. We are optimistic that these efforts will pay off in the near term and lead to significant growth and an even better quality program.

Forest products marketing program efforts reached new heights in 1986. Through a special legislative appropriation a consultant was hired to help develop a new marketing assistance program aimed at mid- to upper-level managers and executives of small- to medium-sized wood products producers and distributors. Among the accomplishments was the development and presentation of two seminars: Marketing of Manufactured Wood Products I & II. Led by Mr. Orié Beucler, an experienced consultant to small business concerns and a specialist in analysis of financially ailing firms, the full day seminars were well attended and an unqualified success. Extensive documentation prepared in conjunction with each of the seminars will be used in ongoing marketing assistance programs. The past year also marked the kick-off of a major fundraising campaign to fund an Endowed Chair in Forest Products Marketing. Backed by a commitment from the University to match private contributions dollar-for-dollar, the Department is seeking to raise some \$1 million from private sources. A significant expansion of the academic forest products marketing program is planned as is the establishment of marketing oriented continuing education programs for industry managers and executives nationwide. Hopefully we will have a great deal to report along these lines by this time next year!

One other item concerning the marketing program relates to the Forest Products Marketing Scholarship Program. With extensive assistance from the Twin Cities Chapter of Hoo Hoo International, the marketing scholarship endowment has grown from about \$10,000 to over \$30,000 in only 9 months. The increased dollars will permit the awarding of several substantial scholarships each year and will help to attract bright young students to the forest products marketing and distribution industry.

The faculty, as usual, have been up to all kinds of things over the past year. While far more has happened than can be reported herein, a few of the highlights include:

Rolly Gertjansen's selection as national review panel member for the USDA Wood Utilization Competitive Grants Program.

Bob Erickson's travels to Guatemala, Indonesia, and China to work with various industries and forest products

institutes in wood drying research and problem solving.

Bob Rouda's selection as Chairman of TAPPI's Process Simulation Committee, and his stint as a Visiting Professor for a three month period at the Paper Science and Engineering Department at the University of Canterbury, Christchurch, New Zealand.

Elmer Schmidt's activity as a member of the International Research Group on Wood Deterioration and Protection and his service as national review panel member for the Wood Utilization Competitive Grants Program.

Tom Milton's election as Chairman of the Upper Mississippi Valley Section of the Forest Products Research Society.

Jim Bowyer's election as President of the Society of Wood Science and Technology.

In addition, it was a banner year for success in grant/contract procurement on the part of faculty scientists. Funds from outside sources increased 30 percent over 1985, serving to illustrate the top-notch reputation enjoyed by Minnesota faculty.

The strong job market that revved-up in '84 has continued very strong all through 1986 and into this spring. The down side of this is that we don't have enough people finishing-up this spring to begin to satisfy the industry demand for forest products graduates. A reminder though, to those of you out there who are in the hiring business — as our program continues to grow we need a steady availability of good summer, part-time, and coop-education jobs that allow students to learn more about the industry they are seeking to become part of. These people are generally highly motivated and make top notch employees. So keep us in mind!

We still have a number of copies of the 1985 survey of placement and salaries of forest products alumni. In this publication we have tracked salary development of graduates for up to 25 years. Anyway, if you would like to have a copy, just let us know.

As Porky Pig used to say — 'That's All Folks.' Actually, that's not all, but space limitations prevent any further expounding. So if you want the *full* story, you'll need to stop by and get the news firsthand. We'll hope to see you soon!

DEPARTMENT OF FOREST RESOURCES

1986 in Review

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.

Activity in the past year has focused on staffing changes, the Green Hall Addition and Remodeling project, tuning our instructional program and focusing research efforts. Buildings often remain constant for decades, but the curriculum and research and extension efforts are in constant flux that may not always be very evident.

Our newest faculty member is Sean Ahearn in remote sensing. He will be teaching Aerial Photo Interpretation and remote sensing courses. Sean comes to us from the University of Wisconsin where he recently obtained a Ph.D. in their remote sensing program. He has a strong background in forest management, and his specialties are digital image analysis and geographic information system usage.

Marna Butler-Fasteland has replaced Rick Iverson as the forest weed control specialist in the Vegetation Management Cooperative operating out of the Cloquet Forestry Center. Marna has experience in forest regeneration and vegetation management from her previous position with the Potlatch Corporation. Rick recently took a position with American Cyanamid Corporation. Assistant Professor Robert Dixon has also resigned to take a position with Auburn University. We're in the process of searching for a replacement with the emphasis being on biotechnology application in forestry. We are also recruiting a new faculty member in the forest management-economics-silviculture area to be housed at the North Central Experiment Station of the University in Grand Rapids. That person will work closely with our staff at St. Paul and Cloquet. There are a number of new graduate assistants in the Department. New research staff include Emily Chesick, research specialist in tissue culture; Laura DeWald, research associate in tree physiology; and Russell Henly, research specialist in forest economics and policy.

The department has continued strong research efforts in forest policy and economics, water quality with special emphasis on the Lanesboro watershed in southern Minnesota, and on forest regeneration, especially by application-oriented projects through the Vegetation Management Cooperative and new biotechnology application projects.

New continuing education offerings by faculty this year include a hands-on short course on "Microcomputer Applications in Forestry" led by Charlie Blinn, a "Selling Skills for Foresters and Other Natural Resource Professionals" workshop and "Loggers" workshops led by Scott Reed, and the 1986 Woodland Owners and Users Conference led by Mel Baughman. Tom Burk and Charlie Blinn have also developed a new course, FR 5110, Microcomputer Applications in Forest Management.

The major event of the past year was the beginning of the construction of Phase I of the Green Hall Addition and

Remodeling Project. Phase I involves the addition of two new lab wings on the back of Green Hall and a large new building between Green Hall and Kaufert Laboratory. The latter building will house the forestry library, computer center, student commons, conference space and administration. This building will help the linkage of college programs and, in particular, give faculty in the biology and hydrology areas excellent new facilities for research and for instruction. Laboratories for instruction in forest biology have long been needed. These facilities will also enable the Department to respond more effectively to needs for research on water quality, acid deposition, biotechnology application potentials, stress physiology and forest genetics. It further gives us stronger ability to interact with the tremendous campus-based research capability in the general areas of plant and earth science.

Notable accomplishments include the election of Professor Paul Ellefson as a Fellow of the Society of American Foresters and Professor Scotty Scholten's efforts to publish the Minnesota Association of Soil and Water Conservation Districts (MASWCD) Minnesota Tree Handbook. That handbook is a valuable addition for extension specialists around the state. Professor Emeritus Henry Hansen has recently led a week-long Elderhostel program focusing on natural resources at the Itasca Forestry and Biological Station.

Changes in the instructional program include the fine tuning of new courses, especially the FR 5120, Introductory Tree Physiology and Genetics course taught for the first time last year. The new FR 3250, Role of Natural Resources and Economic Development course is a popular new addition to the Twin Cities campus. Especially noteworthy is that David French, professor of plant pathology and forestry, has agreed to serve as the urban forestry program coordinator and handle the instruction in FR 5500, Urban Forest Management. Phil Splett will assist him in advising undergraduate students. David Grigal, professor of soil science and forestry, has taken over the instruction of the Cloquet course, FR 5216, Silviculture: Soil Site Relationships.

Professor Larry Merriam retired from his position on the faculty this last spring and moved to Oregon State University. Many of you shared a delightful evening toasting and roasting Larry's contributions here. Associate Professor Tim Knopp has moved to the role of coordinator of the Recreation Resource Management program, and we are searching for ways to expand the RRM staffing.

Notable faculty travel during the past year has been Professor Dietmar Rose's efforts as a forestry data base advisor to USAID's forestry/fuelwood project in Asia and his assistance to international project in Latin America. Last spring Tom Burk and I traveled to the People's Republic of China to assist the UN FAO Department of Forestry in a project dealing with the modernization of inventory and

planning techniques in Heilongjiang Province. Paul Ellefson, Russ Henly and Tim Knopp attended the IUFRO Congress in Yugoslavia. Associate Professor Jim Perry served as an advisor to water quality research projects in Africa and Asia. The department is also hosting two visiting faculty members from India, Dr. O. P. S. Bana and Dr. M. L. Bhat. Drs. Bana and Bhat have backgrounds in agriculture, and they are here for a year to learn how forestry programs operate. Upon their return to India, they will become part of an effort to establish several new forestry schools there. These international activities are an important enrichment of faculty experience.

In summary, the department sees the new facilities and changes in staffing as giving us an opportunity to be more effective in research and to provide improved forest biology instruction, particularly in greater "hands on" depth than we have been able to do. The University is also in a state of flux with its efforts at a "Commitment to Focus." That will require careful articulation on our part to see that the natural resources are given appropriate consideration in the University's planning. The changing agricultural scene in the nation and declining farm economy also suggests that many acres will shift to management responsibility by forestry and related natural resource professionals. The next few years will thus be challenging for us both within the University and in the region.

On your next visit, please look around. We have "decorated" the walls with descriptions of projects and faculty would be pleased to show you what we are doing. We hope to see you soon.

FACULTY

Fisheries and Wildlife



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.



Francie Cuthbert Associate Professor
Teaches Introduction to Fisheries and Wildlife Biology and Management. Research includes behavior, ecology and conservation of nongame birds.

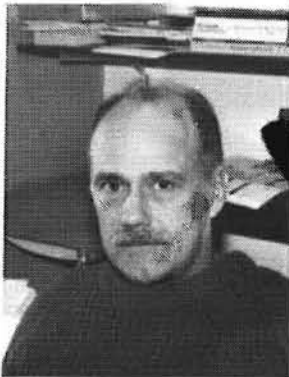
Peter Jordan Associate Professor
Was on sabbatical in 1986. In Sweden he continued cooperative research started earlier on the nutritional ecology of moose. While in Poland he helped organize an evaluation of radioactive contamination of wild game being consumed after Chernobyl. He also joined a research team in Isreal and studied the ecology of the crested porcupine in the Negev Desert.





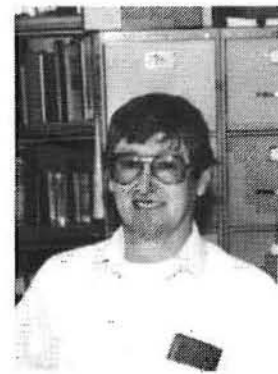
Anne Kapuscinski Associate Professor
Courses taught include Aquaculture and Conservation Biology: Genetic and Demographic Issues (starting Spring, 1987). Research is on quantitative genetics of fish, genetic engineering of fish, and aquaculture of cold-water fish. Extension specialist in aquaculture.

James Kitts Associate Professor
Each spring teaches Wildlife Management for Non-majors. Conducts workshops, seminars and field courses in Management of Woodlands for Wildlife. Organized and supervises the Minnesota Volunteer Woodland and Wildlife Advisor program. Instructs Master Gardeners, structural pest control operators, food processors and grain elevator operators in control of problem wildlife. Counsels urban and suburban landowners in methods of landscaping and management to attract desirable wildlife. Contributes to life skills of youth as a member of the National 4-H Shooting Sports Project Committee and in Minnesota as an instructor and judge for 4-H projects in Minnesota 4-H Natural Science Program. Current research includes bird nesting activities in shelterbelts and educational evaluation of youth marksmanship programs.



David Smith Associate 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.

FACULTY

Forest Products

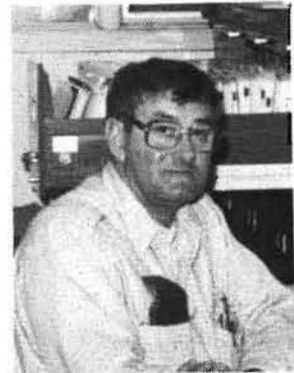


Robert Erickson Professor

Teaches 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 Gertjansen Professor

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



Lewis Hendricks Professor

During 1985-1986 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 light frame construction. Still conducts annual Lumbermen's Short Course (the 38th annual program was held in February).

Timothy Larson Graduate Research Assistant

Teaches Mechanical Properties, Wood-Fluid Relationships, Wood-Frame Building Systems and Materials, 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 in forest products utilization and marketing, with emphasis on wood drying and use of wood in construction. 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.



David Ritter Associate Scientist
Am currently in the process of completing the requirements of my Ph. D. from the University of Idaho. My research interests lie in the area of wood composites. I will be working for the most part with Dr. Gertjens in this area. I am also interested in the effects of different wood processing techniques on the structure of wood. In addition, I am assisting Dr. Bowyer in the instruction of Wood Structure and Identification. Other responsibilities include overseeing the operation of the Department's solid wood products laboratory.

Robert Rouda Professor
Teaches Pulp and Paper Process calculations (including the use of microcomputers for process modeling and simulation), Pulp and Paper Process Operations (applications of chemical engineering to industrial unit operations), 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 for the Forest Products course 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 1987 Lumbermen's Short Course.

Philip Steklenski Assistant Scientist
In the past year, taught Analysis of Production Systems. 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.





Sean C. Ahearn

Joined the faculty of the University of Minnesota on September 1, 1986. He will serve as assistant professor of remote sensing in the Department of Forest Resources. As such, he is responsible for conducting research and teaching undergraduate courses on remote sensing of natural resources.

His recent research involved the development of advanced techniques for digital image classification through the incorporation of artificial intelligence and expert systems technology.

Sean has worked in Indonesia on a United States Agency for International Development (AID) – funded program for technology transfer of microcomputer-based remote sensing image processing systems. The work included hardware integration and software development in the U.S. and installation and training in Indonesia.

Alvin Alm Professor (Cloquet Forestry Center)
Teacher 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.



Egolfs 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 Associate 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 N. Brooks Professor
During the past year he taught Forest Hydrology, Forest Hydrology-Field Application, Advanced Forest Hydrology, and Range Management. During Spring Quarter he taught a CLA Honors Colloquium: "Trees, People and World Hunger: The Role of Social Forestry and Watershed Management" with Drs. Hans Gregersen and Dietmar Rose. Assisted with two international educational programs during the year. Presented lectures at an FAO/Finland sponsored Workshop on Watershed Management in Arid and Semi-Arid Zones of SADCC countries from 7 - 18 April 1986 in Maseru, Lesotho. From 13 August - 5 September he lectured in a series of seminars in the Philippines, Thailand, Indonesia and Malaysia on Watershed Research and Management Practices. These seminars were sponsored by the ASEAN - US Watershed Project. With Dr. Hans Gregersen and members of the East - West Center, completed a book for FAO titled "Guidelines for Economic Appraisal of Watershed Projects." Research centered on peatland hydrology and the development of a peatland hydrology computer model.



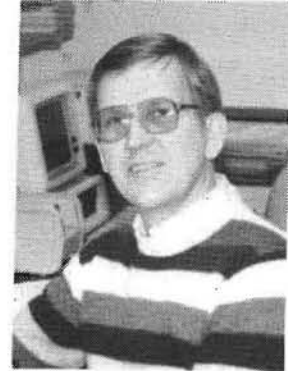


Thomas Burk Assistant Professor

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.

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 chaired the Society's National Convention Program Committee for 1987 - the year in which the SAF National Convention will be held in Minneapolis. In Fall, 1986, attended the 18th IUFFRO Congress in Yugoslavia. 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.

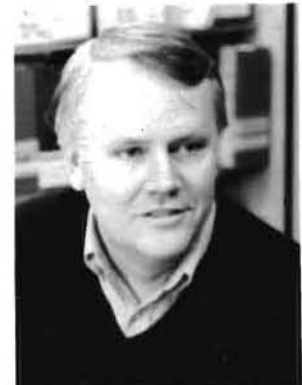


David French

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 Advanced Forest Soils and Silviculture: Soil-Site Relationships at Cloquet. Interested in forest vegetation – soil relationships, including nutrient cycling, especially nitrogen nutrition and cation depletion; productivity on peatlands; and relationships between soil map units and forest productivity. Past work has dealt with biomass estimation, effects of forest disturbance, and numerical classification of forest ecosystems.

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 Associate 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.

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*.





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, Nepal and West Africa. Results of these research efforts are transmitted to students and the public through published reports and through the above classes.

Dietmar Rose Professor

Taught Role of Renewable Natural Resources in Developing Countries, Timber Management Planning and Quantitative Techniques in Forest Management. Current research interests include forest planning models, regional timber supply modeling and development of management information systems for efficient dissemination of forestry research information worldwide. Currently developing several microcomputer programs in the area of forestry investment analysis, forest regulation, and forest planning. Planning workshops and short-courses in project analysis, forest planning, and data-base management applications in forestry. Continued to be active in international forestry projects. Working in a project to develop a global management information system for fuelwood. Providing leadership in IUFRO as project leader to a new project "Forestry and Rural Development" which addresses questions of economic development of developing countries. Participated in seminars and workshops in Yugoslavia, Costa Rica, Thailand, and Malaysia.



Scotty Scholten Professor

Teaches Important Forest Plants at Itasca, Farm and Small Woodland Forestry, and Conservation of Natural Resources. Research is on tree and shrub species, of known sources, being tested for use in farmstead shelterbelts, field windbreaks and under center pivot irrigation systems. Presently working on designs of shelterbelts to reduce snow damage on young trees and design of windbreaks to get more uniform snow distribution over cropland.



Philip Splett Instructor

Career Opportunities coordinator and Instructor. Teaches Conservation of Natural Resources, Forest Resources Orientation, 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.





Edward Sucoff Professor

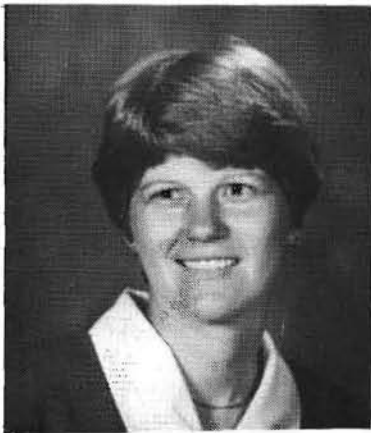
Teaches and learns from a great group of students in Tree Physiology and Genetics, Tree Physiology Lab, and Field Ecology at Itasca. Current research examines how acid rain affects trees and the physiology of water stress. Also involved in the Forest Vegetation Management Program.

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.



Cloquet Forestry Center Staff



Marna Butler-Fasteland Research Fellow; Forest Weed Control Specialist

Directs the Forest Vegetation Management Cooperative at the Cloquet Forestry Center. She is responsible for conducting forest vegetation management research and transferring research results to forest managers.

Marna has worked as a summer assistant for the Minnesota DNR, Division of Forestry, and as a forest research technician for the U.S. Forest Service.

Gorden Gullion Professor

Activities have been mostly involved with ruffed grouse and their management. This has included experimental timber harvesting in various configurations to determine the best options from both a biological and economic standpoint. This forest manipulation has been mostly directed at aspen management. Involved in assessing the impact of hunting on a grouse population. Teaches the Forest Wildlife Techniques Course to foresters who attend the Cloquet session, and participates in various workshops and training sessions in various parts of the country.





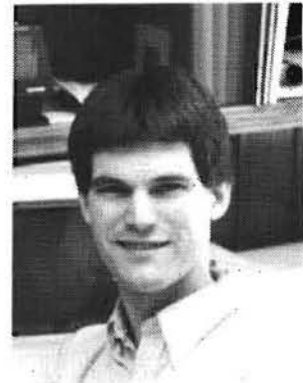
A. R. Hallgren Cloquet Forestry Center Coordinator

A. Scott Reed Instructor (Cloquet Forestry Center)
Instructor and Extension Forestry Specialist teaches Harvesting and Engineering during the Cloquet session and also coordinates the popular Logging Equipment Operation workshop. When not teaching, he is often in the field with loggers, forest landowners or procurement foresters conducting Extension Educational Programs. Recently developed programs include a forest management correspondence course for woodland owners and a comprehensive logging safety training program.



Ronald Severs Associate Scientist/Forest Manager
Current responsibilities include developing forest management programs for the Cloquet Forestry Center coordinating these programs with research activities at the Center.

Robert Stine Research Fellow
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.



Secretaries

Forest Technicians

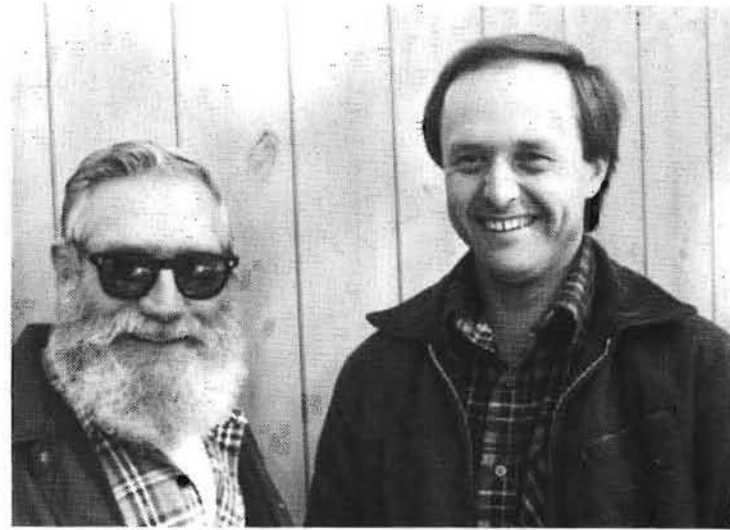


John Blanchard and Charles Kramer



Bonnie Jones, Karen Nelson, Phillis Bakka, Mary Ferguson

Maintenance



Gene Spicer and Mark Anderson

Kitchen Crew



Florence Meger, Marlys Tate, Alice Olson

OFFICE OF STUDENT SERVICES



Sandy Gibbs, John Bell, Vicky Mackerman, Bill Ganzlin

Secretary Student Services



Janine M. Settle

Librarians



Jean Albrecht

Cheryl Owens

Laura Brinkmeier

Forest Resources Staff



Forest Products Staff



(l-r: Lynda Tucker, Linda Prowatzke, Carol Laffoon, Emily Sundeen

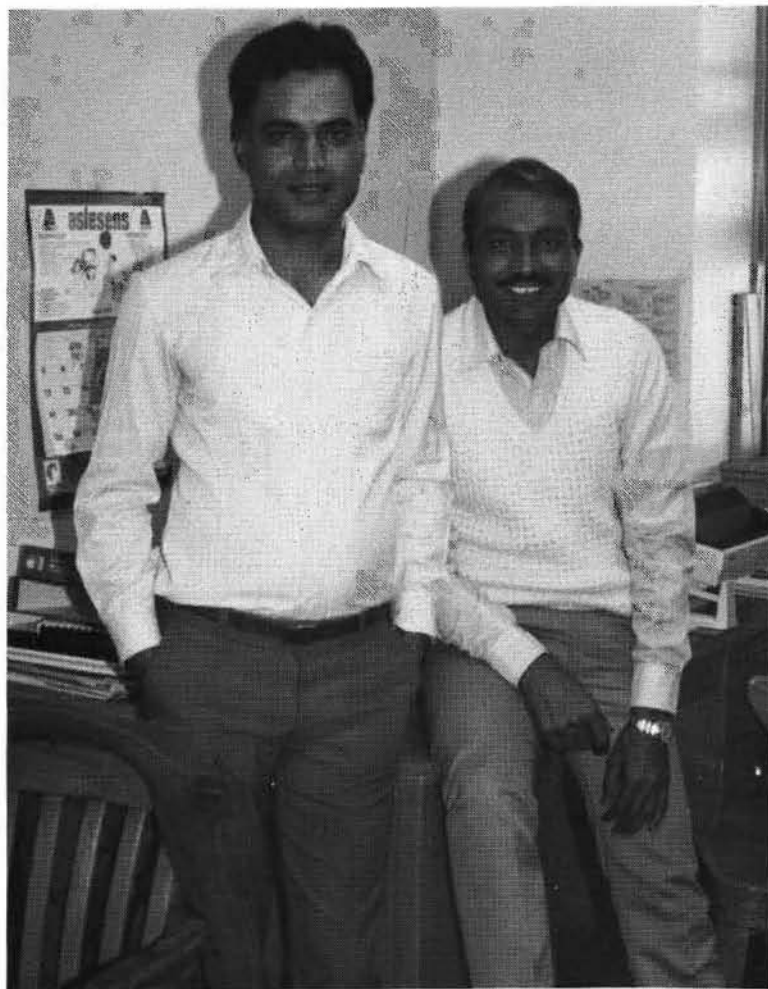
Kathy Phelen, Karen DeWanz, Gail Gangstee, Clara Schreiber, Mary Ann Hellman, Karen Kanda, Ruth Davidson, Janelle Schnadt

Fisheries and Wildlife Staff



(l-r: Roz Zippa, Norma Essex, Jay Maher, Jo Schroeder, Llewellyn Wright

VISITING FACULTY



M.L. Bhat Assistant Professor (Agronomy) at S.K. University of Agricultural Sciences and Technology, Shalimar Kashmir India. Teaches courses in Agronomy. Has worked in Nematology, Seed Certification Floriculture, Wheat Improvement Project, Background of Growth Regulators and Transpiration Suppressants under Dryland Conditions and has a practical knowledge of vegetable seed production. Before visiting the U.S., was in charge of the "All India Coordinated Agronomic Research Project" at Shalimar Campus. Presently is a visiting scientist under USAID program for a period of one year (September 1986 - September 1987) at the College of Forestry. The purpose of the visit is to learn nursery management and tree crop propagation in Forestry.

Om P.S. Bana visiting faculty member from India. Assistant Professor of Agronomy, G.B. Pant University of Agriculture and Technology, Pantnagar - 263145 Dist. Nainital (U.P.), India. Has taught agronomy courses (Crop Production II, Concepts in Crop Production and Crop Ecology), agroforestry elective courses (Farm Forestry and Forest Mensuration and Management) and new education course (Geographical Principles of History). Research interests and projects include "All India Coordinated Research Project on Agroforestry" and "Project on Effectiveness of Mixtalol (Paras Photosynthesis) in Improving Photosynthesis in Rice, Wheat, Soybean and Mustard." (Visit to U.S. is aimed to learning more about Forestry practices and administration.)



Graduates: Front-Tara Dale, Tim Tiplady, Paula Bergland, Lynn Erickson, John Vaida. Back-Larry Lewison, Malcolm Tisdale, Todd Grant, Tim Hanson, Paul Buck, Marty Cassellius, Phil Stringer.

**GRADUATION RECOGNITION
THURSDAY, DECEMBER 4, 1986
IN THE CHERRYWOOD ROOM
ST. PAUL CAMPUS STUDENT CENTER**

ORDER OF EVENTS:

RECEPTION	5:00-5:30 p.m.
DINNER	5:30
Program follows dinner	
OPENING REMARKS	John V. Bell Assistant Dean College of Forestry
FOR THE GRADUATING SENIORS	Phil Stringer Department of Forest Resources Timothy Tiplady Department of Fisheries and Wildlife
<i>Sweet Chance that Led My Steps Abroad</i>	Neil Conrad, Vocalist Vicky Mackerman, Accompanist

The Impossible Dream

**PRESENTATION OF
GRADUATES**

For the College	John V. Bell Ira R. Adelman, Head, Department of Fisheries and Wildlife James L. Bowyer, Head, Department of Forest Products Alan R. Ek, Head, Department of Forest Resources William K. Ganzlin, Office of Student Affairs
For the University	The Honorable Verne E. Long Board of Regents
<i>Hail Minnesota</i>	Neil Conrad, Vocalist Vicky Mackerman, Accompanist

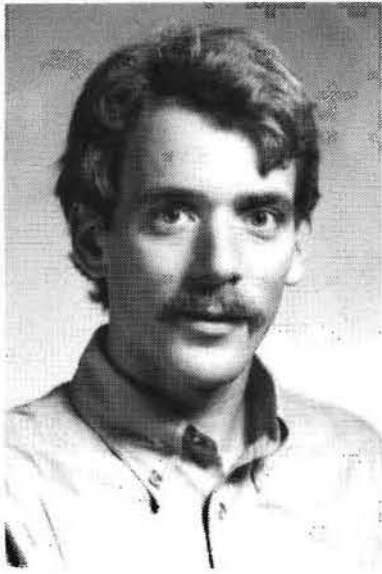
CLOSING REMARKS

John V. Bell

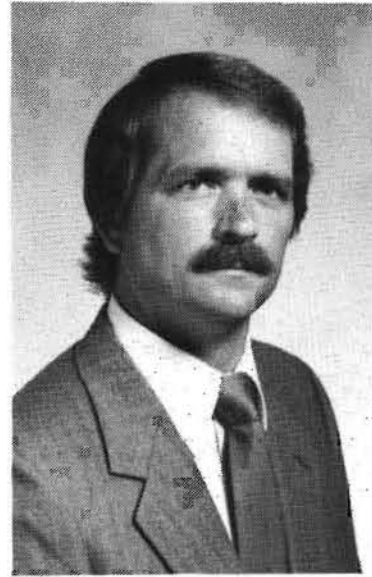
GRADUATES

Forest Products

Ph.D.

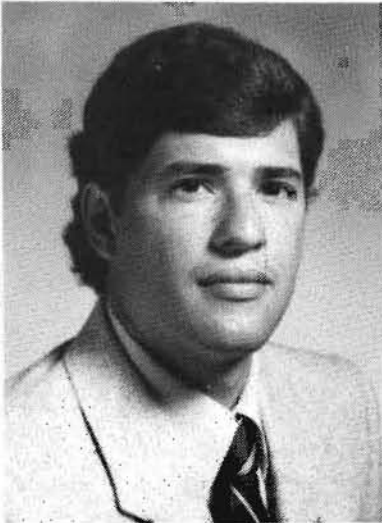


Theodore Garver

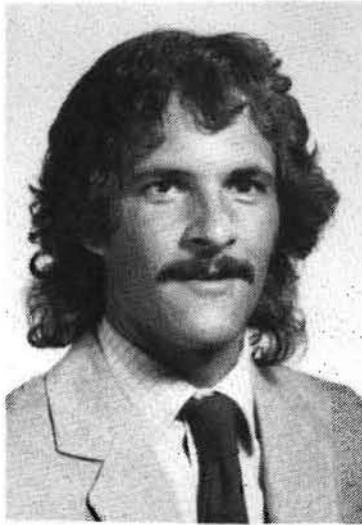


Tim Larson

Masters of Science



Bill Callas

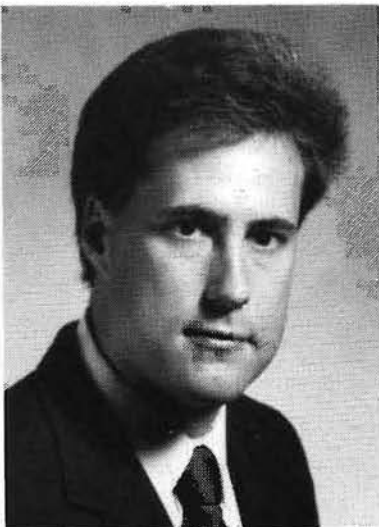


Mark Dietz

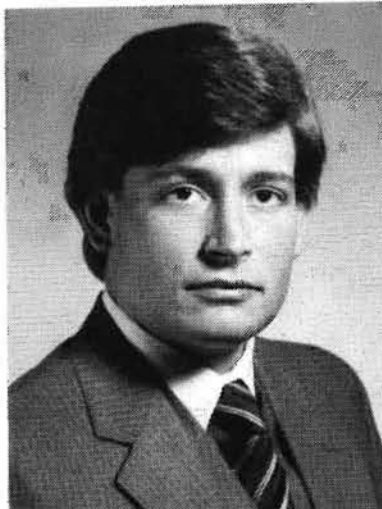


David McInerney

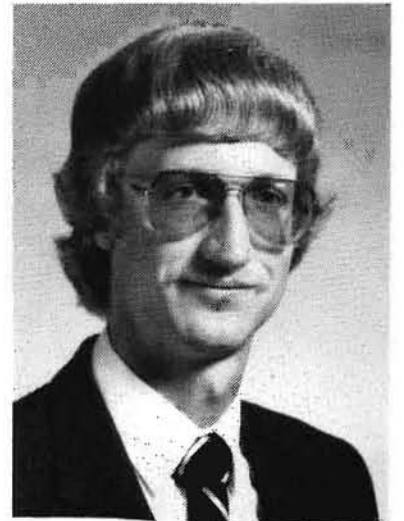
Bachelors of Science



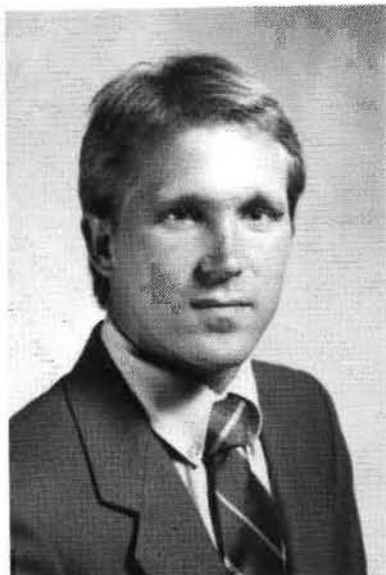
Anthony Belanger



Mike Flom



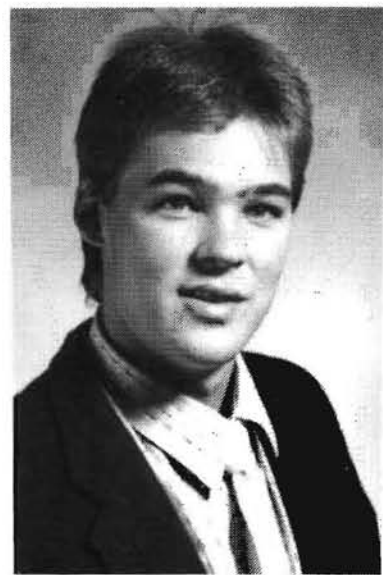
Todd Grabuski



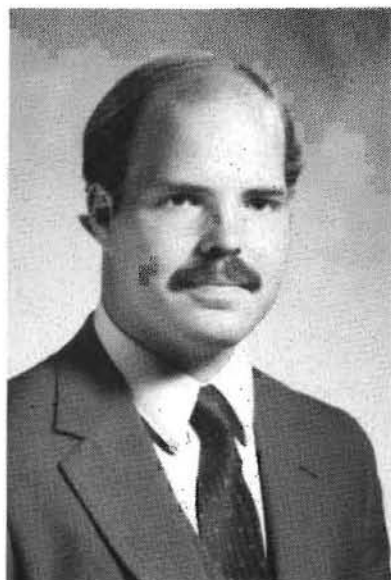
William Hall



Scott Heutmayer



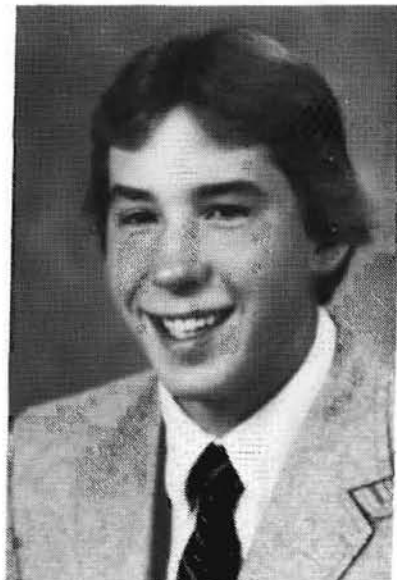
Steve Hoppe



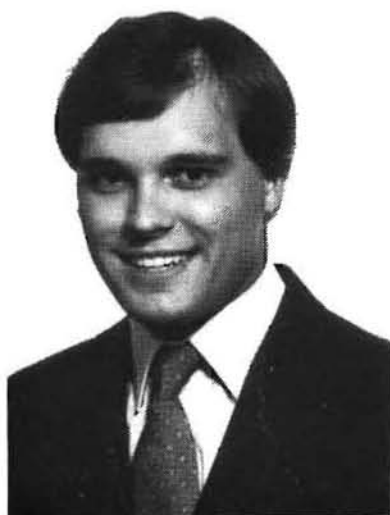
Doug Hyland



Brian Kopas



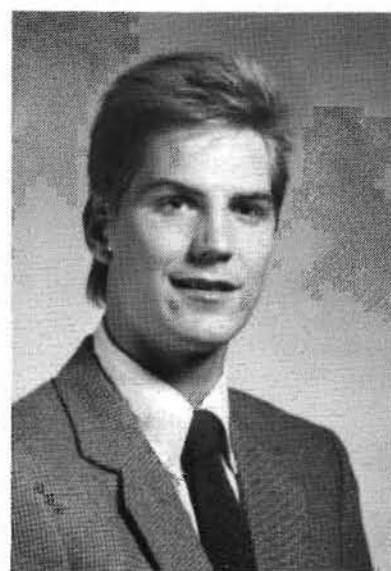
Dirk Kramer



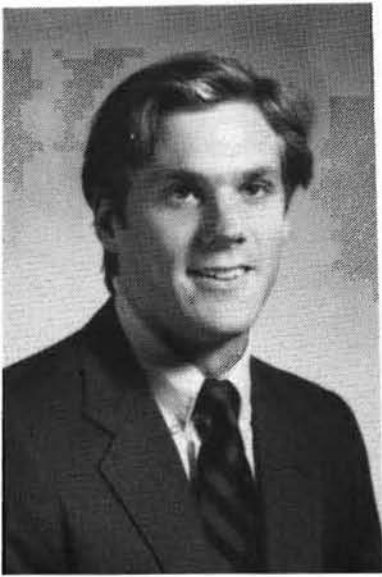
Brian LaBrash



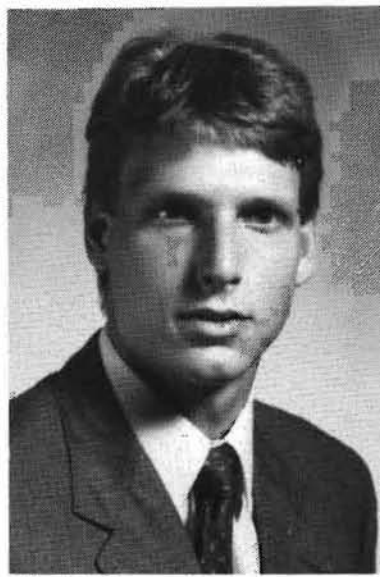
Tom Lochner



Donald Schwabe



Malcolm Tisdale



Mark Weber



Jim Wurst

GRADUATES

Fisheries and Wildlife

Bachelors of Science



FALL GRADUATES: Front-Tara Dale, Paula Bergland. Back-Tim Tiplady, Todd Grant, Tim Hanson

Not Pictured:

Michael T. Anderson
Craig A. Bublitz
Thomas K. Buhl
Steven J. Delehanty
Andrea J. Eliason
Robert P. Fashingbauer
Mark L. Gross
Mark C. Hove
Deborah A. Illies
William J. Meyer
Douglas A. Neeser
Maria B. Olson
John D. Paulson
Todd R. Luke
Mark J. Schendel

EMPLOYMENT OPPORTUNITIES

by *Phil Splett*

Graduates from the Forest Resources, Fisheries and Wildlife, Urban Forestry, Recreation Resource Management and Renewable Resource Science curricula find varying levels of job opportunities with a wide range of employers. Although there is a competition for jobs in these areas many graduates do find permanent professional positions related to their field of study within one or two years after graduation. After seeing placement information from other programs at the University of Minnesota including a statistic indicating a 60% placement rate for 1986 Institute of Technology (Engineering/ High Tech) graduates (programs that most people assume offer 100% placement) it occurs to me that our graduates do as well or better than many other majors. Certainly Forest Product majors, discussed in a separate article by Dr. Bowyer, rank near the top.

Forest Resources, Renewable Resource Science, Urban Forestry, and Recreation Resource Management

A 1986 survey of graduates three months following graduation indicated that 71% obtained employment (25% permanent, 46% temporary) in their field of study, 17% were employed in jobs unrelated to their field of study, 8% entered advanced educational programs and 4% other (Peace Corps, Armed Forces).

Nearly 60% of the Forest Resources graduates found employment in the state of Minnesota. About 25% found positions in the North Central region (states bordering Minnesota), with the remainder located in other parts of the United States and foreign countries.

The major employer groups were about equally divided between federal agencies 33%; state, county and municipal government 33%; and the private sector 33%.

The best employment opportunities are occurring in Urban Forestry and the more quantitative areas of Forest Resource Management. So far in 1987 I have noticed an increase in outdoor recreation related positions including several Cooperative Education positions (permanent job upon graduation) with the U.S. Army Corps of Engineers.

Fisheries and Wildlife

Fisheries and Wildlife Bachelor's degree graduates most frequently fill positions in county, state and federal resource agencies such as the State Department of Natural Resources, the U.S.D.I. Fish and Wildlife Service, U.S.D.A. Forest Service or the Bureau of Land Management with some employment available in the private sector. Beginning positions usually involve fisheries and wildlife population and habitat management, often with responsibility for environmental impact analysis.

Currently, permanent job opportunities for B.S. graduates are somewhat limited. Permanent employment with state agencies such as the Department of Natural Resources usually is the result of one or two years of temporary employment.

The same 1986 employment survey indicated that 60% of the wildlife graduates found employment in their field of study (20% permanent, 40% temporary) three months after graduation. In addition, 20% were employed in jobs unrelated to their chosen fields, 10% entered advance educational programs and 10% other

(Peace Corps, Armed Forces). Nationally, about 40% of B.S. graduates obtained permanent or temporary employment in natural resources and about 20% enrolled in graduate school. Employment opportunities for M.S. graduates is better, with about 65% employed in natural resources and 20% pursuing a Ph.D.

A similar number (60% of Fisheries and Wildlife graduates remained in Minnesota after graduation, with 20% finding positions in the North Central region and another 20% in foreign countries.

The primary employer of Fisheries and Wildlife graduates continues to be government agencies such as the U.S. Fish and Wildlife Service and the Minnesota D.N.R.

The graduate from Forestry and Fisheries and Wildlife programs (which face competitive job markets) who are successful in finding employment typically have two or more of the following factors working for them:

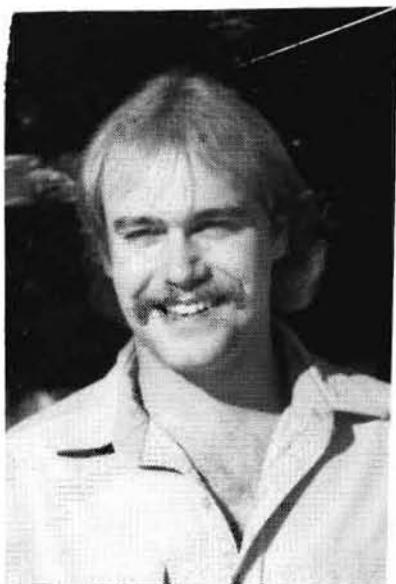
- (1) **Flexibility** – in where you are willing to work and for whom.
- (2) **Grades** – Maintaining an above average GPA of 3.0 or higher.
- (3) **Related Work Experience** – before graduation, e.g., summer forestry/recreation jobs.
- (4) **Job search preparation** – and professionalism including communication skills and interview performance.

I can't stress enough the importance of these four factors and how they relate to graduates getting jobs.

GRADUATES

Forest Resources

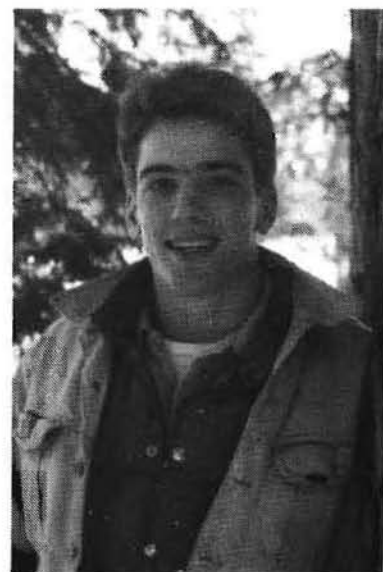
Bachelors of Science



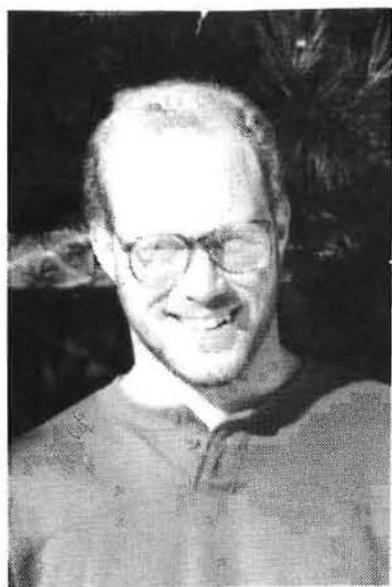
Scott Anderson



Tom Biltonen



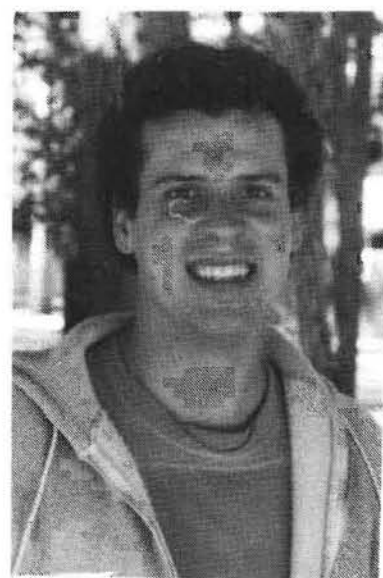
Marty Cassellius



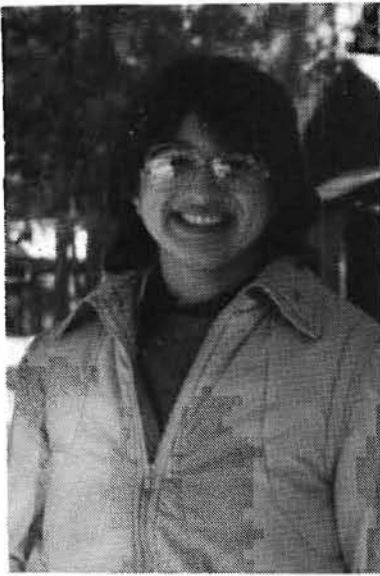
Joe Clark



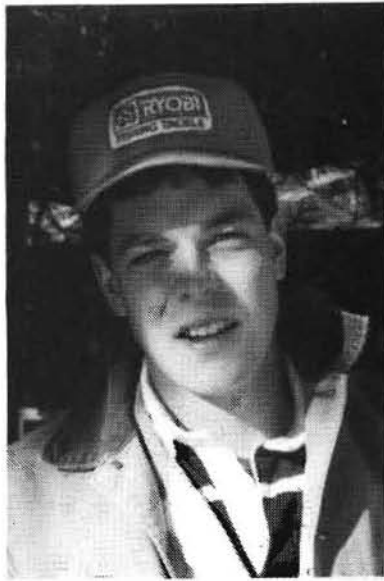
Robb Collett



Bill Jandro



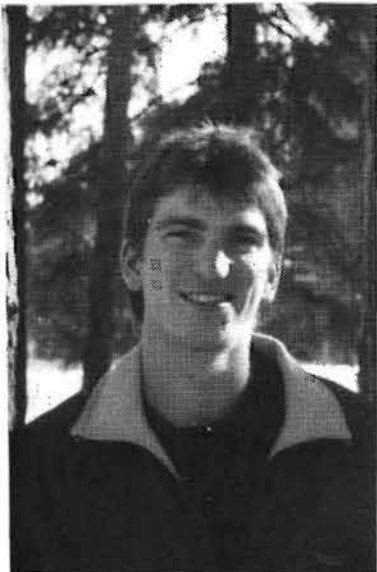
Audrey Koltjes



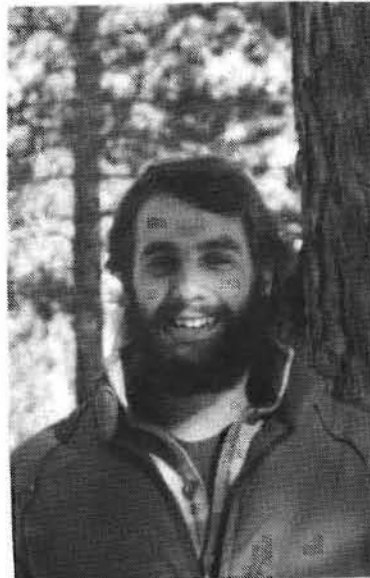
Austin O'Brien



Lois Pfeffer



Mark Reed

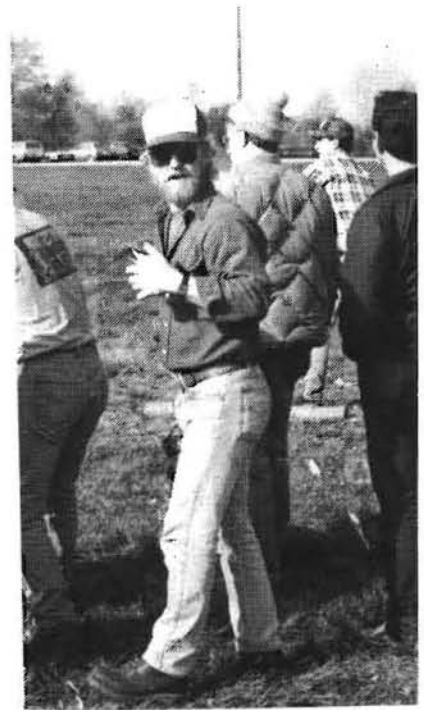
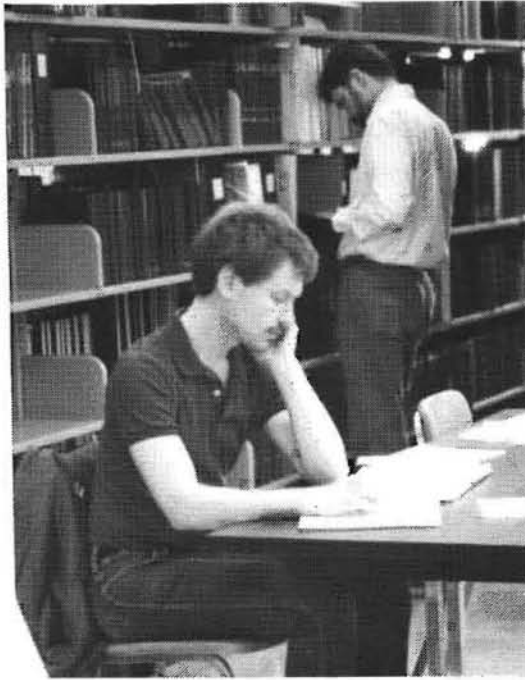
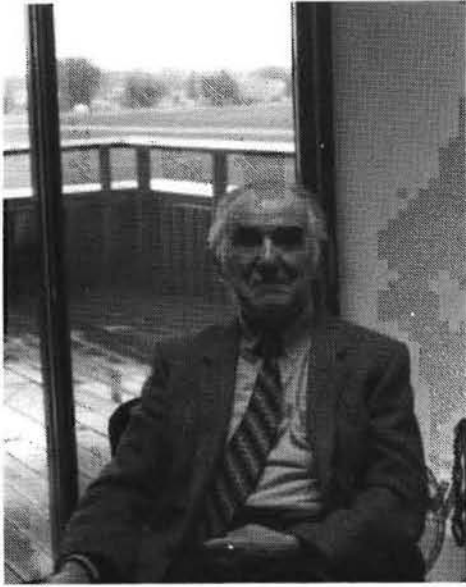


Chris Schulte

Not Pictured:

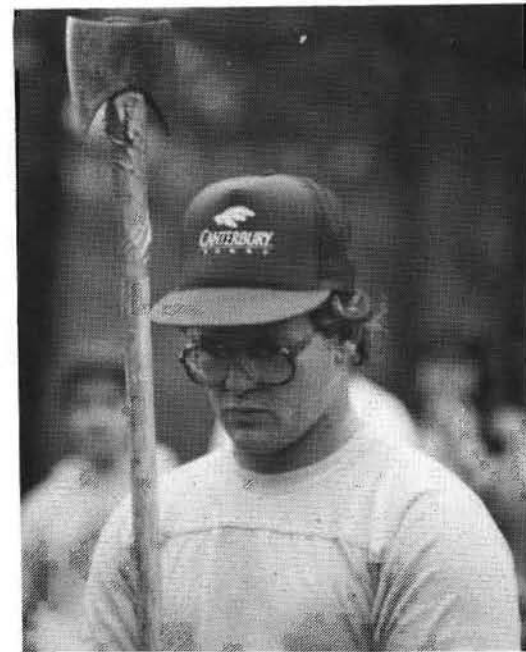
- Paul V. Agurkis
- Kathryn B. Allers
- David A. Arends
- Greg L. Beck
- Dale D. Gormanson
- Jane N. Greenberg
- Larry A. Long
- Charles A. Madsen
- James M. Schultz
- Rolf T. Tufte
- Kathleen T. Ward

PEOPLE & PLACES



PEOPLE & PLACES

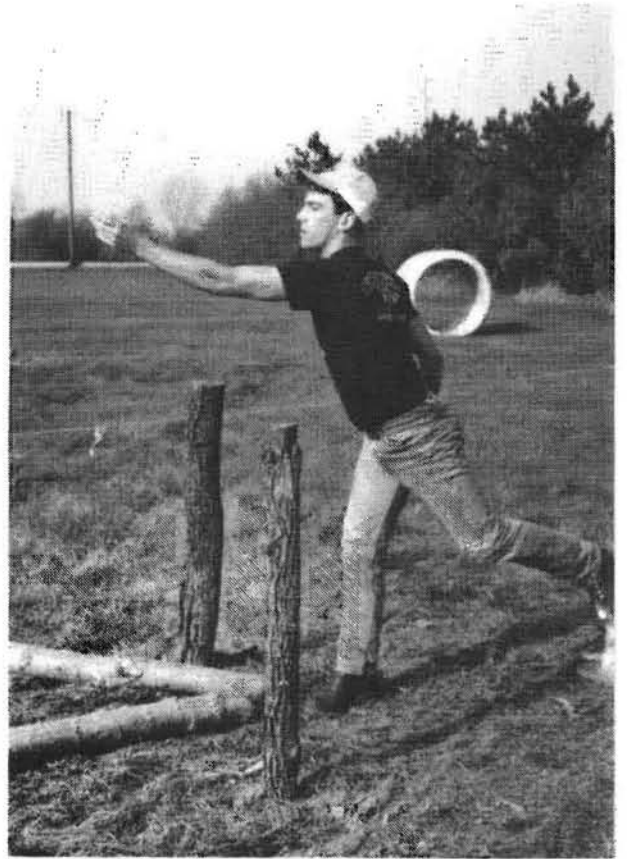
PEOPLE & PLACES



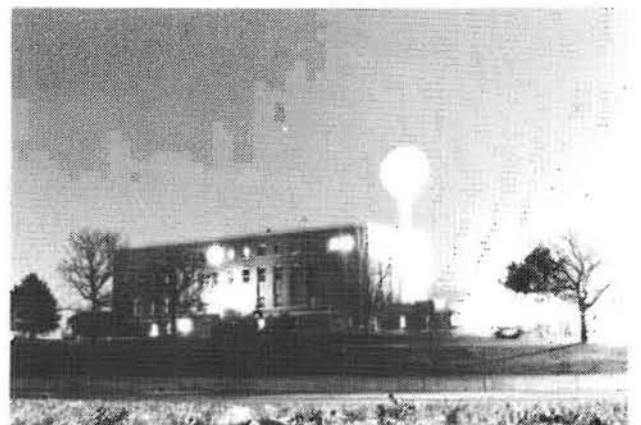
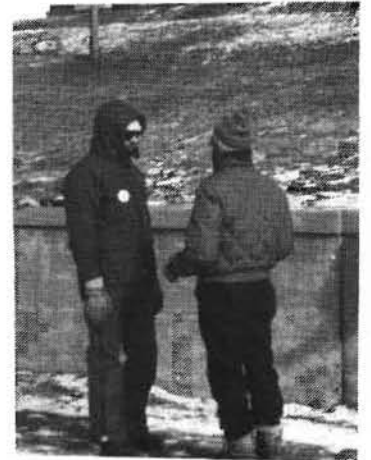


PEOPLE & PLACES





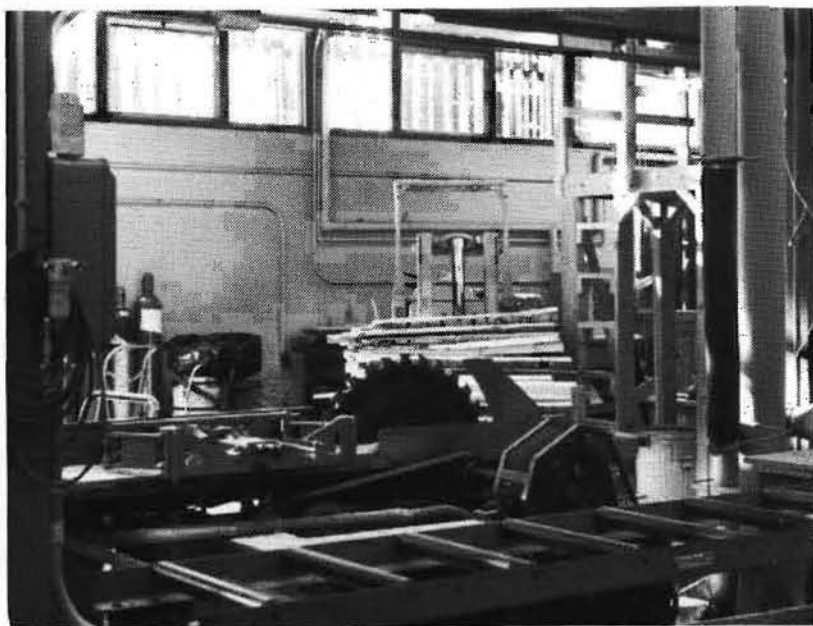
PEOPLE & PLACES





PEOPLE & PLACES





PEOPLE & PLACES

CLUBS

Recreation Resource Management

by Erik Petersen

President: Erik Petersen
Vice-President: John Elholm
Treasurer: Suzann Willhite

The RRM Club is an organization of Recreation Resource Management students. We held our elections for the 1986 - 87 year in May of 1986. Suzann Willhite was elected treasurer, John Elholm was voted vice - president and Erik Petersen, president.

We went our separate ways over the summer and got together at Dr. Knopp's house. Dr. Knopp fixed an elegant buffet (featuring tacos and refried beans) and we, along with alumni and graduate students, had a great time.

For the winter of 1986-87 we had a ski outing and a discussion with a state park manager. Plans for a winter ski-camping trip was part of the plans as well. Spring projects may include volunteer work.

Fisheries and Wildlife

Officers

President Mark Hove
Vice President Tom Roster
Secretary Russ Van Horn
Treasurer Henry Van Offelen



The Wildlife Society

by Mark Hove

The Minnesota Student Chapter of The Wildlife Society is involved with several activities this year. Our student chapter will host Conclave this year so much of the student's time has been devoted to preparing facilities, food, and activities. Conclave will be held near Annandale and will include lectures on a wide variety of fisheries and wildlife topics, a fisheries and wildlife contest, a dance, and other fun events. North Dakota State University is also helping with some of the arrangements. Fisheries and Wildlife Clubs from 14 universities are expected to attend. Club members have also been busy with the Environmental Education Outreach Program (EEOP). Students present programs on mammals, animal adaptations, predators, fisheries and

wildlife careers, bird identification, raptors and other subjects to elementary and secondary schools throughout the Twin Cities.

Mark Hove, club president, has arranged an internship program with the Minnesota DNR. Students will have opportunities to work in various DNR divisions. The club hosted the Minnesota Annual Meeting of the Wildlife Society on January 30 and is also hosting Wildlife Week at the University of Minnesota March 2-6. A variety of speakers for the event will present illustrated lectures on tropical rain forests, loons, trout and salmon management in Lake Superior, the raptor clinic and tiger conservation. The Fisheries and Wildlife Department has and continues to provide advice and resources for most club activities.

Technical Association of the Pulp and Paper Industry Student Chapter

President	Richard Pope
Vice President	Brian LaBrash
Secretary	Anthony Belanger
Treasurer	Mark Weber

Fall Activities:

Under the guidance of faculty adviser Dr. Robert Rouda, the University of Minnesota TAPPI Student Chapter maintained a full calendar of activities. Meetings were held with three industry representatives. Robert Hume of H.B. Fuller Company, Gary Kaziukewicz of Waldorf Paper Company, and Dick Zinn of Buckman Laboratories spoke on careers in their companies, available summer and permanent jobs, and academic preparation for these jobs in the Pulp, Paper, and Allied Industries.

The student chapter also sponsored a free dinner and reception for all paper science and engineering students and their 'significant others' last December at the Roudas' estate in outer Roseville.

In addition, students toured Waldorf Paper Co. and Stone Container Co.

Winter Activities:

Winter Quarter was equally as busy for TAPPI members as they toured Consolidated Paper's Wisconsin Rapids kraft mill and met with several of the U of M PS&E graduates currently employed at this location.

Further, students met with Dr. Dwight Easty of the Institute of Paper Chemistry who spoke on opportunities for graduate education in PS&E and research programs at the IPC. On a less formal note, the TAPPI 'Pulpheds' gathered with the FPRS 'Woodheads' at Steamer's Resort in Stillwater.

Spring Activities:

Spring quarter will bring officer elections along with a long list of other activities for TAPPI Student Chapter members. This list includes attendance at the Minnesota Section of TAPPI's Spring Conference, the 1987 Annual Meeting of the U of M Paper Science and Engineering Council, and The PIMA 68th International Management Conference.

On a final note, several social activities are planned to round off an active and successful year, including a picnic with all PS&E students, faculty, and 'significant others.' In fact, in what is viewed as a parting gesture of good-will, the 'pulpheds' have even threatened to invite the 'woodheads!'



Forest Products Research Society Student Chapter

Officers:

President	Doug Hyland
Vice President	Eric Olson
Treasurer	Mike Flom

Forest Products Scholarship Banquet

A total of fourteen students received scholarships totaling \$20,000 at the annual Forest Products Department scholarship banquet held at the University's St. Paul Campus on November 5. The scholarships were awarded for academic achievement and professional promise.

Eight of the students received Paper Science and Engineering Scholarships. A Paper Science and Engineering Scholarship is \$500 per quarter or \$1500 per academic year. The students and their sponsors are: Brian L. Hoover, Minneapolis, Minnesota (H.B. Fuller Company); Brian A. LaBrash, Roseville, Minnesota (Pottlatch Corporation); Paula A. Meyers, Rochester, Minnesota (Consolidated Papers, Inc.); Johnathon P. Nelson, Duluth, Minnesota (Waldorf Corporation); Mark A. Olofson, Minneapolis, Minnesota (Nalco Chemical Company); Richard B. Pope, Oshkosh, Wisconsin (North Central Division of the Paper Industry Management Association); Julie A. Roguski, Minneapolis, Minnesota (Buckman Laboratories, Inc.); and Mark J. Weber, Sheboygan, Wisconsin (Blandin Paper Company).

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 scholarships sponsored by the Forest Industry Fraternity of Minneapolis and St. Paul, and Mertie W. Buckman in memory of Dr. Henry Schmitz are \$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: Brian Kopas, Roseville, Minnesota (Henry Schmitz Forest Products

Engineering Scholarship); Robert Lenzmeier, White Bear Lake, Minnesota (Andersen Corporation); Thomas Lochner, Chisago City, Minnesota (Andersen Corporation); Jeff Manke, Cambridge, Minnesota (Forest Products Marketing Scholarship); Donald Schwabe, St. Paul, Minnesota (Andersen Corporation); and James Wurst, Shoreview, Minnesota (C.J. Mulrooney Memorial Scholarship, WCCO-AM/FM/TV).

Recent additions to paper science and engineering scholarship funds include an \$11,000 donation from the Minnesota Section of TAPPI (Technical Association for the Pulp and Paper Industry) to establish a Minnesota-TAPPI Scholarship Endowment Fund, and the establishment of a new \$3,000 scholarship by Consolidated Papers will be awarded to an outstanding entering student beginning in 1987. In addition, a donation of \$10,667 was recently made to the forest products marketing scholarship endowment in memory of John L. Westrum.

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 products industry is currently 95%, according to Jim Bowyer, Professor and Head, Department of Forest Products.

TAPPI Scholarship Banquet



From Left: Mark Olofson, Brian Hoover, Julie Roguski, Brian LaBrash, Mark Weber, Paula Meyers, Richard Pope, Johnathon Nelson

Forest Products Banquet



From Left: Donald Schwabe, Tom Lochner, Robert Lenzmeier, Jeff Manke, Brian Kopas, James Wurst

Wood Industry Tours OR

“What We Did on Our Spring Break”

by *Brian Kopas*

As the first day of spring break '87 arrived, 22 anxious forest products men and women eagerly boarded a motor coach destined to take them on the wildest adventure of their college careers. Surely, you say to yourself, these people were headed for a week of fun in the sun in Daytona Beach, or perhaps Ft. Lauderdale. However, those in the know realize that the student's true destinations included the University of Minnesota's research and entertainment complex at Cloquet, as well as the bustling port cities of Two Harbors, Superior, and Ashland. And as if that weren't enough, the adventurers concluded their journey with a stay-over in Marshfield, Wisconsin, a town with more thirst-quenching establishments per capita than any other this side of Madison. Their mission? To tour more forest products mills and operations than deemed humanly possible in one week's time.

On a more serious note, the trip included tours at the following locations:

Company

Woodcraft Industries
Champion Intl.
Ferche Millwork
Diamond Match
Louisiana Pacific
Koppers
Louisiana Pacific
Superwood Corp.
Owens-Illinois
SMC Corp.
Wausau Homes
Weyerhaeuser Co.
Walters Brothers

Products

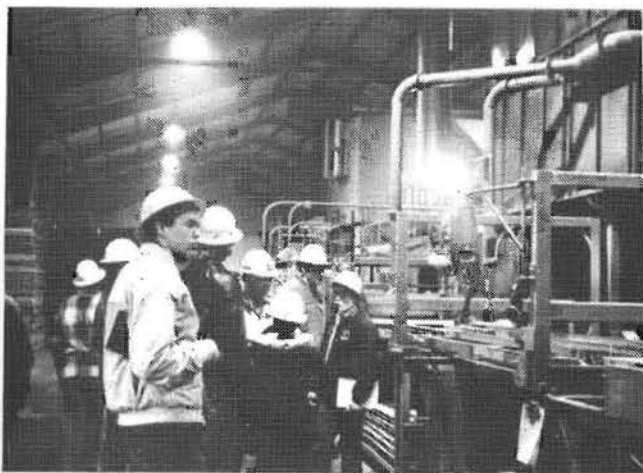
Hardwood dimension
Pulp and paper
Millwork
Matches
Waferboard siding
RR Tie treatment
Hardwood veneer
Hardboard
Pulp and paper
Windows and doors
Factory homes
P-board and doors
Pallets

As can be seen, a wide variety of facilities were toured, enabling the students to observe first-hand the application of concepts discussed in their courses while at the same time, developing a connoisseur's appreciation for woodyards, chippers and boilers.

Even our faithful driver Raosal a.k.a. 'Speed' got into the spirit of the tours, and by trip's end was able to identify woodyards and boilers with a quickness and accuracy matching that of the most seasoned forest products veterans among us.

While the majority of facilities we visited burned their residues for fuel, the undaunted travellers relied on a steady diet of Hardees, Hardees, and more Hardees to provide the energy necessary to partake in those unscheduled, yet critical forays into our host communities. It was these visits, coupled with the incessant impersonations of 'Monty Python,' Bob Dylan, and cartoon character George Jetson's dog Astro originating from the back of our luxury over-the-road coach which provided the cultural dimension required to make the tours a success.

In conclusion, the trip was well worth the thousand miles covered throughout northern Minnesota and Wisconsin as new perspectives were gained with regard to our future vocations, as well as our fellow classmates. I take this opportunity to express our appreciation to all of those who extended their hospitality to us. The information which was shared will be valuable as we pursue our education in Forest Products. And finally, a parting 'hard-hats off' salute is given to Harlan Petersen, for his patience and good-nature throughout a spring break journey that will live in infamy, or at least until next year's tour!





Itasca Session: Are We Having Fun Yet?

by John D. Elholm

Bye Mom! The grey battleship rolled out of the driveway, heading north to return a junior forester. What was this Itasca all about? I wondered to myself. When I arrived at the park, I really had to admire all of those huge pines, little did I know that my admiration for them would decline dramatically as the course went on. When I arrived, we had to figure out who we were going to spend 3½ weeks with. What if I made a bad choice? Well, I lucked out, and just happened to get the best roommates on the whole station. We all went to dinner, and ate in total silence, as none of us really knew each other yet.

The first night we met our instructors. I began to wonder if I could actually handle them living so close to us, and watching our every move. I soon learned, though, that when the going got tough, the students went to the Northway, and the instructors went fishing. It seemed that the going got tough a lot. I don't think that the instructors really cared that it was still summer, they really wanted us to work. I thought I used to study, but I didn't know what studying was until I went to Itasca. They really want us to know the trees in English *and* Latin! Even in the rain! The task seemed impossible, but after many herb-ing and shrubbing sessions after dinner, the late nights studying, and of course, the endless nightmares, we all got through it. It really helped to have people around that could think of obscure ways to remember some of that Latin. Jack went to the bank to see who?!

If this wasn't bad enough, we also had to write Ecology reports, and measure endless trees! It was interesting doing some of the work in the field, but in some cases disappointing. I guess I found it disappointing when I headed out with my trusty compass and I climbed logs, went through brush, got caught up in hazel, waded through swamps, and then, after all of that, I ended up in the same spot. Why? It was really neat working in groups at times, and especially being in the one group of three, but why did we get plot 13, and is there *really* a bear on that plot? It was nice to know that even with studying being as hard as it was, you could still have a good time.

I imagine that in the years to come I will remember the good times and forget the bad. I will remember the endless sand volleyball games, the one screen theaters, studying in front of the fireplace, Ardis and the gang, those big trees that don't move, and of course, canoeing and watching the spectacular sunsets. Overall, the Itasca session was a lot of work, and a lot of fun. It is something I will always remember. Have a PMA day!

Cloquet Session A View From Cabin 42

Cloquet, the last chance in one's career in the College of Forestry to get actual in-the-field educational experiences. These ten weeks in the Fall are special to a FR senior. It's one of those rare occasions where learning and fun are combined.

We were first introduced to Cloquet from a bird's eye-view during our aerial photo class. A prerequisite for this class included a pair of rubber boots, stereoscopic vision, and the ability to distinguish between "cones and cottonballs". Using aerial photos, we updated the Cloquet forest vegetation cover type map. Little did we know these maps would become our most prized possession since we referred to them throughout the quarter.

We thought we knew bogs from Itasca. We were wrong. The Soils class taught us the true meaning of bogs. Dr. Grigal brought us to bog, after bog, after bog It was here we almost lost one of our classmates to the bog monster. All-in-all, Soils was really the "pits" (Omega, that is).

Inventory (otherwise known as "Inventorture") taught us a few rules of thumb: "3P line plot windshield cruising with your calibrated thumb", and don't forget: "trees plus sticks divided by two equals the second best face of your Biltmore stick with the bulldog clip taped on it at .42Dh cords." Dr. Ek (which means Oak in German) enlightened us with computer technology and sampling techniques. P.S. Thanks for bringing the nice weather.

In Hydrology we learned the true meaning of "running" water (frantically carrying 50 five gallon jugs over stumps, branches, and other logging debris just to complete an infiltration exercise). Dr. Brooks took us to the Marcell experimental forest (once again, Bill did not let us down — he fell asleep within five minutes). Paired watersheds, the latest in high tech equipment, and visual aids were all part of our educational experience at Marcell.

Week five, the halfway point found us in the midst of Silviculture with Dr. Alm. Only five more weeks to go!! For two weeks we applied our knowledge of regeneration surveys, thinning operations, and management perscriptions to our assignments. We were also introduced to the TWIGS computer program used by the USFS. And who will ever forget the compartment exams and oral presentations (Duke, Joe, remember that?)

Towards the end of the quarter, we found ourselves faced with the three remaining classes of the session: Wildlife, Harvesting and Recreation. We thought that these courses would be much easier and less time consuming than the previous ones. We were far from the truth.

Wildlife, with Gordy Gullion, was a good experience to learn everything about ruffed grouse. What they eat, where they breed, and why they "drum". We also learned a little about why Gordy bands the grouse at the center. It's because when Joe and Duke hit them, it's easier to identify the corpse.

The harvesting course with Scott Reed was interesting, to say the least. Scott brought in guest speakers, the most prestigious

being Buzz Ryan. Buzz delighted us with stories about old-time logging in Minnesota (you can tell a "Frenchie" by the way he has to hold an axe in the picture). One of our assignments was to build a road into our area of concern. Using miles of flagging, everybody built their road and later dedicatingly pulled off all that flagging — everybody promised to, the question is, did they?

The field trip that encompassed Harvesting, Silviculture, and Wildlife took place during that week. For the most part, we saw many different harvesting operations. We were delighted to see an actual demonstration of a skidder going anywhere it wanted to (this included plowing through a stand of aspen — incredible). We also saw a demonstration of a whole tree harvesting system. A very capital intensive job — everybody worked inside a cab. This was the cutting edge of harvesting and we bore witness to it. As far as the wildlife aspect of the tour, Gordy had us identify the buds on the aspen that were so conveniently dropped to the ground before us.

Our final week at Cloquet was a thriller. The temperature dropped to a beautiful Minnesota five below zero which made for perfect weather to study recreation. The class was taught by a newcomer to the session, Tim Knopp, and his sidekick Bill Ganzlin. The highlights of the class included a tour of Jay Cooke State Park, Bill's talk about his recreational experiences accompanied with slides, and our assignment. We were to develop a recreational experience on the forest. It was no problem after spending many prior weeks learning almost every inch on the Center. Field reconnaissance was at a minimum that week. Dr. Knopp loved our ideas and with that, the session ended.

Of all the methods by which to learn about Forestry, the Cloquet Field Session is by far the best. One does not only get the theory behind the practices, one gets to actually be in the field and see them first hand. It is an experience that everyone should have in their Forestry education.

Now, those of us who will graduate look back and remember the towering pines, the cold and foggy mornings, and most of all, we remember our friends who we spent ten weeks with. As foresters we learned field practices. As friends we learned to live together and to share our feelings. As students we learned a lot, and a lot about ourselves.



CLUBS

Forestry Club

by Christopher Schulte

President	Christopher Schulte
Vice-President	Gregg Hove
Assistant	
Vice-President	Audrey Koltos
Secretary	Laura Held
Treasurer	Paul Buck
Sergeant at Arms	Robb Collett
Historian	Amy Krieger
Faculty Advisor	Bill Ganzlin

It was a close election, but the 1986-87 Forestry Club hit the ground running with what I considered to be a top-notch executive committee. Stepping into the role of presidency was difficult for me as it is for every new president. The differences in the leadership styles of Bryan Pike and myself were enormous. Members who used to Bryan doing everything for the Club found me to be a disappointment as I strongly believe in delegating duties. Also, spring quarter is usually a slow period for the club in terms of membership (as well as enthusiasm) and when one steps into office with earthshaking ideas . . . well, the result is much talk and little action.

The club has gone through some changes over the three years that I have been involved. Membership in the club has been fairly steady the last few years. Hopefully, the membership in the club along with some new activities will start to increase with the expected enrollment increase of the future. Future club plans are to put together workshops, symposia or invite guest speakers to our campus. It is a worthy endeavor but it will take more people to make it all a reality. At the present time, our hands are full with the events we already put on.

The Forestry Club has meant a lot to me. It has provided me with an opportunity to do things I may have never been able to do. I have been able to become active in different areas of concern in the school and it has given me great insight into the role of leadership. Finally, it has given me a chance to make some friends during my stay here at the University – something that I will value for the rest of my life.

The club keeps busy over the school year. The following are some highlights for the year.

Arbor Day Tree Sales

In classic F-Club form, since 300 seedlings were ordered the year before and all of them sold, this year we decided to order around 450 seedlings. We only managed to seed about 375 of them. The rest found their way into club members' homes through our "adopt-a-tree-at-cost" program. We set up our two booths in the St. Paul Student Center and Coffman Union and sold our little trees to the public at a minimal cost. As in years past, much time was spent giving out information about Dutch Elm Disease and dispelling misconceptions about trees, forestry, and our reasons for pursuing a career in forestry. ("No, I'm not a nature freak.") All in all, we managed to do what we always try to do during that week of sales – stay visible on the campus.



Spring Picnic

This year the spring picnic was held on June 6 – a very late date considering previous years, and the closeness of finals week (the next week). It was so because of conflicts with Larry Merriam's retirement dinner. We wanted to present Dr. Merriam with a gift at the picnic and send him on his way to retirement in Oregon. Therefore, we rescheduled our picnic and as it turned out, it was all for the best. The turn out was excellent and everybody was in the mood for good food, good friends, and good softball. The food and the friends were good, but the faculty's performance in the softball match left something to be desired. Phil Splett and Bill Ganzlin, co-conspirators for their team, still openly admit the pounding their team took by the students on that fateful day.

The Forestry Club presented Dr. Larry Merriam with an honorary club membership for life, a club sweatshirt, and a gift certificate to Joe's Sporting Goods. He was good to us as students, so it was only fair that we expressed our gratitude before he left.

Fall Bonfire

As usual, preparations for the fall bonfire were rushed because of the fact that school started on a Thursday that quarter and the bonfire was the day after. Nevertheless, the crew that was on hand to organize got the job done. Plenty of food was on hand and the faculty turnout was very high (is there a correlation?). Student turnout was low but there were some new faces. The purpose of the bonfire is to welcome new students to the college and get to know some current students as well as some faculty. Some words of wisdom are then given by the Dean. This year, the Dean introduced the Department Heads, visiting professors, and gave a brief talk on college news. He mentioned the Green Hall addition and the Society of American Foresters National Convention coming to Minneapolis in 1987.

Midwestern Forestry Conclave

This year, our team of 15 brave souls made the long trip to West Lafayette, Indiana, to compete in various old-time logging events at Purdue University. The trip was made mostly during the night so that 1) we could do a little Halloween partying and 2) not suffer through looking at cornfields for hours on end. For the most part, it was a fun weekend. Even though we only took fourth place, we did manage to be the team having the most fun. We met a lot of new people and learned what the weather is

like in Indiana. For details on Conclave, read the article by Kevin Sturgeski.

Christmas Tree Cut

This is the project the club undertakes each year in an effort to raise money for its events. It seems to be working. So far, the club has started an endowment fund with the college with an initial amount of \$5,000 and future expectations are that proceeds from the tree lot sales make the initial amount grow. The money is to be used for anything from scholarships for students to sponsoring workshops.

The remainder of the proceeds go toward running the club's events and funding the scholarships that are given out each year at the Foresters' Day Banquet. This year, over \$5,000 was awarded to deserving Forestry Club members. For the whole story on how we earned this money, read the two articles on the tree cut and the Christmas tree sales.

Winter Quarter

Forester's Day

Foresters' Day kicks off with the annual Banquet the Friday night before the Saturday field events. The banquet is a time for club members to sit back and be recognized for their devotion to the club. It is a time for everyone to enjoy a meal together and listen to a few speeches. It is also a time to see everybody in suits and dresses — a rare event.

This year, the banquet was held at McGuire's Inn in Arden Hills. The banquet M.C.s were Audrey Koltes and myself. We did our best to introduce people such as our guest speaker Jim Brooks, assistant director of the DNR; the Dean with his opening remarks; Norm Moody, Forester of the Year; and Vicki Mackerman, our beloved Aunt of Paul. The Daughter of Paul award winner this year was Audrey Koltes.

The scholarship recipients this year were:

Ruby Anderson
Paul Buck
Laura Held
Gregg Hove
Amy Krieger
Lois Pfeffer
Jim Radzak
Mark Reed
Chris Schulte
Kevin Sturgeski

At the end of winter quarter, our new club officers were elected. It was a close election, complete with two run-offs. Congratulations to our new officers:

President	Laura Held
Vice-President	Robb Collett
Assistant Vice-President	Gregg Hove
Secretary	Ruby Anderson
Treasurer	Frank Strahn
Sergeant at Arms	Jim Radzak
Historian	Blythe Liedig
Faculty Advisor	Charlie Blinn

Best Wishes to all the club members and Good Luck for 1987.



FALL BONFIRE

by Paul Buck

The 1986 Fall Bonfire, although hastily prepared, was a successful venture in food, frolic, and friendship. Before Dean Skok's introductions of faculty and F-Club officers, new students became acquainted with current students and faculty in an informal setting while munching on an exceptional meal of beans-n-wieners, potato salad, and pop. An impromptu student football game took the place of the traditional bucksawing exhibition as transportation difficulties were encountered while delivering the saws from Cloquet.

The roaring blaze of the bonfire and nighttime chill spawned a storytelling session about summer employment tales that lasted well into the night. After a few more drinks, the remaining longwinded students extinguished the blaze (Dr. Irving would have been proud) and retired home, excited about the upcoming year.



by Gregg Hove

This year's SAF national convention, which was held from October 4-8 in Birmingham, Alabama, provided both educational and entertaining opportunities for two members of the student SAF chapter.

With the cooperation and financial assistance from the College of Forestry, myself and Laura Held were able to take part in this special event. We would like to thank Richard A. Skok, Dean of the College of Forestry and Alan R. Ek, Head of the Department of Forest Resources for their much appreciated help in making this trip possible. Special thanks must go to Phil Splett, faculty advisor, for providing transportation to and from Alabama, not to mention the leadership and advice given by him at the convention.

The four days we spent in Birmingham provided us with many opportunities to learn about and experience forestry in the southeastern United States. This information came to us in the



form of forest tours, information given out at booths set up at the convention hall and just from visiting with foresters from the area. The convention also provided us with the unique experience of meeting the president of the Society of American Foresters, Warren Doolittle, and Chief of the U.S. Forest Service, Max Peterson.

An important purpose of our attending this year's national convention was gathering information on how the student activities portion of the week was handled. At the Birmingham convention, approximately 100 students from California to Maine, had opportunities to take part in such events as an employment forum, student rap sessions, informal gatherings in the student hospitality room, as well as meeting Warren Doolittle and other SAF staff at his president's welcome to the students.



This information will be reviewed throughout the school year and used by the student chapter to assist us in preparing for next year's national convention which will be hosted in Minnesota, in cooperation with the University of Wisconsin. It will be a busy year ahead, but we're all looking forward to the challenge.





by *Kevin Sturgesleski*

The 35th Annual Mid-Western Foresters Conclave was hosted at Purdue University the weekend of October 31-November 2. The University of Minnesota once again sent its small but illustrious team of Forestry Club members past and present to the event.

The weekend started with a sendoff bash at the Bachelorette Pad of a couple of wild and crazy foresters. The party started slowly but gradually gained momentum. By 12 o'clock when the party transferred to the Green Hall departure site, everyone was in high spirits.

The bus arrived at Green Hall at 1:00 a.m. After loading up, a final head count was taken. It revealed 15 hardy, party on their minds foresters. And party we did! The party started in Minnesota and didn't end until about 4:00 a.m. in eastern Wisconsin when folks finally fell asleep.

We awoke about 8:00 a.m. in Chicago, Illinois at a huge Wendy's truck stop built above Interstate 90. This stop provided the

highlight of the bus trip; eating white toast while watching 8 lanes of traffic drive below the building at high speeds. Another highlight of the bus trip was the toll booth every mile. We must have hit a dozen toll booths either side of Chicago, going and coming. We finally arrived in West Lafayette, Indiana at 12 noon – approximately 11 hours after the trip started from Green Hall.

Conclave was to be held on 4-H grounds and we learned our accommodations were barracks on these grounds. We quickly referred to these barracks as Stalag 13 and to ourselves as prisoners of Cell Block H. Incarcerated with us were a group of foresters from Michigan Tech. They invited us to a game of touch football in the warm sun. Yes, the weather cooperated this year. The whole weekend was warm and sunny with temperatures in the mid-seventies. In fact, those of us preparing for the worst (rain, sleet, snow, etc.) had to deal with having packed only warm clothing.

After the football game they invited us to share their keg of beer, toss the frisbee and football around, and talk about our colleges, the teachers we've had, the classes we could look forward to, and what we did the past summer. The rest of the afternoon was spent practicing for the events of the next day.

The evening's festivities began with a bonfire at nightfall. This too got off to a slow start, but gradually gained momentum. By the time the party really got going, most of our crew made their way back to the old cell block and had turned in for the night. A few of the hardier members of the crew did make an appearance at the party and were responsible for keeping it going through the night. They did however pay for their actions the next morning.

Breakfast was promptly served at 7:00 a.m. Saturday morning. Each year the reporter at Conclave writes about the traditionally bad food. Not one to break tradition, I'll mention it wasn't too good again this year.

The first of the day's events started at 8 o'clock. All of the events were really intense with lots of cheering. Many of us grew hoarse encouraging Laura and Audrey on in the 2 lady buck, Gregg and Robb, and Marty and Bryan, in the 2 man buck, and all of the other participants in the other events.

Even though our crew was small we did well enough to place 4th out of nine schools. The official team results are as follows:

SCHOOL	POINT TOTAL
University of Missouri	60
Purdue University	52.33
Southern Illinois University	28
University of Minnesota	16.33
Michigan Technical University	10
Michigan State University	8
University of Michigan	5
Hocking Technical University (Ohio)	3
Illinois University	1

And finally the important stuff: the individual places of team members, and their events that got us those all important 16.33 points.

EVENT	PLACE
2 Lady Buck Sawing	
Audrey Koltas & Laura Held	1st Place

1 Man Buck Sawing	
Tim Kennedy	2nd Place
Match Split	
Laura Held	2nd Place
Gregg Hove	4th Place
2 Man Buck Sawing	
Gregg Hove & Robb Collett	3rd Place
Special Event: Tree Climb w/Ropes and Saddle	
Chris Schulte	4th Place
Pulp Toss	
Robb Collett, Steve Stenger, Paul Buck and Marty Cassellius	4th Place
Jack and Jill Buck Sawing	
Tim Kennedy and Laura Held	4th Place

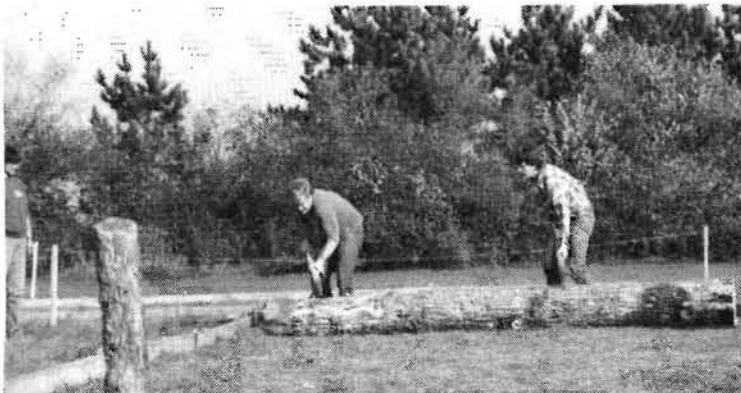
The awards and door prizes followed dinner Saturday evening. Once again Missouri picked up their trophy for first place. The prestigious Goalies' Stick for the furthest traveled team was also awarded at this time. Since we had held it for three consecutive years we talked it over and decided we did not want to be burdened with this trophy again. So by unanimous decision it was given to the Michigan Tech. team. We figured this will definitely get them to show up at next year's Conclave.

After the awards ceremony, we all went back to the cell block to prepare for the evening's highlight event — the dance and party. This is one event we were sure to sweep. To prepare for this we broke out the bottle of *Old Foresters Bourbon* and drank toasts to all around.

The party finally started with a local disc jockey spinning stacks of wax. This wasn't bad due to the fact that everyone heard his or her choice of music from country, to oldtime rock 'n' roll, to modern pop music.

When the party ended at one o'clock Sunday morning, we managed to find the right bus and promptly fell asleep and left the bus driver in peace as he made the long trek back to St. Paul.

The team will be looking forward to getting together again next year for the 36th Annual Midwestern Foresters Conclave to be hosted by Michigan State in the fall of 1987. Don't forget the 38th will be hosted in Minnesota in 1988.



“You Can Almost Hear Those Cash Registers Now”

By Laura Held

Ah yes, Tree Cut. Two words that stir the hearts of U of M Forestry Club members. This event was expertly planned and wasn't left until the last minute, (classic Forestry Club), well, almost. Lois Pfeffer and Kevin Sturgeski did an excellent job this year. We actually had saws and some food to eat.

The turnout was great. There were a lot of people on hand to cut and haul our little babies with care to the edge of the road to be picked up for bailing. The bailing crew was in a class by themselves, sacrificing their bodies so that others would not have to. Incidentally, for those of you thinking of going next year, bailing is the job to do. It's tough work, but somebody has to do it. (Just ask S.D.)

This much acclaimed event begins in the wee hours of the morning, or so we plan. Like everything else the Club does, we got underway late. “Meet by 8:00 a.m. at the tree lot,” said Chris Schulte, our valiant leader. Casually glancing at my watch, my mouth full of donuts and O.J., I noticed Chris driving in. (My watch said 9:00.) With our leader there, we could finally begin. Now, “Who is going to drive?”

With the biggest decision of the day out of the way, we headed for Carl's Tree Farm, right outside of Cambridge, MN. We didn't bother towing the Club's bailer this year because of the great performance records it has had in the past.

In all the years I have been going on the tree cut, this was the first that it was actually above zero. The day started out cold, it even snowed as we drove up, but as soon as we started work, the sun came out. Dumb foresters were runnin' around without their fur lined parkas on. Of course some craziness erupted, but we were careful not to put an eye out, mom. The saws were really flying, so were the people lucky enough to have the hauling job. We were working like busy little beavers, even the bailing crew was keeping up, sort of. Then, it happened — a bug in the program, if you will — the bailing crew broke the bailer. It's true. If it wouldn't have been for the brave and cunning of Paul Anderson and the whole crew, our little party would have ended right there. They fixed the bailer; all they had to do was put back the tiny screw that held the whole works together.

From that fateful moment on, the bailer broke down periodically. We must owe Carl at least \$5.00 for various parts of the bailer. (More like \$100.00.) But Carl, in his infinite kindness, told us to forget it (for now).

The rest of the afternoon was spent gaining experience on the techniques of hauling trees to the road and using swede saws. Boy, those dead trees are easy to cut down. Around 5:00 p.m., a faint rumbling could be heard from everyone's stomachs. The dinner bell rang and we were on those hotdogs and beans like nothin' flat. Did I mention beans? Ooooooh, big mistake! Eating those little deals really lets you know who your friends are. More on this exciting twist in the details later.

Dinner time is when a lot of the “whimpy” foresters left. (Just kidding guys, I'm sure you all had better things to do like go to a Gopher hockey game.) All those who didn't have to work the next day, etc., and wanted to stay overnight, received luxury

accommodations in the Hotel De Carl. Which is the same as staying in an uninsulated shack, with cracks big enough to stick your head through. We asked for it I guess. Hey, we're tough, right?

As soon as we cracked open the hotdogs, the keg was tapped, and we settled down to some serious eating and . . . needless to say, it got colder outside and we got warmer inside. Right at the height of our jocularities, Carl came in our suite and announced the arrival of a semi truck full of balsam fir that we had the opportunity to unload. “Think of the experience,” I heard someone say. “Think of the work,” I thought. It was an experience all right, actually it was kind of fun. Darkness had fallen long ago and Carl was out there with a flashlight trying to distinguish the markings on the butts of the trees. “That one's a dot, it goes over there. That one's got a slash on it, it goes over there.”



Well, we finished that chore and headed back to the beer. We all knew what came next. The lighting of the slash piles that we had heard about since our birth in the Club. The story of the famous slash pile that got away and sobered up tired, drunken foresters real fast, was in the back of my mind anyway. I think we were all hoping for a little action that night. But, it was not to be. Oh sure, Carl even encouraged us to burn some of the acreage around the bonfire so he could plant it next year. Something just didn't want those fires to get away like they had in the past. So, we brought out the marshmallows and roasted while we got toasted.

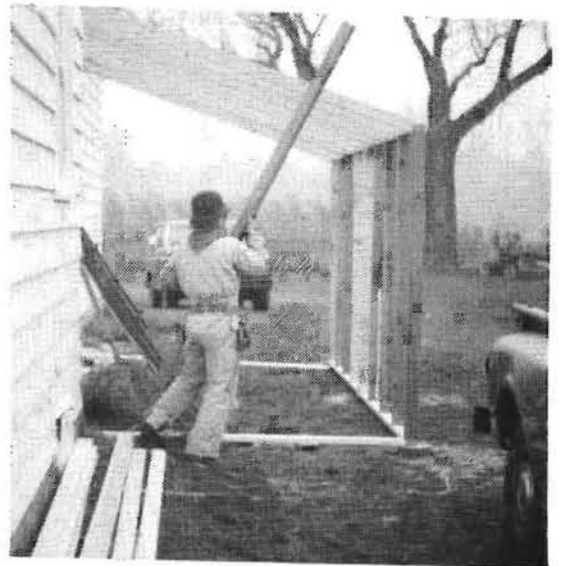
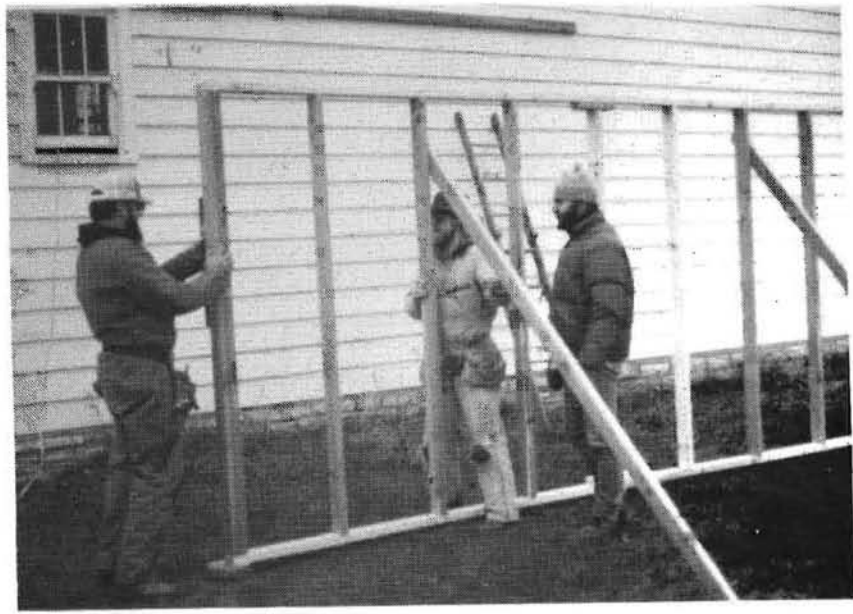
After the last ember had died, and Carl couldn't think of anymore stories, the tired hands went off to nigh nigh land. We witnessed Steve Stenger, that master of hamocs, try to get in bed, and listened to some musical notes up in the lofts (remember I told you about the beans we ate for dinner?) Two of our more prominent members had a running conversation for all to hear, while we laid awake freezing as they slept. (They were by the stove, you see.) Other than that, it was a very uneventful night.

Unless, of course, you had to go to the bathroom. Everyone who was awake at the time knew exactly where you were going too. Did I mention the fact that Carl has a real outhouse complete with the moon on the door? The cracks in it are just big enough to stick a hand through.

Awaking from a very warm and restful night's sleep, the wide awake and joyous foresters ate breakfast. After which we enjoyed another day full of sawing and hauling and bailing. We even had the opportunity to unload another truck that came in. (Do you detect any sarcasm in this paragraph? You shouldn't, there is none.) It was swell! Finally the last tree was cut and hauled, and the shack was cleaned and pressed, and all that was left were the memories. Fleeting shots were taken with the camera. Then the cars were loaded up and off we went. But, we were not headed home just yet. Ha, you thought this boring story was over. Well, it isn't. We arrived at Carl's other farm to diligently pick out a few select trees for President Kenneth Keller. We worked hard finding those trees that he wanted to put around his ice rink. Unfortunately, all this work was for naught. There was a misunderstanding between us and the gardener who ordered the trees, (or so I'm told), consequently we got stuck with the trees.

All kidding aside, the tree cut is really a fun experience. Those who went, now more fully understand the hard work and effort put into the business. And who else better to learn from than the best in the business? One who has been a friend of the Club for many years, and without who the tree sales would not be as successful as they are. Thanks again Carl for another tree cut!





CHRISTMAS TREE SALES 1986

December 21, 1986

by Audrey Koltes

Three and one half weeks and 3500 trees ago, Forestry Club members once again embarked on an adventure into the booming world of Christmas tree sales

This past season was quite similar to previous years in many respects, but we also added a few new features that made life at the tree lot even more enjoyable.

Of course, Mr. and Mrs. Santa Claus made their annual appearances. Those eager elementary school children (and even some adults) learned (almost) everything they could ever want to know about Christmas trees from these jolly foresters.

Once again, the candy cane ritual was the highlight of everyone's shift. Who can resist giving those youngsters (and some who aren't so young anymore!) a candy cane and see their faces light up with a big smile?! (Trivia question: Does anyone know how many trips we made to Target to buy more candy canes?!)

Of course, the annual phone troubles plagued us again. I must say, though, that the phone company had pretty good timing. They hooked up the phone just in time to desperately call people to work on the first of many hectic business days. Hopefully, we won't have too worry about this phone hassle again. The phone number will be the same next year, and the phone company won't have to "press the magical button" to turn it on.

While future tree lot operators shouldn't need to concern themselves with the phone problem any longer, they may want to consider building new tree racks. How many times did we have to do a quick transformation from "Forester" to "Carpenter" and fix the broken racks? Oh, what a feeling it is to "open" the tree lot and find that an entire line of trees is on the ground with seemingly innocent racks lying warm and cozy below. Subtle hint: Next year, build new racks!

With every new change in tree lot operators comes new ideas to improve the quality of life at the tree lot. This year was no exception

The satellite restroom relieved many of the problems plaguing tree lot workers and customers. (No pun intended!) Those "pine bough air fresheners;" added an ingenious touch to the satellite — aesthetic, and aromatic, too!

Heating the tree lot house has been a battle in the past. This year, however, we invested in a kerosene heater and tank. This little heater provided a comfortable and cozy atmosphere, even though the kerosene put forth its unique odor. This purchase has already proven its efficiency.

The most noticeable addition to the lot was the new warming house. This shelter gave us the opportunity to warm the trees and let the branches thaw out so that their full beauty could be appreciated by the customers. This structure was constructed with care and skill and should last for many future tree sales.

Specialty items added their special touch to the sales again, as expected. Hand-made garlands "sold like hot cakes," and fire starters and ornaments followed closely behind. The mistletoe, birdseed, nuts, and deer were popular again, too.

Once again, the Club's Christmas tree sales exceeded our

wildest expectations. The credit for this enormous success, in my opinion, belongs to three groups of people: the preparatory committees, the workers, and the customers. The tree ordering, tree cut, and tree lot set-up committees organized all of the necessary ingredients for a smooth-running operation, and tree lot workers braved Mother Nature's elements to find customers "the perfect tree." The dedication and hard work of these people is greatly appreciated! And last, but not least, I credit our loyal customers, many who have made buying their tree from the Club an annual tradition.

These are just a few of the highlights from this year's Christmas tree sales. I'm sure everyone has their own memories of the joys (and pains) that accompanied our fundraising event. I sincerely hope that future foresters will continue this tradition. It's a lot of work, but I believe that it's worth the effort.



1987 FORESTERS' DAY

Field Events



by *Kevin Sturgeleski*

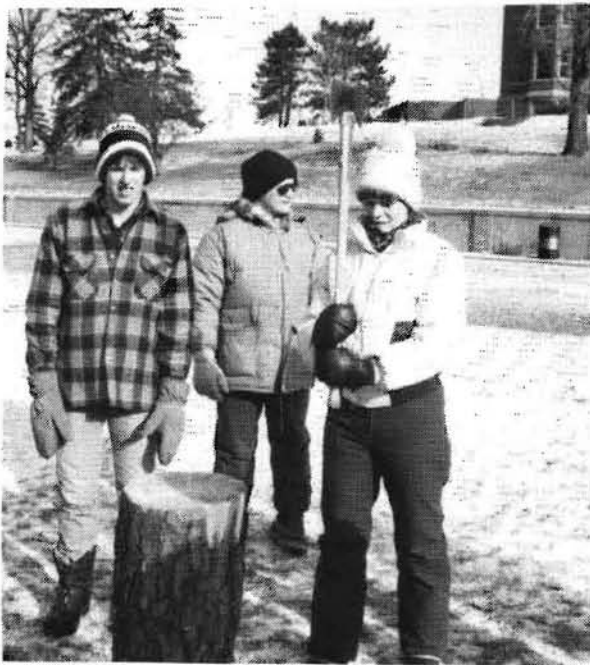
The day dawned cold and clear. After breakfast of pancakes and sausages and only one skit (put on by the undergrads, of course), the time came for the field events.

As usual Paul Bunyan (sporting a nifty pair of shades this year,) presided over the field events. Snow cover was lacking this year but the cold temperatures reminded us that it was winter and

that it was Forester's Day. Because of the lack of snow that snowshoe race was cancelled. But there were plenty of other events to keep everyone interested.

The events commenced with the official, traditional cutting of the first cookie by this years' Lumber Jack and Jill, Robb Collett and Audrey Koltjes and ended with the special event.



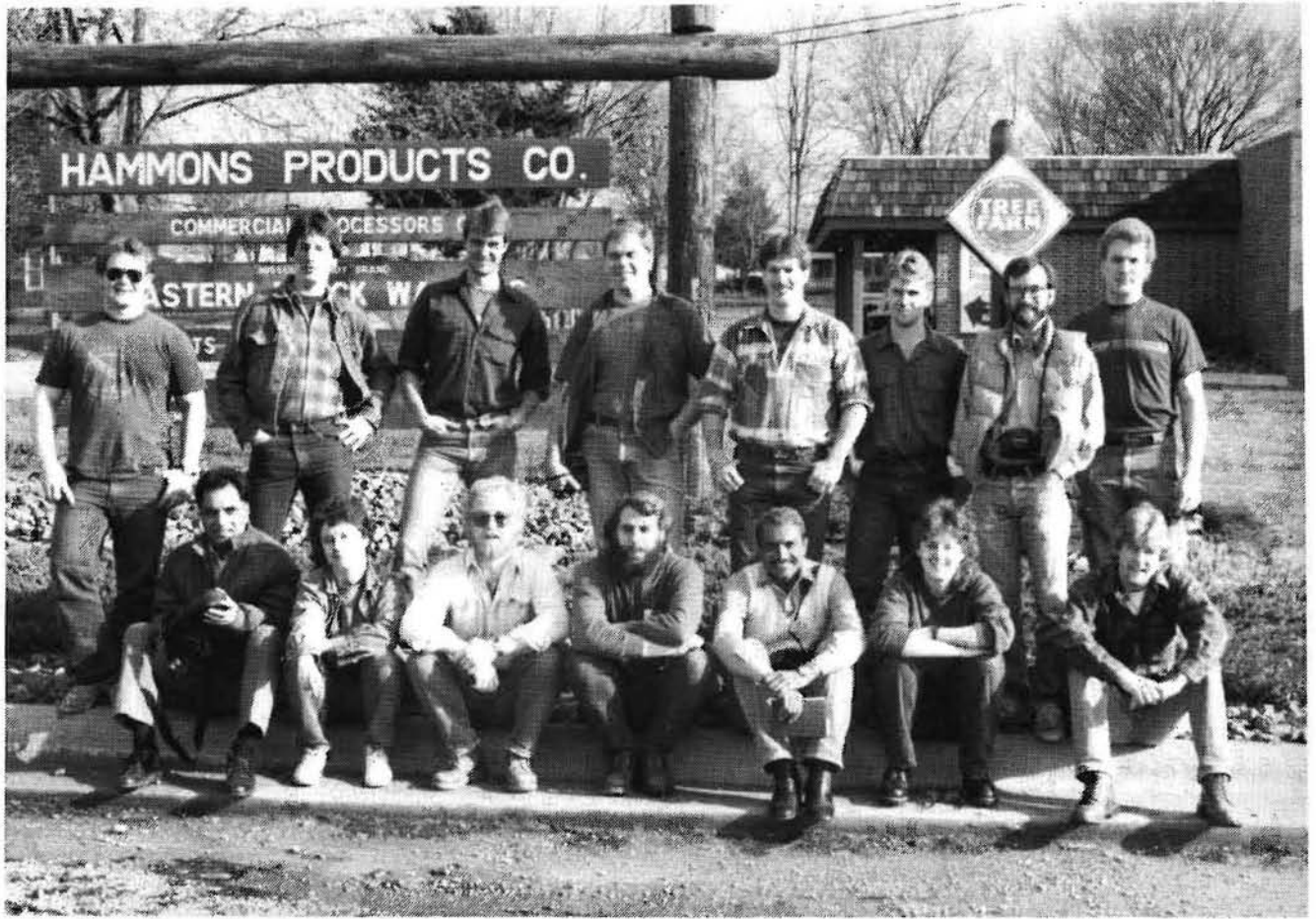


The results:

	Two Man		Two Woman		Jack & Jill
BUCKSAWING					
1st	Tim Kennedy/Jim Gustafson	Audrey Koltes/Laura Held	Jim Gustafson/Audrey Koltes		
2nd	Gregg Hove/Robb Collett	Betsy Lowe/Sharon Raetz	Bill Ganzlin/Sharon Raetz		
3rd	Bill Ganzlin/Chris Schulte	Lois Pfeffer/Sheryl Nelsen	Tim Kennedy/Lisa Allison		
LOGROLL					
1st	Chris Schulte/Robb Collett	Blythe Leidig/Audrey Koltes	Bill Ganzlin/Sharon Raetz		
2nd	Dave Haugen/Jim Gustafson	Sheryl Nelsen/Michelle Hove	Gregg Hove/Laura Held		
3rd	Gregg Hove/Bill Ganzlin	Laura Held/Lois Pfeffer	Jim Gustafson/Audrey Koltes		
KEG TOSS			TOBACCO SPIT	TUG-OF-WAR	MATCH SPLIT
	Men's	Women's			
1st	Doug Magee	Sharon Raetz	1st Dave Haugen	Jim Gustafson	Tim Kennedy
2nd	Jim Gustafson	Lisa Allison	2nd Jim Gustafson	Paul Anderson	Gregg Hove
3rd	Steve Stenger	Audrey Koltes	3rd Paul Anderson	3rd Chris Schulte	3rd Blythe Leidig
SPECIAL EVENT:					
1st	Lois Pfeffer / Jim Gustafson / Laura Held				
2nd	Chris Schulte / Robb Collett / Sheryl Nelsen				
3rd	Lisa Allison / Amy Krieger / Scott Hartneck				



SOUTHERN TOUR '87



by *Laura Held*

Every other year, a journey is taken to visit our friends to the South. Many of us have heard about this journey since we entered the College many moons ago. This trip is traditionally made during Spring Break, when most of us have ideas of basking in Florida's sun. But all those who want to learn more about Forestry, and how it is practiced down South, go on this journey.

Saturday morning, March 20, 7:00 A.M., 13 cranky, sleepy students, 2 grad students, and Carl, piled into two vans heading south. As soon as we got onto Larpenteur Ave., Carl was ready to tell stories, he was welcomed by the sound of students doing what they do best: sleep. The rest of the day was spent truckin' down the highway. Before we knew it, we were in Missouri. The first night was spent in Stockton, MO. As we pulled into town, the first thing that was scouted out was, of course, the liquor stores.

Most of the crew crashed into bed early; we had to get going by eight in the morning. "Wait a minute, I'm on vacation, I don't have to get up until 12:00." Hammons Products was the first stop. They develop black walnut shells for industrial use. Many questions were asked by inquisitive students, and we were then given a tour of their silvicultural practices in the field. The area was rather muddy and rained while we were touring, so we did almost get stuck. But, have no fear, Carl put the van into four wheel

drive, and away we went.

After the visit to Hammons, we headed out to Crossett, Arkansas. This is one trip no one was looking forward to. After spending so much time in the dreaded van already, we had to go clear across the state to reach Crossett. Arriving at 11:00 P.M., no one really felt like partying anyway. But what is this, each room has Showtime? Movies were watched until early morning. We were roused out of our beds at 0700, ready to hit Georgia Pacific. This tour was disappointing for some because we were not able to tour their facility. Instead, we were shown all their land, and the different management techniques used on it. This was interesting in itself. Logging techniques were also shown which are very different from those used out West. All in all, a long and informative day. That night we located a liquor store in the next county, you see, the area we were staying in for 3 nights was a dry county. This place was very interesting, to say the least. It was called "Willie's Oasis in the Woods", and boy was it ever. See, the place that Carl usually takes everyone to was inaccessible, the road was under water. Very wet country down there, some call it Bayou country. Anyway, this Willie's was rather funny, some day, ask Carl about it and he'll tell ya everything.

I almost forgot, we had a stop at the Crossett experimental forest which is run by the U.S. Forest Service. They basically showed us all their techniques of management, etc. This was another long day but interesting. It was the first exposure we

had to Loblolly pine and how fast it really grows.

Well, we had our beers and we had our movie channel, so we sat down and watched some more movies. Not too late, though, because the next morning we had to get going at eight again. Now we were off to Huttig, Ark., which is very close to Loosiana (as they say down there). Manville Products was the stop for the day, and this time we had a chance to get inside their mill. A rather rushed tour, but very interesting. Then we went back to their main office and had a "light" lunch, which consisted of a mound of mashed potatoes and gravy, two kinds of vegetables, chicken and a roll. Nothing light about it!! After that, we rolled ourselves into the vans to tour Manville's silvicultural practices in the field. We even dipped our feet into Loosiana.

That night was one that all had been waiting for. We were finally going to eat at the famed "Catfish Inn". All you can eat catfish and crab and of course, little frog legs. Of course Carl was there with his camera taking the usual pictures. A group shot of us outside the Inn, a group shot of us eating our frog legs, a shot of me trying my first boiled shrimp, etc., etc. After our feast, we again rolled into the vans and headed home. The rest of the night was spent like the previous ones, except the natives were getting a bit restless. We were craving the bar scene, you see. There were some threats of going rollerskating, but that fell through. So we played hackey sack in the dark instead.

Getting up at 0700 was getting harder and harder, most people were coming to breakfast with wet hair now. This was our last morning in Crossett, Ark., and some people were very happy. That smell that wafted from the Georgia Pacific plant was unpleasant at times.

We headed out to visit International Paper Company. Plywood is the name of their game, and boy was the process they used interesting. We saw their huge crane that unloaded all the logs off of a truck in one grab and then transported them back to their massive stock pile. They showed us how they make the veneer, and the process it goes through to the final piece of plywood. Some of us special people almost got run over by the forklifts, which have the right of way. This was definitely one of the better tours.

After all the questions had been asked at IP, we headed on to our YCC camp for the night. But first, we stopped in Hot Springs, Ark. What a hoppin' place that was! Cars, people, tourists, like you wouldn't believe. We stopped to drink some of the famous hot water from the springs. Since most of the stores were closed, we decided to get on to the camp and have a picnic style dinner and then come back after our tour with the Forest Service the next day.

That night a party erupted because it was Steve's birthday, so naturally we had to celebrate. Most people were in bed by a reasonable hour, although I heard that several of the guys stumbled in around 2:00 A.M. In general, not much happened that night, a lot of talking was done though.

Morning came and we were ready for the Forest Service. This time we got more into Hydrology, and Recreation than the private industry tours had. It was interesting to see the method they had used to cross rivers and how they made their roads through the forest. We actually saw the methods that Dr. Brooks had taught us in his hydro class.

Our last tour was over, and the tourist in all of us came out. First stop was a little gift store right outside of Hot Springs. We all needed to get an Arkansas Razorback hat. So what if 5 people all had the same hat? Then we headed to Hot Springs and shopped around some. Only an hour, unfortunately. We piled into the vans with our tacky souvenirs, and left Hot Springs forever. People immediately fell asleep as they often do when they know they have a long drive ahead of them. On our way back to good ole' Minnesota, we went through the Ozark Mountains and were dazzled by a beautiful sunset. Night soon fell and we stopped for gas in Fayetteville, home of the Arkansas Razorbacks. The drivers for the night loaded up on caffeine and the rest of us bought junk food.

The rest of the journey was long and boring. We were all ready to come home, being the weary travellers we were. Boy did we know we were home when we hit the beginning of the blizzard that wiped through Iowa. If we would have stayed just one more hour in Hot Springs, we would have been stuck. When we hit the state line though, the snow magically stopped, "Beautiful Minnesota".

Generally an interesting and informative trip. Too bad some of you missed out!



SCHOLARSHIP RECIPIENTS

College of Forestry

1986 Dayton Kirkham Scholarship Recipients

Name	High School	Location	Proposed Major
Lisa Bevans	Dostburg	Oostburg, WI	Recreation Resource Management
Joseph Lukas	Perham	Perham, MN	Fisheries & Wildlife
David Masters	William Fremd	Palatine, IL	Fisheries & Wildlife
Robert Mossman	Hastings	Hastings, MN	Fisheries & Wildlife
Eric Nordlie	Edgewood	Madison, WI	Forest Resources
Raymond Rainbolt	North	Minneapolis	Fisheries & Wildlife
Darrell Splett	Cloquet	Cloquet, MN	Forest Resources



Lisa Bevans:

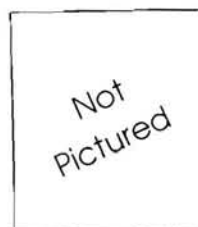
DAYTON KIRKHAM SCHOLARSHIP PROGRAM



Darrell Splett:



David Masters:



Joseph Lukas:



Raymond Rainbolt:



Eric Nordlie:



Robert Mossman:

Forest Resources

The Forest Resources Scholarship Committee has awarded the following 1986-87 scholarships:

Carolind Scholarship (\$300)

Eric A. Wymore
Arthur A. Karels
Suzann Willhite

Helen A. Young Memorial Scholarship (\$200)

Patricia Ann Dejarlais

W. R. Miles Scholarship (\$500)

Brennan A. Ferguson

Minnesota Forestry Association (\$500)

Brian Kopas

Edward Everett (\$500)

Cathy Dybiec

Oscar Mather (book award)

Mark Reed

Ken Merriam (\$500)

Erik Peterson

K. E. Winsness (\$300 ea.)

Austin O'Brien
Rolf Tufte

E. G. Cheyney (\$200 ea.)

Chris Schulte
Brian Walukiewicz

Samuel Green (medal)

Suzann Willhite

Arthur L. & Violet Aamot (\$700)

Ben Anderson

Caleb Dorr (\$500)

Joseph Lukas
Timothy Murphy
James Moynagh
Ben Anderson

Henry Schmitz (\$300 plus plaque ea.)

Gregg Hove
Mark Hove
Audrey Koltes
Laura Held

Augustus Searles (\$500 ea.)

Roxanne Wagoner
Catherine Solgat

John Allison (\$500)

Lawrence Long

R. M. Brown (\$500)

Mark E. Reed

Robert L. Goudy (\$300)

Arthur A. Karels
Roxanne Wagoner

Ralph L. Lindgren (\$400)

Austin T. O'Brien

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Judy-Design & Typesetting

SPECIAL THANKS TO SANDRA LYNNE GIBBS

Senior Secretary
Office of Student Affairs



Sandy graduated from Lincoln High School in Bloomington. Then went on to Normandale Community College before receiving a degree in Speech Pathology from Chapman College, Orange, California. Instead of pursuing the necessary Master's degree in Speech Path, she switched gears a bit, took some evening extension here at the "U" and is presently two-thirds through the evening-Weekend Nursing Program at St. Mary's Campus College of St. Catherine. While at Chapman, Sandy spent a semester at sea on "World Campus Afloat" where she had the opportunity to sail around the world.

Sandy has worked with several great *Peavey* staffs in her eight years at the College of Forestry and has been involved with typing, some editing, typing correspondence to sponsors and mailing the *Peavey* to all the subscribers each year.

Before beginning work in the College of Forestry Sandy had been "warned" by many to avoid working in one of "those older non-air-conditioned buildings at the 'U.'" She was told to hold out for one of the newer, more modern buildings. Surprisingly, however, as soon as she saw the St. Paul Campus, and Room 10 even with its dull, grey walls and then uncarpeted floors and

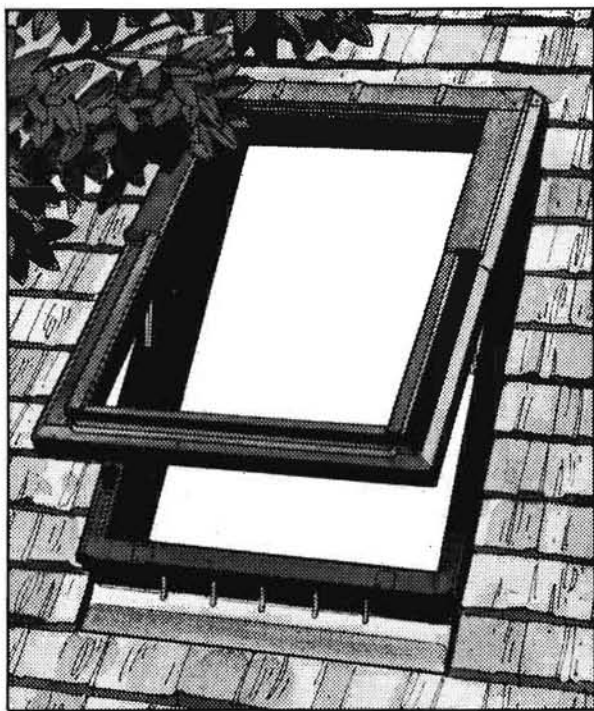
ancient pictures, she knew this was where she wanted to work – the superficial things she had been warned about didn't seem so important anymore because she found an office where there was a mixture of paperwork and helping students which to her was what working at the University is all about.

Probably the reasons for her relatively long stay at the Student Affairs office is the rare pace of always being busy but in a relaxed atmosphere. Being surrounded by students helps make it that way.

And now, after eight years in the College of Forestry, it looks like Student Affairs will be moving to a new modern office after all. Next fall when the Student Affairs operation moves into new facilities Sandy will have prevailed in one-ups-man-ship to those cautioning her about the University's older buildings.

Thank you Sandy for all the hard work you have put into the *Peavey* over the years. Your cooperation and very flexible attitude are appreciated. Future *Gopher Peavey* editors are fortunate, as we are, to have such a capable and pleasant person so willing and able to help.

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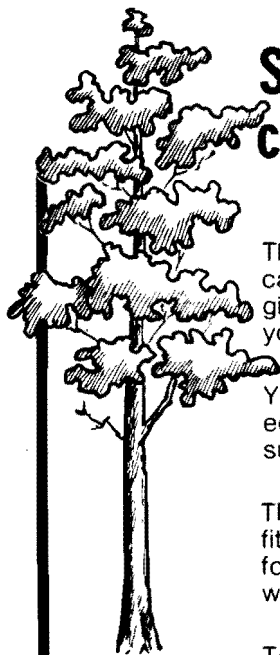
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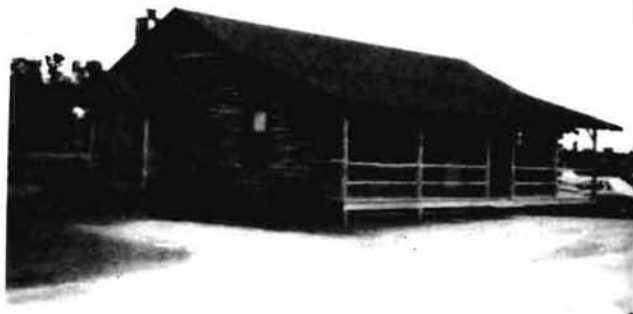
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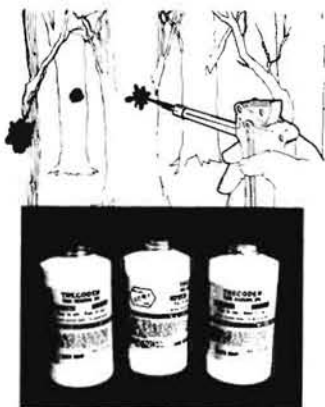


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