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The
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Michigan Tech Forester
Another year ends for the student, but that same year only begins for the graduate. We of the staff of the "Forester" can only speculate on how each person will view his time in life. Here, along with the new Michigan Tech logo, we present our 1971 publication for review. In it we have aimed to capture some of the hard-won moments of the past year for our Forestry students. We hope that they enjoy the memories thus returned as much as we enjoyed recording them.

—Walt Summers, Editor
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The "Forester" Salutes:

One of Michigan Tech's foremost graduates now engaged in industrial and private forest management is this year's recipient of the Forester Salute. He is William A. Todd, a 1948 graduate of Michigan Tech.

Mr. Todd has achieved distinction as a forester and chief executive of the Longyear Companies, a firm which has its headquarters in Marquette, Michigan. Longyear is one of the largest land managing enterprises in the Upper Peninsula of Michigan, and has extensive interests in other states and abroad.

When he joined Longyear as a forester in 1950, Mr. Todd took over the management of forest lands which were mainly cutover, poor in quality and understocked. Realizing the potential of these forests for growth and renewal, he advised his company to retain ownership of the lands. This advice was accepted, and Mr. Todd set about formulating a plan of reforestation and the rehabilitation of these second growth forests. Through this program, utilizing selection cutting and stand improvement measures, Longyear's high quality, maturing stands have emerged. They assure the company a resource for sustained-yield timber production extending indefinitely into the future.

Mr. Todd has put all necessary information for management of these lands on computer cards in order that any needed data can be assembled quickly and correctly. This system facilitates the securing of complete and accurate information necessary for rapid decision-making.

The directors of the Longyear Companies recognized the achievements of Mr. Todd in 1964 by selecting him for the office of president. In this position, Mr. Todd not only manages an extensive forestry program but has responsibility for management of the firm's widespread mineral properties which include a number of active mining operations.

Hailing from Marquette, Mich., Bill graduated from Graveretae High School in that city. At the beginning of World War II he entered the army and served for four years, eight months until his discharge in 1945. During this time he served with the 50th Signal Battalion, then moved to the First Field Artillery Battalion. At his request he was transferred to the famous 87th Mountain Infantry which invaded Kiska Island in the Aleutians. Later this unit became part of the Tenth Mountain Division which fought illustriously in Italy. He was awarded the Bronze Star for courageous actions during this campaign.
After his release from the army, Bill lost no time in enrolling at Michigan Tech, from which he received his degree in forestry, with honor, in 1948. His first employment was with the engineering department of the Duluth, South Shore and Atlantic Railroad in Marquette. In 1949 he became resident engineer for R.E.A. power line construction, and in 1950 he joined Longyear.

The operations which Mr. Todd oversees include not only lands owned directly by Longyear, but those owned by other companies such as Albany Pool, Ltd., Groton-Michigan, Inc., Sparrow Kenton Corp., Dead River, Inc., and Turner Interests. Until recently, it also managed the surface and timber lands of the Keweenaw Land Association, Ltd.

In addition, Mr. Todd is an officer and director in several other land and mining companies having operations in Michigan and Minnesota. He also is president of Mineral Management Corporation, serves as special forestry consultant to Keweenaw Land Association, Ltd., and is managing director of the Huron Mountain Club, owner of about 20,000 acres of scenic timberlands near Marquette.

Mr. Todd married Adeline Oman in 1942. The couple have two children, Kathleen, who lives in Marquette, and Bill, Jr., a student at Michigan Tech. There are two grandchildren.

In addition to his business and family interests, Mr. Todd is active in many community organizations including the Marquette Historical Society, Chamber of Commerce, Rotary Club, and Marquette Range Engineers. He always has been an avid outdoorsman, enjoying fishing, hunting, and skiing until a knee injury forced him to give up his skiing activity. He spends much of his leisure time at his cottage on Conway Lake in the Huron Mountains. A loyal hockey fan, he usually attends several Michigan Tech games each season.

The Forester takes pleasure in saluting William Todd for his accomplishments in forestry, in corporate leadership, and in active participation as a citizen of his community.
In Memoriam

CAPTAIN JAMES G. SIDDONS
Killed in action in Indochina

It is with deep regret that we report the death of Captain James G. Siddons, the second Michigan Tech Forestry graduate to lose his life in the Indochina war. Captain Siddons, who received his forestry degree in 1967, was killed in action while on a helicopter assault mission on February 12, 1971.

Jim was the son of Mr. and Mrs. Garland F. Siddons and was married to Marlene Gratchner in September, 1967. He graduated from Fenger High School, Chicago, where he became a member of the National Honor Society. At Michigan Tech he was a member of Delta Sigma Phi Fraternity.

While at Michigan Tech, Jim attained the rank of Cadet Colonel and the post of battalion commander in the Army ROTC. He received the Distinguished Military Graduate Award in recognition of his standing in the upper five percent of his ROTC class, and was commissioned a second lieutenant at the time of his graduation.

Jim entered the Army Corps of Engineers and received training at Fort Belvoir, Va. In June, 1968, he received his Ranger Tab following a training program at Fort Benning, Ga. He then was assigned to the Eighth Infantry Division and was stationed at Dexheim, Germany. He completed Airborne training at Weisbaden, Germany, and flight instruction as a helicopter pilot and received his aviator’s wings.

He was assigned to the 187th Assault Helicopter Division at Tay Ninh, South Vietnam, where he served as leader of a Cobra platoon. In December, 1970, he received the Air Medal, Second Award with “V” Device for heroism while participating in aerial combat assault.

He was buried in Arlington National Cemetery, Virginia, with full military honors.

We extend our sympathy to Jim’s family, and honor the courage, achievements and the sacrifice he made in the service of our nation. Michigan Tech can take pride in its association with Captain James G. Siddons.

As a memorial to her husband, Mrs. Marlene Siddons has established the James G. Siddons Memorial Student Loan Fund, administered by the Michigan Tech Development Fund. A forestry student may borrow up to $4,000 during his University career, with a maximum of $1,000 for any one academic year. Eligibility will be on the basis of need, availability of funds, and evaluation of the applicant’s scholastic ability.

In behalf of the Michigan Tech Forestry Club, the Forester acknowledges with deep appreciation this thoughtful gift and lasting testimonial to Captain Siddons.
Department of Forestry
The largest freshman Forestry class in Michigan Tech history enrolled for the 1970 Fall Term. The total number of students in the Forestry Department reached 400 for the first time. Prospective new student statistics indicate that this enrolment trend will continue; and that as many as 500 students will be on hand in the Fall of 1971.

Fortunately, the active pre-planning by the staff of the Department of Forestry will find them well prepared to handle the influx of new students. The eleven options from among which students can now choose and the newly-streamlined curricula will minimize problems even for the irregular students.

For the first time, summer courses in Dendrology and Silvics have been added to the usual summer offerings of Forestry Summer School and Forest Surveying. These courses will help transfer students “catch up” on courses not available to them elsewhere and will eliminate the necessity to wait a year for students who must repeat. If the new summer courses receive wide acceptance, their number will be expanded. Currently also the offering of some courses in more than one term during the academic year is being considered as an aid to irregular students.

At the Ford Forestry Center, completion of the new Laboratory has provided badly needed space. The Soils Lab there has been a very busy place as the locale for research on soil-site analysis, on classification of sandy soils, and on some of the problems associated with the reclamation of mine tailings basins. Five graduate students currently are working on phases of the last project. Construction of a new 64' x 144' General Purpose Building is well underway, with the heating and electrical systems currently being installed.

The Center also is contributing to the Department of Forestry’s program. Two researchers now hold joint appointments as Forestry Department staff. Each teaches a course in his area of specialization and supervises graduate student research.

Education at the Forest Technician level has expanded at the Center, too. Forty students are beginning their field work there this summer. Facilities have been expanded and modernized to accommodate them and new service facilities are being planned.

Growth in the School of Forestry and Wood Products has not been without its problems, of course, but student behavior this year, as in the past, has not been one of them. The job of learning still is the Tech student’s chief concern, as it properly should be. It is in such an atmosphere that growth is a challenge rather than a handicap, whatever other problems may attend it.
What ever happened to that special human quality in foresters we refer to as “pioneering spirit”? A century ago it was a common ingredient of many Americans. Only a decade or so ago—it was a quality one could occasionally find among men—and women. But today, pioneering spirit has become a rarity indeed.

What is it?

Pioneering spirit is that quality in young Americans which—instills pride, requires courage, demands vigor, costs energy, absorbs interest, yields experience, invites enthusiasm, provokes thought, incites action, needs incentive, renders character, challenges youth, stimulates associates, and generates more pioneering spirit. It is contagious among the energetic, spurned by the lethargic, conceived by the thinker, implemented by the leader.

Pioneering spirit is the product of originality and it is that rare quality which causes man to explore new vistas beyond present horizons. It is a spirit from within that nudges us into action. A spark of an idea that energizes a body to provide the leadership which can change the whole book of history.

As you examine the characteristics of the real pioneers you find that most of them were soft-spoken, even-tempered people. They were often the quiet ones who served to stimulate leadership by their positive thinking and direct action. They were usually men with orderly minds; men who could set into motion a whole skein of events by lending direction to the energy and talents of others. Often, they were experts at selecting a team of associates who had the skills and experiences, product of originality for success of their new adventure. Psychologists of the first order, they had the savvy to understand human nature of those who assembled about them: They were true leaders.

Pioneering spirit comes in the form of a questioning mind. What lies beyond the mouth of the river? The edge of the escarpment? The distant mist-shrouded hills? It is the spirit that urges answers to what? how? where? — then provides delicate finesse and expert “follow through” which compels plans to be made and implemented.

And what is spirit? It is that peculiar restless quality of man that causes him to be dissatisfied with the ordinary. Pioneering spirit is dissatisfaction personified. It comes in men of all sizes, ages, sorts, professions, breeds, religions, colors, creeds and conditions. Anyone can be a pioneer—the only single prerequisite is to have spirit in what you do; to generate keen interest in “yonder”. To have that initial spark of enthusiasm and eye-twinkle that moves you to be a pioneer and to work to benefit the society in which we live.

Be a pioneering forester! Generate spirit.

Gene's
"Top Log in the Deck"
Faculty

DR. MICHAEL S. COFFMAN
Assistant Professor
B.S. Northern Arizona Univ.
M.S. Northern Arizona Univ.
Ph.D. Univ. of Idaho

C. RICHARD CROWTHER
Associate Professor
B.S. Iowa State Univ.
M.S. Iowa State Univ.

DR. GENE A. HESTERBERG
Professor and Head
B.S. Purdue Univ.
M.S. Univ. of Michigan
Ph.D. Univ. of Michigan

VERNON W. JOHNSON
Professor
B.S. Syracuse Univ.
M.S. Syracuse Univ.
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Assistant Professor  
B.S. Syracuse Univ.  
M.S. Syracuse Univ.  
Ph.D. North Carolina State Univ.

ROSELL K. MILLER  
Assistant Professor  
B.S. Syracuse Univ.  
M.F. Syracuse Univ.

ROBERT L. SAJDAK  
Assistant Professor  
B.S. Michigan Tech Univ.  
M.S. Univ. of Minnesota

DR. NORMAN F. SLOAN  
Associate Professor  
B.S. Michigan Tech Univ.  
M.S. Univ. of Wisconsin  
Ph.D. Univ. of Wisconsin
Our fine departmental secretary LUANA C. KORPELA

DR. ERIC A. BOURDO, JR. (right) Dean, School of Forestry and Wood Products, receiving SAF Distinguished Service Award from Clarence A. Samuelson.

H. M. STEINHILB
Professor
B.S. Michigan Tech Univ.
M.S. Michigan State Univ.

DR. BERNARD C. H. SUN
Assistant Professor
B.S. Taiwan Univ.
M.S. Univ. of British Columbia
Ph.D. Univ. of British Columbia
Rapidly rising enrollment has been the big story of 1970-71 for the Department of Forestry. At the beginning of the fall quarter, 360 students were enrolled in forestry, an increase of 48 over the enrollment of a year earlier. More significantly, new students numbered 151 last fall, as compared to 97 the previous year.

Enrollment for next year is expected to rise substantially above the level of 1970-71.

Three faculty changes occurred since last year. Dr. William Wynd resigned effective last June and took a position with the Division of Business and Industry at Eastern Washington State College, Cheney, Washington.

Dr. Bernard C-H Sun, whom we reported last year as arriving during the spring of 1970, was unable to begin his teaching duties at Michigan Tech until the fall quarter. Dr. Sun arrived last September from Vancouver, British Columbia, Canada, where he had completed his doctoral studies at the University of British Columbia. He teaches courses in the field of wood utilization and wood technology, holding the rank of Assistant Professor. He is married and has one child.

Dr. Michael S. Coffman joined the forestry faculty in September, 1970. He is a graduate of Northern Arizona University, Flagstaff, and conducted his graduate study at the University of Idaho, Moscow. His teaching responsibilities include instruction of courses in silviculture, range management and forest ecology. He also holds the rank of Assistant Professor. Dr. Coffman is married and has two children.

Dr. Lawrence Rakestraw returned to his teaching duties at Michigan Tech last fall after a year's leave of absence. While on leave, he engaged in a research project sponsored by the U. S. Forest Service, compiling information and writing the history of forestry in Alaska. His search for information took Dr. Rakestraw to many parts of the United States, as well as to Alaska for two summers of investigation. Although officially a member of the Social Science Department, Larry teaches three courses dealing with U. S. forest history and the public lands, in the Forestry Department.

Dr. E. A. Bourdo, Jr., Dean of the School of Forestry and Wood Products, received a notable honor from the Wisconsin-Michigan Section, Society of American Foresters, in March. He was presented the 1971 Distinguished Service Award by the Section. Dr. Bourdo was cited as “an outstanding educator who has developed a remarkable ability for encouraging young people to use and develop their mind”. It was recognized that for 24 years he “has brought his talent, understanding, enthusiasm, leadership and practicality to teach forestry, to conduct research, and to extend the profession of forestry in every right way”.

The award notes that, as Director of the Ford Forestry Center since 1955, he developed that facility into “one of the nation's outstanding centers for research in forest soils, silviculture of northern hardwoods and continuous forest inventory”. He is credited with development of the research design at the Center “in which all aspects of forest management, timber harvest and wood utilization are programmed for electronic data evaluation”. He also is cited for establishing and administering “an exceptional array” of technician level courses which make the Center “a veritable clinic to solve problems in sawmill operation”.

In 1968, Dr. Bourdo was appointed the first Dean of the newly organized School of Forestry and Wood Products, which consists of the Department of Forestry, Institute of Wood Research, and Ford Forestry Center.

The Forester extends its congratulations to Dean Bourdo for this recognition of his outstanding accomplishments in forestry education, research, administration and professionalism.

C. R. Crowther
THOMAS M. BAHTI  
Bombay, India

ERIC A. BOURDO  
L'Anse, Mich.  
Forestry Club, Rifle Raffle  
Chairman, Glee Club

DENNIS J. BUSCH  
Bay City, Mich.

DONALD A. BARBER  
Troy, Mich.  
I. M. Basketball, Softball,  
Volleyball

RUSSELL W. BRITTAEN  
Amasa, Mich.  
Forestry Club, Varsity Basketball,  
Track, I. M. Basketball, Baseball

WILLIAM L. GANTZ  
Chicago, Ill.  
Forestry Club

Seniors
BERNARD F. HUETTER
Green Bay, Wise.
Forestry Club Treasurer, Forestry Research Problem, Xi Sigma Pi
Dorm House Vice President, I.M. Football, MTU Scholarship

KEITH V. KILPELA
Chassell, Mich.
Forestry Club, I.M. Hockey, Horseshoes, Vets Club.

JOHN M. KOSKI
Ewen, Mich.
I.M. Baseball, Basketball, Hockey

LOUIS J. JEFFERSON
Escanaba, Mich.
Forestry Club, I.M. Volleyball, Softball, Football

PAUL M. KING
Jackson, Mich.
Forestry Club Annual Staff, Dendro Lab instructor, WWH House Pres., Treasurer, Married Students Assoc., Dept. Photographer.

FREDRICK J. KRUEGER
Grand Rapids, Mich.
Forestry Club, I.M. Hockey, Swimming, Softball, Football
GLENN E. LAMBERG  
Rapid River, Mich.  
Forestry Club, Alpha Phi Omega,  
Xi Sigma Pi, Fiscal Agent

CRAIG V. LITTS  
Norway, Mich.  
Forestry Club

JOHN A. NISKANEN  
Southfield, Mich.

TERRY M. LANE  
Escanaba, Mich.  
Forestry Club—Conclave Team,  
Camp comm. Rifle Raffle, Vets Club,  
Student Education Corps,  
I. M. Softball, Volleyball

EUGENE E. MILL  
Sebewaing, Mich.  
Dendro Lab Instructor, SAF,  
Xi Sigma Pi

JAMES T. NOLAN  
Munster, Ind.
DAVID L. OUILETTE
Pinconning, Mich.
Forestry Club, Vets Club, I. M. Bowling

KATHY L. QUILLIAM
Tucson, Ariz.
Forestry Club, Xi Sigma Pi, Intervarsity Christian Fellowship Annual Staff

THOMAS C. SALMI
Negaunee, Mich.
Forestry Club, AFROTC Pistol Team, Tau Kappa Epsilon—Chaplain, Xi Sigma Pi, I. M. Hockey, Basketball, Volleyball.

JOEL G. PRATHER
Rockford, Ill.
Forestry Club, Vets Club, I. M. Volleyball

MICHAEL E. RYAN
Auburn Heights, Mich.
Forestry Club, Bridge Club—Pres., I. M. Softball, Bowling

JOHN R. SCHULTZ
Lake Mills, Wisc.
Forestry Club, Alpha Phi Omega—Pres. & Vice Pres. Xi Sigma Pi, SAF, I. M. Basketball.
DANIEL W. SIKARSKIE
Manistique, Mich.
Forestry Club, Xi Sigma Pi,
Dean's List,
Mich.-Wisc. Timber Producers
Assoc. Scholarship.

GARY L. STANLEY
Windham, Ohio
Forestry Club, I. M. Softball,
Basketball

RONALD K. STUDER
Grand Rapids, Ohio
Forestry Club, Vets Club,
Otter River Camp Chairman

DONALD H. SIMMONS
Scott Township, Penn.
SAF, I. M. Volleyball,
Daniell Heights Council.

DENNIS A. STONE
River Rouge, Mich.
Forestry Club,
Forester Editor-in-Chief
Xi Sigma Pi, Chief Forester

JOHN R. VAN ELLS
Manitowoc, Wisc.
Forestry Club
WOLFGANG WALTHER
Dumont, N. J.
Forestry Club—Conclave Team,
Varsity Football, Track, Ski Patrol,
I. M. Basketball, Volleyball, Softball,
Track, AFROTC Commander

GLEN C. WARUCH
Kerhonkson, N. Y.
Forestry Club, I. M. Basketball

“Wow”

“Julie”

“Nobody loves us”

Not Pictured

MARK R. LADUE
DAVID R. LIEB
Forestry Graduate Program

The graduate program in Tech's School of Forestry continues to grow in both size and diversity of study. Faculty additions and increases in facilities have opened the door to more areas of interest and broadened the entire graduate program.

Fourteen students are now enrolled in courses of graduate study leading to the M.S. in Forestry. All are engaged in research projects related to management of forest resources. A breakdown of the various disciplines shows there are three students in silviculture, three in economics, and one in each of the following: pathology, entomology, recreation, ecology, wood technology, wildlife, mensuration, and logging.

Four graduate students currently at work will complete their schedules by summer, 1971. These research projects embrace studies of particle board for trailer decks, stand structure and quality of cutting methods, forecasting growth value in northern hardwoods, and decay following damage by the sugar maple borer.

Other projects are investigating methods of re-vegetating the so-called stamp sands in the Torch Lake area, the effects of stand density on growth of jack pine, and logging-cost relations in northern hardwoods. Another student is developing a method of using lady bird beetles to control a serious insect pest in nurseries.

In addition to their own course work and research projects, graduate students often help with undergraduate lectures and labs. This arrangement gives the class benefit of modest change, relieves some pressure from the instructor, and allows valuable teaching experiences for the graduate student.

Jay Wright

DONALD L. SCHWANDT
M.S. in Forest Economics

CHARLES A. TRIPHAHN
M.S. in Wood Technology

C. JAY WRIGHT
M.S. in Forest Pathology
Forest Technician
Program

In 1971 eleven Forest Technology students received their two-year associate degrees. This was the second graduating class since the Forest Technician program first began in the fall of 1968. The main objective of this program is to train men to assist foresters in carrying out their many functions.

During their first year through the cooperative use of Forestry Department facilities, the students were introduced to the basics of forestry and related disciplines on the Houghton campus. The summer term and second year were spent at Michigan Tech's Ford Forestry Center where practical field work was emphasized.

This past winter saw the first annual softball game on snowshoes between the freshmen and sophomore students. As a result of their greater experience on snowshoes, the second year students won the game two to one.
Guenter E. Frankenstein, a 1953 forestry graduate of Michigan Tech, received an award on December 2, 1970, for outstanding service in connection with ice engineering research. The award, the U.S. Army Research and Development Achievement Award for 1970, highlighted the key roles Mr. Frankenstein played in two operations related to sea ice in the arctic. One of these was the recovery of nuclear armed bombs following the crash of a B-52 bomber adjacent to Thule Air Force Base in Greenland, in 1968. The other operation was a study of sea ice and its effect on marine structures, made during the voyage of the tanker USS Manhattan through the Northwest Passage. Mr. Frankenstein led a team of fifteen scientists and engineers on board the Manhattan during this historic voyage.

The citation was presented by Lt. Gen. A. W. Betts, Chief of Army Research and Development, at the U.S. Army Cold Regions Research and Engineering Laboratory, Hanover, New Hampshire. Mr. Frankenstein is a research civil engineer, stationed at the Hanover installation.

Shortly after the B-52 crash, Mr. Frankenstein received orders to fly to Thule Air Force Base for the purpose of providing guidance concerning safe procedures in recovery operations on the sea ice, site of the crash. The procedures which he formulated for monitoring ice thickness and other conditions, for deployment of structures and equipment, and for operation of equipment on the ice, resulted in an operation unmarred by break-through accidents despite marginal thickness of the ice.

In the Manhattan operation, Mr. Frankenstein organized the research effort and directed the ice reconnaissance and ice properties research program carried on during the voyage. The program yielded data which materially advanced the knowledge of both ice engineering and the design of icebreakers.

Mr. Frankenstein has been in government service since 1954, when he joined the staff of the Snow, Ice and Permafrost Research Establishment, now designated CRREL. In 1969, he was elected to the International Registry of "Who's Who".
Features
The "Good Ole' Days" of Logging

"Then here's to the lumberjack, bad or good,
Who toils in the depth of the dark green wood.
Though rough of dress, of visage grim,
Beneath it all there's a heart in him."

This first stanza from the song "The Lumberjack" gives a pretty good idea of the type of men who flocked to the Lake States in the late 1800's to cut the white pine. These were rough, tough men who sawed the pine but they were by no means lawless savages. Many of them were average family men who were forced into logging in order to support their families. Most of the men in these pictures have been long forgotten; but what they did and the way they lived in the states they helped build will never be forgotten.

A typical work week started awfully early with the cookee and his helpers rolling out of the sack at 3:30. The teamsters would be up at 4:00 to hitch the teams and at 4:30 the shanty boys (now called lumberjacks) would roll out. They were blasted out of their sleep by the five foot long tin horn that the cookee used.

They made quite a motley crew as they dressed for the day ahead. Most logging was done in the winter; so these woodsmen dressed with the firm conviction that the heavier the clothes, the warmer they would be. The "long johns" were of the heaviest wool available and their under-shirts were jackets in themselves. The first layer was followed by a heavy wool shirt and a pair of mackinaw pants. Then, after three or four pair of socks, they would put on a large pair of overalls and a heavy mackinaw coat. Add mittens, moccasins and a warm cap and these men were ready for anything. The only drawback to dressing like this for cold weather was that often a day would warm up considerably. Anyone who has ever been in a bunkhouse when seventy-five pairs of sweat-soaked long johns and two hundred fifty pairs of socks are drying has had the disadvantage jump up and bite their noses. With Sunday being the only wash day, by Saturday night . . .

Siberianly dressed, the men would head toward the cook shack for a good lumberjack breakfast. This was one of the two times during the day when the cookee really had to prove himself. He would either have to be an excellent cook or he would be walking up the tote road by noon. With many of the camps miles from the nearest town, about the only thing that kept peace in the camp was good food. With poor food the men would be ready to kill at the drop of an axe before half the winter was past. A typical breakfast for these camps would consist of: fried potatoes, sowbelly, pickled beef, sour-dough flapjacks, molasses syrup, gravy, cookies (the size of stovelids), doughnuts and steaming mugs of tea or coffee which was "guaranteed to make weak men strong and vice-versa". After this little snack the men would take a short pull on their pipes while waiting for dawn to break.

As for how hard the work was, the pictures speak for themselves. However by the latter 1800's, with the introduction of the crosscut saw and later with motorized skidders, the woodsmen's work was greatly reduced. The crosscut saw saved many a man's back; cutting down a 50" pine with an axe was no small task.

If the men were more than a mile from camp their noon meal would be brought to where they worked by sleigh. The "flaggins" (a noon meal brought out to the woods) usually weren't much more than beans, bread and
coffee; but after a morning's work it was mighty welcome. The only problem was that often the beans would freeze right on the tin plates; there was no grumbling over the crunchy beans, because they knew that supper would more than make up for it.

Later, when the "jobber's sun" (the moon) rose the men headed back to camp to ready for the evening meal. After an agonizing fifteen minute wait in the bunkhouse they would be called to supper. The only noise during the next half hour would be the sound of chewing; it was an unwritten law that there was to be no talking while the meal was in progress. If the men had been allowed to talk it probably wouldn't have been too long until they would have started throwing things. This final meal of the day was fit for a king; pork, salted beef, beans, potatoes, bread, tea, dried applesauce, rice pudding, cookies, doughnuts, and black molasses cake. After supper the men would return to the bunkhouse while the cookees' helpers cleaned up the cook house and washed the dishes. The silverware was dried by shaking it in an old grainsack; not too sanitary—but highly effective.

The evenings in the bunkhouse were rather short after such a hard day's work. Some would write letters, mend some socks, sit around and talk or play some quiet games. Perhaps having a final pipe before lights out at 9:00.

Thus the week went without much change until Saturday night rolled around. If there was a town within a few miles the men would head there for some drinking, always a little fighting and generally just try to raise a little hell. The night life was not quite so gay for the isolated camps but they gave it one helluva try. There was always lots of singing and dancing if someone had a fiddle or a harmonica. The men would grab their ladies (the ones with the bandanas on their arms), head for the cen-
Winter Hauling

Loading Up

At sight of misery or want's appeal,
He'll give his all for the sufferer's weal,
He's done his work well, the forest laid low.
Soon, in story alone we'll the lumberjack know.
Steam Loco and Load

Winter Camp

Driving the Steam "Skidder"

Steam Loco and Load

Lunch in the Woods

In the Bunkhouse

The Cook and Crew

We acknowledge with thanks the many photographs provided for this issue by:

The Houghton County, Michigan Historical Museum
(B. L. Haas collection)

The Marquette County, Michigan Historical Museum

The Michigan Department of Conservation

At Work

Log Stacks
Research at Ford Forestry Center

The role of a forester in today's society is very diverse. Gone are the days of just timber cruising, forest type mapping and stand tables. A graduating forester may secure jobs in municipalities, with industrial forests, or in the fields of recreation, wildlife and pollution. Forest research has also had to adapt to the needs of a changing society, and this is reflected in the variety of studies at the Ford Forestry Center.

The development of the 4,000 acre research forest is under the guidance of Prof. Jim Johnson. Studies in progress involve inventory, northern hardwood silviculture, regeneration of jack pine, together with phytosociology and ecological investigations in virgin forest types at the Huron Mountain Club. Forest managers need to maintain a high level of growth and value in order to maintain an economically viable forest. Jim's studies are aimed at determining the level of management necessary to attain these goals.

The speed and accuracy of today's computer allows rapid analysis of large volumes of data. Prof. Jim Meteer is deeply involved in this aspect of forest research. During the past several years, over eight public and private forest landowners have sought Prof. Meteer's expertise in this area of study. His studies have given graduate students invaluable experience in the use of computers and problems associated with analysis of data. Forest managers need quick and reliable answers with which to manage forests.

During the year 1969, it is estimated that over 20 million tons of fly ash waste were produced in the United States. This is expected to double in the next several years. Deep concern is being voiced by our society over problems such as this. What can be done with these kinds of materials? Prof. Steve Shetron has become involved with similar problems concerning industrial wastes. Last year Prof. Shetron maintained a three year old study on the vegetative rehabilitation of iron mine wastes and started a study concerning the establishment of vegetation on copper tailings. Both studies have been consolidated into one project supporting two graduate students.

The problems of our environment are real problems and involve detailed study. In forested areas such as the Upper Peninsula of Michigan, tree growth is a vital component in understanding the use of our forests. The soil, climate and vegetation are interwoven influences on tree growth. Prof. Shetron is responsible for developing forest growth potentials by the kinds of soils and forest types common to the Upper Peninsula of Michigan. Results of this research will aid public and private forest landowners in making decisions about the management of forests such as fertilization of northern hardwoods, levels of stocking, or the quality of lands for multiple use.

During 1970 the study of forest fertilization was greatly expanded. One forest landowner in the Upper Peninsula of Michigan completed fertilization of over 2,000 acres. Research at the Ford Forestry Center was also expanded to include the study of tree response to different levels of fertilizer. Rates of application were varied from 250#/acre to 1,000#/acre for nitrogen, phosphorous and potassium. This year, 1971, a look at the economic potential of forest fertilization should indicate whether forest fertilization is a sound management practice and under which circumstances. The Center looks forward to the continued involvement of forestry students who are challenged by the idea of assisting in these various areas of research.
A technological breakthrough to achieve maximum tree use in hardwood dimension production has been developed after five years of research by Prof. James F. Hamilton of Michigan Technological University's Institute of Wood Research.

The maximum-tree-use concept achieves 30 percent more usable material from the same tree, compared with the system currently used by manufacturers. In addition to increasing the value of trees, the new concept also will help conserve our valuable timber resources because 80 trees will produce the equivalent of 100 trees.

Hardwood trees usually are converted into logs ranging from 8 to 16 feet long, which then are sawn into full-length graded lumber. Most of the lumber is shipped out of the area. Manufacturers then re-manufacture this lumber into dimensioned components primarily for furniture. The ultimate use of the bulk of hardwood timber is in short lengths, averaging less than 48 inches.

The new concept involves using more of each tree stem and then cutting it into shorter lengths related to the length of the actual finished product. Those sections, bolts, are converted into the board lengths required in a fast-sawing system. After kiln drying, re-manufacturing is done to produce a secondary product to the purchaser's specifications. Thus, the maximum tree-use concept employs more area people than sawmilling alone and the value added by re-manufacturing helps the economy of the area.

Another benefit of the new system is that low quality hardwood timber produces a much better yield of high grade industrial parts than the current system, which has a problem of obtaining high grade lumber from low grade logs. A key to implementing the concept was development of a reliable method of grading and cutting bolts for specific uses. The actual sawing involved in the study was done at Michigan Tech's Ford Forestry Center sawmill at Alberta.

The research proposal was approved by the Michigan Legislative Committee on Economic Development in June, 1965. The project was funded by the Michigan Office of Economic Expansion and has been supplemented by support from the University's Institute of Wood Research. The new maximum-tree-use concept could result in increased employment and increased market value of products throughout the hardwood timber areas of the state and the nation.
The number one priority assigned to the Houghton Forest Engineering Laboratory is to develop economical means of harvesting and transporting material from low-quality forest stands so these low-value stands may be converted to improved species. The effort in this priority area has been broken down into three functional divisions. These divisions are described as: (1) Mechanics and Physics of Tree Breakdown, (2) Equipment Evaluation, Design, Efficiency, and Safety, and (3) Logging Systems Analysis.

Division 1 has become involved in studies including shearing, chipping, and bark removal after chipping. Division 2 has initiated studies in tree weight and center of gravity, dynamic forces and moments in handling trees, and mobility of off-road vehicles.

It is the responsibility of Division 3, Logging Systems Analysis to incorporate the basic data provided by divisions 1 and 2 and other sources into meaningful solutions to harvesting and transportation systems. It is reasonable to assume that no one harvesting and transportation system will be the solution to all anticipated and existent conditions. In addition to forest factors, economic, social and market conditions must be taken into consideration. Logging Systems Analysis will attempt to find the answers and solutions to questions and problems in a manner that can handle the variety of conditions, actions, and choices encountered. It should assist the decision-maker by furnishing him with quantitative estimates of the effectiveness and costs of each of the alternative courses which he could choose.

The basic data furnished by the other disciplines is of great importance to the logging systems analyst since theories and models of the operation can be established from them. From these theories and models, he can predict and test the system properties by computer simulation or mathematical computation before constructing an actual system.

Some of the current and proposed studies to be undertaken by the logging systems division are:

1. Development of cost data for log making and transportation.
2. Determination of the value of the product at each stage of an operation.
3. Evaluation of the productivity of various harvesting methods.
4. Simulation modeling of harvesting machines and systems of machines.

A typical study undertaken by the Logging Systems Analysis division was a cooperative effort with the Forest Products Marketing Project located on the campus of the University of Minnesota in Duluth. This was a study to investigate the economic operability of aspen pulpwod. It attempted to develop relationships between harvest costs and the environment and to test the applicability of specific methods for estimating accessibility and resulting transport cost per cord. Although all fieldwork was conducted in Minnesota the principles applied would be effective in other areas.

—Frank E. Biltonen, Research Industrial Engineer
Michigan Tech Forestry Club 1970-71


The Michigan Tech Forestry Club was founded in 1936 in order to give the Forestry students at Michigan Tech a representative organization on campus. Throughout the years since its founding the club has represented the Foresters in campus activities and functions, as well as in the Midwest Foresters Conclave. The Forestry Club is the only organization on this campus which officially represents the Tech Foresters. From its start, a Forester was also a member of the Forestry Club.

In the past few years the Forestry Club has been faltering in its task of representing the Foresters. During the past several years the club has gone from almost full representation of the Forestry students down to less than half representation. Such activities as intramural sports, Winter Carnival, and Conclave show the effect of this lack of representation and participation. Instead of being among the best, the Tech Foresters are now no longer even considered as contenders for first place. Other organizations do not even feel the Forestry Club is in the competition.

The Forestry Club should not put up with this attitude any longer. The club should once again try to put itself at the top of the list. In order to do this much more participation and cooperation is needed. All Foresters must once again want to belong to the club and be willing to pitch in and help the club in its activities. This is the only way the club can get out of its rut and back into its former place of number one.

—Dave Szykowny, President
"THE STAFF"

(L. to R.) C. R. Crowther, Paul King, Linda Blum, Dave Engleman, Walt Summers, Steve McCormick, Chris Kionka.

THE "FORESTER" 1971

S. McCormick and C. Kionka

D. Engleman
P. King
cutting up
The first full year of Xi Sigma Pi’s existence on the Tech campus is drawing to an end. It has been a busy and interesting year. It began in October with the election of officers from among the student members. I won the Forester’s position, Dan Sikarskie got Associate Forester, Glenn Lamberg—Secretary-fiscal Agent, and Tom Salmi—Ranger.

Professor Mike Coffman, who was active in the chapter at the University of Idaho last year, became our faculty advisor. We also decided that with his background in advising the “Forester”, Dick Crowther would make the perfect fraternity historian.

Since graduation wiped out half of our active members, our first order of business was to plan an initiation. The Fall quarter was almost over before all of the details were worked out. So we held the initiation the first full week of the winter quarter. We admitted three professors, one graduate student, and eight underclassmen to the chapter. The banquet was held at the Colonial Steak House.

The rest of the winter quarter was spent setting up the structure of the fraternity. We worked on the by-laws to the constitution, chapter dues, and refining the initiation procedure. A committee was established to investigate the possibility of our fraternity sponsoring an annual symposium, also.

Spring quarter found us setting up another initiation. This one brought in two professors, two graduate students, and ten underclassmen. We held the banquet on May 6 at the Redwing Lounge and Mike Wiener of M.T.U.’s Fraternity Relations was the guest speaker. Now, as the year comes to an end, our last item of business will be to elect a new slate of officers for next year.

—Dennis Stone
The Otter River Camp
“Our Hideaway”

A cool, clear stream filled with sly, shy, slithery trout. Clean, crisp air disturbed by an occasional mosquito, black fly or any of the other millions of insects, colored by the bright red setting sun. This is the Otter River where many a forester finds himself standing with rod in one hand and insect repellent in the other. Yes, the Otter River Camp has been the hideaway for many foresters this past year. It is the only place on the campus of Michigan Tech where a forester can go to just relax and enjoy the beautiful Copper Country. There are no exams to worry about, no homework to do, no school—just fishin’, fun and friends. Big Brother Day, Winter Outing and Spring Field Day have brought many foresters together this year. Work was avoided at all costs. Everyone participated in the events and good times which are important to rounding out the strong, hard core forester. After a long day of difficult events like tobacco spitting and match splitting a good hot sauna hits the spot. Being typical Tech students, some nuts run from the hot, steaming sauna, wearing what nature has endowed them with, into the snow or cool Otter River. Indeed, foresters find “enjoyment” in many ways!

The camp is not only fun and games. It takes a lot of hard work to preserve our hideaway as a palace of relaxation and enjoyment. This year three work days were held to accomplish the work which had to be done. In the fall a permanent parking lot was established, thanks to Professor Crowther’s recreation class and the Houghton County Road Commission. Remember those mud holes which ate your car as you neared the gate to the camp? Well, they won’t do it any more. It’s a great feeling to drive up to the Camp and kick up dust instead of water all summer long! A new sturdy metal gate was constructed at Alberta for us this year. It was put in this summer and hopefully we will see an end to snowmobilers helping themselves to our winter supply of wood. Other big projects for the Camp this year include the stream improvement and reroofing projects. In June, with much help from the Department of Natural Resources, the stream bank was finally stabilized. Also during the summer the Camp was reroofed. It was in need of repair from the thick layers of ice deposited over many winters. Hopefully, our Camp is now safe and sound for many more years to come.

I would like to take this opportunity to give a special thank you to Dean Eric Bourdo, Head of the Forestry Department Dr. Gene Hesterberg, our Club adviser Dr. Martin Jurgensen, the Camp Committee and all the people who have willingly offered their time and energy to make the Otter River Camp truely the “Forester’s Hideaway”.

—Ronald J. Church,
camp Committee Chairman

THE CAMP COMMITTEE
T— (? ) Zielinski

Glenn Comfort and Bill Dennison “At Work”

R. Church, E. Frimodig, Scott Almdale, L. Blum, C. Kionka, R. Hoeksema, R. Coleman, G. Anderson, W. Hughes, M. Harris, Joe, R. Herbig.

F. Krueger (What’s up?)
C. Kionka

P. “Tarzan” Blettner

“Norm” — Teaching is rough!

“Peg”
As the sun appeared over the Copper Country for the annual "no-snow" season the ever-fortunate and happy-go-lucky foresters of Michigan Tech headed into the mosquito infested woods to laugh away the summer and play in the mud. Again we were led on by our valiant professors, and under their watchful and baleful eyes we poor fools trudged through mile after mile of Upper Michigan's finest second growth timber in quest of knowledge and other things. Pacing in circles, slashing at brush and black flies and searching for those elusive quarter-corners kept us constantly busy from pre-dawn to approaching dusk.

Sheer toil was often interrupted with the wonderful jokes of "Hammer" and "Ross"—each competing for the last laugh. And for a laugh, who could ever forget the bray of Bill (Crowbait) Stewart?

After our initiation we moved into the cultural half of our lessons and were placed under the tutelage of Norm and Verne. Oh well, "Say la V!". It seemed that the only thing in the world that started earlier in the day than we did were the mosquitoes—and they must have been waiting for their "Off" breakfast.

Even the morning flight from Houghton aboard the "Yellow Streak" with "Mad Marty" at the helm was an event to recount in numerous tales during the rest of the day and certainly to relive each night while 'shaking off the dust' at Spanky's. Awe and fear rode each day in that metal monster which we always hoped could somehow get back to campus and just as fervently hoped would not start the next morning.

What would surveying have been without our faithful companion Joe and his ever-filled water can? How futile it seems in retrospect to have spent all those hours peering at the sun in a hopeless attempt to pinpoint our location—and proving only what we already knew—that we don't know—that we don't know where we are!

Even with the complaints though, we were happy to finish the summer and race away to enjoy our too-short vacations. We hope we learned something. But we still can't wait until we can sit back next year just to listen to what the next class has to say about their summer camp.

—Terry Reedy
Conclave

This year marked the nineteenth annual Midwest Forester’s Conclave and saw the competing teams gathered in the warm climate of Indiana as guests of the Purdue host team. Competition included formidable teams from Purdue, Minnesota, Illinois, Southern Illinois, Michigan State, Michigan Tech, Missouri, and Michigan ... finishing the day in that order.

All of the contestants put forth as much effort as they were capable of and, win or lose, were able to feel that they had participated well in their events. The year’s “special event” was a particular back-breaker and nearly finished more than one team. While muscles were still aching and backs were still sore every team vowed to return next year and do twice as well as they had this year. Next year Tech will be back stronger than ever!

—Dave Lieb
1970

“Chris” Kionka

“Jim” Conley

“Ros” Miller

“Bill” Stewart and “Drew” DePuydt

Dave Lieb

Dave

John “Mud” DePuydt

Scott Almdale and Dave Broberg

“Rod” Ritter
Intramural Sports

Well the Foresters' competitive spirit in intramural sports has gone from bad to worse. Out of about twenty-five different intramural sports, the Foresters participated in four of them, which were bowling, volleyball, hockey, and basketball. The basketball team made it into the finals and ended up tied for third place. The Foresters have sure been going down hill in sports. Maybe it's because they just don't care.

Come on Foresters—Fire Up!

—David Engleman

Up for the rebound.

What form.

The opposition gets a shot.

Another goal for the Foresters.
Venison Booyaw

The Forestry Club’s annual venison booyaw was held at the St. Albert the Great parish this year. The more abundant than usual bits of venison were delicious, enhanced by the culinary genius of Professor Norm Sloan and his cooking staff. Even after seconds and thirds some of the booyaw was left and was destined to future outings at the camp.

Tech Professor Bradley gave an interesting talk this year on the three years which he spent in Australia. Many questions were fielded by the foresters as they sought to discover the possibilities of future employment in that part of the world.

Attendance was very good this year as most of the club turned out to get a taste of real “deer meat”.

—Eric Frimodig

Rifle Raffle

The Rifle Raffle went over well for the Forestry Club this year. The raffle netted nearly $300 for the club to set an all time record. Ted Hering managed to win himself $15 for being the top salesman—at over a thousand raffle tickets.

This year’s first prize was a Winchester, Model 94, 30-30. Also given away were a sleeping bag, snowshoes and a gun cleaning kit. Homecoming Queen Mary Ouellette was on hand to pick the winning tickets.

—Eric Frimodig
Big Brother Day

Big Brother Day started out questionably this year. Those who thought they were spry enough to get up early and still make it through the day, watched big fluffy snow flakes filter down from a completely clouded sky. But as the day went on, the weather improved. The sky cleared, and the sun came out to spur on the activities. This year left very little to be desired. The activities came and went steadily and the food just went. The traverse was run first and most finished in time to watch the bolt throw. Except, that is, the one who read the wrong end of a compass needle! The bolt was thrown, along with a few backs, the logs were cut, along with a few fingers, and the matches were split, along with a few hopes. Finally came the favorite, the tobacco spit, and some of those guys could hit all four pieces of paper at once. A few of the guys could concentrate a little better though, and almost hit Norm, our ref. With that event, all planned activities were through, but Dave and Julie still had to go down and test the water temperature. I'll bet it was cold! Then after a short skeet shoot, people slowly wandered home, satisfied, sore, and excited about the next Big Brother Day.

—Taren Hollister

Look at that concentration.
T. Dombrowski

K. Quilliam

Now that's confidence.
It just won’t move!
L. Pratt, K. Quilliam

Turn what log over, eh?
J. DePuydt

Just because you can do it.
M. “Barney” Kennedy

Time for a bath.
Joe Minier Ron Church

I Swallowed it!
J. Conley
G. Van Heest
Dude
B. Stewart
T. Zielinski

Going up!
“Denny” Wyllie
The Otter River Camp is not entirely for our pleasure. Routine maintenance and general house cleaning have to be done, usually every spring and fall.

Last fall it was said that we had the most gung-ho task force at the camp ever. Most of the work centered around digging holes; a new garbage pit, a drain for the sauna, a drain pit for the kitchen, and gate post holes. The wood shed was filled for the long winter ahead, a chimney was installed for the new oil stove, repairs were made on the bridge, and the cabin was generally buttoned up for the winter. Two of our female twigs came along to cook lunch, pick up trash, and paint all the saw handles. The final problem was a test of the pulling powers of a Jeep on our water soaked burling log which could not be trusted in the river all winter.

This spring it was mostly a clean up. A site was cleared for some of the spring field day events and the snow that we had so laboriously removed from the roof last winter was spread out to speed its melting. Some of it even ended up back on the roof. Except for the discovery that the cabin needed a new roof, everything was generally ready for summer.

—S. McCormick
It was a mild winter day in February with little sign of snow in the sky, at least for the time being. The 1971 Winter Outing started out with a bang of feet and the scraping of shovels on the cabin roof. The shoveling was quite tiresome for everyone who pitched in and helped. After the shoveling was finished, lunch was served and everyone sat around the fireplace eating and talking about old times. Then the next and last event of the afternoon was the annual football game between the upperclassmen and the freshmen foresters. The freshmen gave the upperclassmen a game they will never forget as they trounced them three touchdowns to zip. After the game was over a little clean up was done and then the tired, sore, and soaked foresters headed home.

—Robin Reed
Winter Carnival 1971

Winter Carnival 1971 and its theme “The Age of Shiv-alry” shown a new light on the Forestry Club; as we began the tedious work of preparing for a snow statue and the other special events, that are so traditional of Winter Carnival.

Although the lack of abundant workers was apparent at the creation of the snow statue, the Forestry Club members pulled through during the last night before Carnival's start to complete the statue for the morning judging. The creation of Snoopy was a real work of art, perhaps rivaled only by the Venus.

The force of Forestry Club members was shown when it came forth to take: a 3rd place in Broom Ball, and Snowshoeing, along with a 4th place in the Skits. Although we did not take an over-all 1st place in Winter Carnival itself, we continued to show the “Spirit of the Foresters” and gave everything we had to the fight.

—Monte Van Buren
So far ahead—no one's near me.
D. Lieb

D. DePuydt
D. Lieb
Action!

Are you sure this is good for the heart Doc?
—F. Krueger

So far ahead—no one's near me.
D. Lieb

D. DePuydt
Why me?

*! ? # Heikki! J. DePuydt, S. McCormick
The "bear skinned" girl.
L. Blum, J. Brown, C. Kionka

Glimpses

W. Hughes surveys his marksmanship.
Looks like a . . . Pinus Crappus?
C. Savage

"Norm Junior" spots a Red Breasted—
J. Minier

The new look in Forestry.
K. Quilliam

S. Almdale enjoying a "Black Bob" test.

The most popular guy in town and his admirers.
C. Triphahn assisted by E. Bourdo trying to break wood.

D. Ouillette removing appendix of rabbit.

Contemplation.
B. Lefevre

"Super-twig"

"Norm, I found a bug".
B. Hueter

Mrs. Sun greets student wife.

Forester Wives' Tea

Meeting the new people.

Guest of honor
Mrs. U. J. Noblet
Spring Field Day
1971

A fantastic weekend that had plenty of sunshine, warm weather and no “bugs” greeted the Michigan Tech Foresters as they trekked to the Otter River camp for their annual Spring Field Day. This year, in an attempt to make the event a bit more enticing to our members, the event was moved to the weekend before Memorial Day . . . however it would appear that this move caught many off guard for the attendance was a bit thin.

Events went on all the same and spirited hands lent themselves to every contest as it came up. Sawing, log rolling, match splitting and the inevitable tobacco spit all occurred before the lunch call was heard. Later in the afternoon canoe racing and log burling took the limelight — and quite a few other wise dry foresters took a rather brisk bath.

Professor Miller gave the assembly a talk — through demonstration in the techniques of proper wood cutting. Although he ended up quite winded I think that many in attendance learned more than they knew to begin with.

We again thank Dr. Sloan for his expert culinary talents in the preparation of the very much welcomed lunch. We also must thank all of the Tech faculty who took time out to come to the event and lend a hand with the running of the events.
Style 1

I know I can.
P. King

... then turn left at the bridge.
D. Saykowny, W. Summers

Style 2
J. Covill

Style 3
T. Duwendak

Simple!
C. Kionka

“Ross”
Visiting Speakers

The Foresters of Michigan Tech were fortunate this year in having a distinguished array of visiting speakers appear. Heading the list was Dr. Fred Knight of the University of Michigan speaking on population and environmental pressures. Also speaking on related topics were Hugh D. Beattie, Superintendent of Isle Royale National Park, and Ernest Hall, Regional Forester of Region I, DNR. Mr. Hall was the featured speaker at the Spring Banquet. The series also brought us Dr. Gunther Frankenstein, who spoke on arctic research, and Cal Stott, father of CFI, who spoke about his 'child'. Richard Guth, of the U.S.F.S. and the man in charge of developing Sylvania, gave a fine presentation on what is happening in this new recreation area. Finally, the annual Booyaw was fortunate to have Dr. Fennimore Bradley in attendance. Dr. Bradley has spent several years in Australia and painted a vivid picture of life in the country 'down under'. And how could we forget our 'own' Dr. Rakesraw and his talk about "Sporting Women"? Over all, it was an interesting year for those Foresters attending the social functions of the Forestry Club.

—Paul King
Alumni Directory

A


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FALGE, JAMES R.; 1959, Wildwood Rt. 1, Dickson, Mo. 65459. Owner, Wildwood Safari Camp, Inc.
FALKNER, EDGAR H.; 1953, 8333 Powell, St. Louis, Mo. 63144.
FARBO, THOMAS P.; 1953, Box 1297, Orofino, Idaho 83445. Timber Staff Officer, U. S. Forest Service.
FELZER, RONALD L.; 1967, 1548 Blake St., Berkeley, Calif. 94703.
FISHER, DONALD J.; 1948, Box 192, Bergland, Mich. 49910.
FLECHSIG, ALBAN R.; 1962, 4414 Cooke St., Duluth, Minn. 55804. Forester, USFS.
FOLTZ, JOHN L.; 1965, Casilla 2-D, Angol, Chile. Agricultural Missionary, Board of Missions of the United Method. Church.
FOSSA, OTTAVIO Q.; 1953, P. O. Box 183, Lakewood, Wis. 54138. Staff Assistant, U. S. Forest Service.

FRANKENSTEIN, GUENTHER E.; 1954, Hillcrest Dr., Lebanon, N. H. 03766. Research Civil Engineer, U. S. A. Cold Regions Research & Engineering Labs.
FRANZEN, JOHN M.; 1965, 745 Grove St., Oshkosh, Wis. 54901. Forester, City of Oshkosh.
FUCIK, GEORGE C., JR.; 1943, 703 Kinzie Court, Menasha, Wis. 54952. Industrial Engineer, Marathon Corp.

J
JAHNKE, JEFFREY: 1970, 223 Columbia Dr., Cape Kennedy, Florida.
JOHNS, WILLIAM E.: 1966, 4110 E. Lake St., Minneapolis, Minn. 55406. North Central Forest Experiment Station, U.S.F.S.
JOHNSON, JAMES: 1951, Ford Forestry Center, L'Anse, Mich. 49946. Assistant Professor, MTU.
JOHNSON, NORMAN L.: 1962, Box 63, St. John, Wash. 99171.
JONES, RICHARD S.: 1964, RFD 1, Vermillion, Ohio. Recreation Forester, Lorain County Metro Park District.


K
KALK, PETER A., 1962, 434 NW 29th St., Corvallis, Ore. 97730.
KARLING WILLIAM J.: 1953, 2150 Gridley, Reno, Nevada 89503. Lands Forester, USFS.
KEANE, DANIEL G.: 1970, 52 Maysenger Road, Mahwah, N. J. 07640.
KEENER, JOHN M.: 1949, 4821 Maher Ave., Madison, Wis. 53716. Director, Bureau of Game Management, Wis. Dept. of Natural Resources.
KEPPEN, GARY: 1960, Rt. 2, Ranger Rd., Eagle River, Wis. 54521. District Ranger, USFS.
KETCHBAW, LARRY W.: 1966, 1124 Pinto Sts., Rhinelander, Wis. 54501.
KIRCHBAUM, JAMES W.: 1939, P. O. Box 804, Snowflake, Ariz. 85937. Forester, USFS.

KNAPP, CLYDE A.; 1949, 11833 N. Wauwatosa Rd., Mequon, Wis. 53092. Right-of-Way Officer. USFS.


KOCH, JEROME ROBERT; 1339 Reed, Green Bay, Wis. 54303.

KORSEBERG, RICHARD G.; 1956, Red Lake, Minn. 56671. Forester, Dept. of the Interior.


KOSKI, DOUGLAS J.; 1953, 212 N. Wells St., Kosciusko, Miss. 33990. Unit Forester, International Paper.

KOTILA, P. E.; 1950, P. O. Box 2668 (Pulwood) West Palm Beach, Fla. 33402. Vice President and General Manager, Bahamas Agricultural Industries Limited.

KRAMER, JOHN G.; 1984, 47 Judson St., Canton, N.Y. 13617.


KRAUTTER, DONALD C.; 1951, Box 7, Fanwood, N.J. 07023. Self-employed, Krautter's, Inc.

KRAWCHUCK, GEORGE J.; 1956, 251 W 63rd Doris Ave., Wheaton, Ill. 60187.

KREJCAREK, DON E.; 1965, 912 Hampton Dr., Del, Okla. 73115. USAF Capt. Maintenance Officer.


KRONBERG, IVAN A.; 1950, P. O. Box 64, Norway, Mich. 49870. Forester, U. S. Steel Corp.

KRONISCHABEL, JAMES A.; 1965, P. O. Box 308, Montello, Wis. 53949. Assistant District Forester, State of Wisconsin.

KRUMBACH, The Rev. ARTHUR W.; 1932, Box 862, Conway, Ark. 72032. Episcopal Priest, State College of Arkansas, Hendrix College, St. Peter's Episcopal Church.


LA BUMBARD, LON; 1970, Rt. 2, Gleason, Wis. 54435. Forester, DNR.

LABYK, DR. LEO F.; 1944, 6120 Sylvan Dr., Columbia, S. C. 29206.

LAMB, DENNIS M.; 1968, 339 Woodlawn St., Winnipeg 12, Manitoba, Canada.

LAMBRECHT, E. GENE; 1952, Rt. 4, Box 169, Orangeburg, S. C. 29115. District Ranger, South Carolina State Commission of Forestry.


LANDGRAFF, DONALD A.; 1961, 2119 Windwood Lane, Bedford, Ind. 47421.


LANGLOIS, RICHARD J.; 1956, 2224 Taylor St., Marinette, Wis. 54143.


LARSON, KENNETH R.; 1933, Box 296, Missoula, Mont. 59801. Timber Sale Appraisals, USFS.


LAVERTIERE, REUBEN J.; 1947, 933 Memorial Dr., Macomb, Ill. 61455. Farm Forester, Illinois Division of Forestry.

LEAUCH, PAUL J.; 1954, 1259 N E. 81st St., Kansas City, Mo. 64118. Executive Director, Michigan Conservation Clubs.

LEADER, MELVIN W.; 1953, Maryville Branch, Box 185, Georgetown, S. C. 29440. Forester, Koppers Co., Inc.


LEE, DAVID A.; 1956, 219 W. 2nd St., Ladysmith, Wis. 54848. Assistant District Forester, Dept. of Natural Resources, Div. of Conservation.

LEHRER, GEORGE F.; 1958, 1730 Clermont St., Antigo, Wis. 54409. Area Supervisor, Blister Rust Control, State of Wisconsin.

LEHTOLA EVERT M.; 1931, Box 144, Marble, Minn. 55764.

LEICHHAN, WILLIAM W.; 1947, 6450 Dawson Rd., Cincinnati, Ohio 45243. Plastic Sales, Monsanto Chemical Co.

LEITNER, LORIN W.; 1935, Box 67, Hoopa, Calif. 95546. Forester, Dept. of Interior.

LEMKE, DANIEL; 1970, Rt. 1, Box 64-K, Perry, Fla. 32247. Forester Pricing Analyst, Buckeye Cellulose Corporation.

LEWIS, RONALD D.; 1963, P. O. Box 260, Blue River, Ore. 97743. Multiple Use Planning and Silviculture, USFS Blue River Rd. 8, Willamette National Forest.

LEWIS, WARNER C.; 1959, 1118 Sequoia, Klamath Falls, Ore. 97601.


LINTCLMANN, FREDERICK W.; 1958, Blackduck, Minn. 56030. USFS.


LITTLE, RICHARD B.: 1954, Rt. 1, Chillicothe, Ill. 61523.

LITTLEFIELD, THOMAS E.; 1970, 412 South St., Bronson, Mich. 49028.


LOCEY, CRAIG T.; 1964, Box 45, Boulder Junction, Wis. 54512.

LOCKWOOD, JACOB P.; 1954, Rt. 2, Box 434, Boyne City, Mich. 49712. Forester, Michigan Dept. of Natural Resources.


Senior Right-of-Way Acquisition Supervisor, Consumers Power Co.


MANTHEY, ROY O.: 1953, Deceased.


MASNADO, DONALD S.: 1953, 1017 Rawson Place, Fremont, Ohio 43420.


MAZAN, DAVID M.: 1968, 4445 Wildwood, No. 12, North Bend, Ore. 97459.


MATSON, PAUL L.: 1964, Rt. 1, Box 603, Centralia, Wash. 98631. Dept. of Natural Resources.


MEADOWS, GEORGE G.: 1970, 705 E. 26th St., Hibbing, Minn.


METSA, ARNE A.: 1947, Box 310, Gwinn, Mich. 49941. Area Forester, Michigan Dept. of Natural Resources.

MEVES, KENNETH O.: 1963, 1725 N. 8th St., Sheboygan, Wis. 53081.


MILLER, ROBERT L.: 1963, Box 694, Glasgow, Mont. 59230. Dept. of Interior.


MILLS, HARRY C.: 1957, 422 Woodview Drive, Sun Prairie, Wis. 53590. Supervisor—Recreation Aids Unit, Bureau of Aid Programs, DNR Wisconsin.


MOORE, JOHN P.: 1958, Box 339, Wiggins, Idaho 83549. Salmon River Ranger Dist., USFS.


MOORE-BUNNEY, ROBERT S.: 1951, 14 Ross St., Dryden, Ontario, Canada. Chief Forester, Dryden Paper Co., Ltd.

MORDEN, WILLIAM E.: 1962, Rt. 4, Box 40-D, Golconda, Ill. 62938. Center Director, Golconda Civilian Conservation Center, U. S. D. A.

MOSES, ELAINE C.: 1961, Rt. 1, Box 436, Aumsville, Ore. 97325. Secretary, Western Farmers Assoc.

MYERS, JON E.: 1968, Box 2174, Hagerstown, Md. 21740. Forester, Landscape Division, Davey Tree Co.
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NANCARROW, DAVID R.; 1967, 108 S. 2nd St., Grand Haven,
Mich. 49417.

NANCARROW, WILLIAM J.; 1947, Deneki Lakes, McKinley
Park, Alaska 99755. Self-employed.

NELSON, JOHN L.; 1966, Willow River, Minn. 55795. Area Staff
Forester, Dept. of Natural Resources, Division of Lands and
Forestry.

NELSON, RODNEY L.; 1961, Mirror Lake State Park, Rt. 3,
Baraboo, Wis. Park Manager, Wisconsin Dept. of Natural
Resources.

NEUBAUER, CLIFFORD A.; 1951, P. O. Box 171, Federal Way,
Wash. 98004. Designer, Boeing Co.

NEWMAN, ALAN G.; 1968, 17T3rd TAS CMR, Box 230, APO San
Francisco, Calif. 96274. Pilot USAF.

NICKLE, DONALD G.; 1959, 904 Palermo Dr., Yuma, Ariz.
85364. Staff Assistant, Lower Colorado River Land Use
Office, Dept. of Interior.

NICOLSON, JOHN A.; 1934, 7475 Osseo Rd., #12, Minne-
apolis, Minn. 55432. Research Assistant, Univ. of Minnesota.

NIELSEN, CHARLES P.; 1959, 5008 Old Post Rd., Sylvania,
Ohio 43560. Vice-President, General Manager Woodlands,
Owens-Illinois, Inc. (Forest Products Div.)

NIEMI, WESLEY O.; 1957, Box 131, Ahmeek, Mich. 49901.

NIELSEN, CHRISTOPHER; 1962, P. O. Box 188, Andover, Mass.
01810.

97303.

49829. President, Soo Hardwoods, Inc.

NOBLE, PETER N.; 1955, 220 E. 13th Ave., Sault Ste. Marie,
Mich. 49783. Raw Material Procurement, Soo Hardwoods,
Inc.

NORGARD, ROBERT E.; 1950, 7846 Madison, Spring Lake Park,
Minn. 55432. Vice President, MacGillis & Gibbs.

NORKOLI, RAYMOND R.; 1951, 1825 Shady Side Drive, Cadillac,
Mich. 49601. District Forester, Michigan Department of
State Highways.

NORLIN, JOHN R.; 1957, 1244 Germono Ave. SE, Roseburg,
Ore. 97470. Realty Specialist, BLM.

NORRIS, MAX E.; 1966, P. O. Box 1, Ashland, Mont. 59903.
Student, University of Montana.

NORTON, DAVID M.; 1964, 1107 Anderson Dr., Leesville, La.
71466. Owens-Illinois.

NORTON, DOUGLAS S.; 1961, 5685 Castleton Lane, Kalamazoo,
Mich. 49001.

Private, U. S. Army.

NYGREN, HAROLD T.; 1961, 1104 Hillcrest Dr., Vienna, Va.
22180. Forester, Div-Fire Control, Washington Office, USFS.

OLSON, Capt. JAMES W.; 1966, Houghton, Mich. 49931. Op-
erations Officer, 7 Ord. Co. (SA) (DS/GS) Korea.

OLSON, WALTER A. JR.; 1953, 1700 Calumet, New Holstein,
Wis. 54961.

OMERNICK, DONALD J.; 1965, P. O. Box 87, Two Harbors,
Minn. 55616. District Forester, Minnesota Lands & Forestry.

OSWALD, WILLIAM P.; 1966, 724 E. 6th St., St. Paul, Minn.
55103. Forester, Minnesota Dept. of Highways.

OTTOSON, DAVID E.; 1955, 2310 John St., Sault Ste. Marie,
Mich. 49783. Work Unit Conservationist, Soil Conservation
Service, USDA.

P

PAAVILAINEN, ERIC J.; 1970, 146 Douglas St., Painesdale,
Mich. 49955.

PADDOCK, ROBERT W.; 1961, USFS, Gildden, Wis. 54527.

PAKULA, THOMAS V.; 1968, 302 Washington Ave., Stambough,
Mich. 49964.

48132.

PARSSINEN, LAURI FREDERICK; 1953, 517 Lightning, KI
Sawyer AFB, Mich. 49843. Lieut. Col. USAF.

PARTANEN, PAUL A.; 1948, 111 Wallinwood, East Grand Rapi-
ds, Mich. 49503. Manager, Plywood Products, American
Seating Co.

PARTYKA, Lt. EUGENE J.; 1961, 1342 N. Hayward, Los An-
gels, Calif. 90046.

97302. Forester, BLM.

PAULSON, NEIL R.; 1957, Cle Elum, Wash. 98922. Research
Assistant USFS.

PEKKALA, OLIVER W.; 1950, 407 8th St., Waverly, Ohio 45690.

PENBERTHY, ROBERT J.; 1953, 9701 SE McLoughlin, Milwau-
kee, Ore. 97222. Manager Technical Applications, Omak
Ind. Inc., Oregon Chain Saw Div.

PEPPER, ALMON A.; 1959, 404 6th Ave., Park Falls, Wis.
54552. Personnel Manager, Kansas City Flamebeau Paper Co.

49882. Graduate Student, Northern Michigan University.

PETERSON, RAYMOND D.; 1950, 909 4th Ave. SW, Grand Rapi-
ds, Minn. 55744. Eighth Grade Science Teacher.

PETERSON, ROBERT C.; 1957, 1416 Colvin St. E., Syracuse,
N. Y. 13210. Technical Service Engineer, St. Regis Paper Co.

PETERSON, ROGER E.; 1950, 1019 Forest Ave., Piqua, Ohio
45356. Log buyer, Hartzel Ind. Inc.

PHILLIPS, GREGORY M.; 1966, Oakwood Trailer Village #20.
Rt. 2, Waynesville, Mo. 65583.

49740.

PIEHL, THOMAS W.; 1963, 1006 Hamilton, Minneapolis, Minn.
55416.

PIEFENBRINK, HOWARD H.; 1961, Box 205, Ashland, Wis.
54806.

PIERCE, PAUL N.; 1966, Box 392, Stephenson, Mich. 49887.
Forester, Michigan Dept. of Natural Resources.

PIERCE, RICHARD L.; 1949, Box 900, Dallas, Texas 75221.
Senior Research Geologist, Mobile Oil Research & Develop-
ment Corp.

PIETERS, JAMES A.; 1965, Rt. 2, Box 152, Minocqua, Wis.
54548. Forester, Wis. DNR Trust Lands & Investments.
SCHOU, HANS H.; 1934, Minera Frisco, S.A. San Francisco Del Oro, Chihuahua, Mexico.

SCHROEDER, DANIEL I.; 1952, 233 Avery Ave., Park Falls, Wis. 54552. USFS.

SCHULTZ, JAMES A.; 1934, Foster City, Mich. 49484.

SCHWANDT, DONALD LEONARD; 1939, 28102 Pierce, Southfield, Mich. 48227.

SCHWARTING, WILLIAM C.; 1935, Rt. 3, Richland Center, Wis. 53531. Co-owner, Sunset Orchards, Inc.


SEILER, E. GORDON; 1950, 14125 S.W. Driftwood Ct., Tigard, Ore. 97223.

SHALDA, KENNETH D.; 1982, 7221 W. Brentwood, Milwaukee, Wis. 53223.

SHANER, BRUCE A.; 1953, Box 1430, Roseburg, Ore. 97470. Consulting Engineer, Shaner Engineering.

SHAW, JOSEPH G.; 1956, Richfield Oil Corp., Box 360, Anchorage, Alaska 99502. Geophysical Computer, Richfield Oil Corp.

SHEPPARD, GEORGE H.; 1957, Rt. 1, Box 146, Wautoma, Wis. 54982. Forest Ranger, Wisconsin Dept. of Natural Resources.

SHEPHERD, ROBERT J.; 1962.

SIDDOINS, JAMES; 1967, 10536 S. Oakley Ave., Chicago, Ill. 60643.


SKOWRON, WALTER S. JR.; 1966, 1810 S.W. St., Seattle, Conn. 06607.

SLOOP, Dr. NORMAN F.; 1957, Massie Rd., Chassell, Mich. 49916. Assistant Professor, School of Forestry & Wood Products, Michigan Techn Univ.

SMART, DALE G.; 1953, 428 Krueger, Orlando, Fla. 32809.

SMITH, JAMES J.; 1940, 21 Kimberly Dr., Brockport, N.Y. 14420. Agronomist, A. & P. Tea Co.


SMITH, THOMAS M.; 1957, 223 Saunders, Park Falls, Wis. 54552.


SOMPP1, TAUNO M.; 1950, 2453 Palm Ave., Redwood City, Calif. 94061. Property Engineer, Southern Pacific Co.


SPAETH, DAVID; 1962, 257 Southview Place, SE Salem, Ore. 97302.

SPALDING, ROBERT W.; 1965, 11120 S. Vernon Ave., Chicago, Ill. 60628. Programmer, Inland Steel Co.


SPIROFF, KIRIL JR.; 1957, 2116 Washington Ave., Ishpeming, Mich. 49849. Sales Engineer, Metal Products Div., Armo Steel Corp.

SPIROFF, MRS. KIRIL JR.; 1938, 2116 Washington Ave., Ishpeming, Mich. 49849. Sales Engineer, Armo Steel Corp.


SPOELE, GERALD A.; 1950, Rt. 1, Box 361, Park Falls, Wis. 54552. Forester, Wisconsin Dept. of Conservation.


STAEBE, D. DALE; 1963, Box 582, Baldwin, Mich. 49304. Staff Forester, Baldwin Range District, USFS Manistee National Forest.

STEHINDLB, HELMUTH M.; 1940, Box 222, Painesdale, Mich. 49955. Professor, School of Forestry and Wood Products, Michigan Tech Univ.


STIMAC, MATT R.; 1942, Deceased.

STYTE, JAMES S.; 1952, 20 Cedar St., Great Falls, Mont. 59401. Major, Missile Combat Crew Commander, U.S. Air Force.


STREJEC, LADDIE M.; 1962, 350 N. Main St., Lombard, Ill. 60148. Remodeling Salesman, Berwyn Western.


SWANSON, RALPH F.; 1942, 815 11th St. S., Wisconsin Rapids, Wis. 54449. Timberlands Dept., Consolidated Papers.

SWENSEN, EDMOND I.; 1952, 707 Franklin Drive, Clinton, Miss. 38905. Forester, USFS, State and Private Forestry.

SWORD, MRS. GLEN; 1942, 2210 Pattiz Ave., Long Beach, Calif. 90815.

SWORDE, PHILLIP G.; 1969, Box 194, Haskins, Ohio 43325.

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TANASCU, MICHAEL C.; 1963, P.O. Box 145, Phillipsburg, Mont. 59838. USFS.

TARCHINSKI, RAMON E.; 1967, P.O. Box 432, Paris, Ark. 72855.

TAYLOR, TAD E.; 1947, 410 N. Flower, Phoenix, Ariz. 85013.

THEILER, JERRY F.; 1962, 21 W. Lincoln, Tomahawk, Wis. 54487.

THEILER, RAYMOND R.; 1960, Box 126, Poison, Mont. 59860. Forester, Bureau of Indian Affairs, Flathead Agency.

THEIRING, JAMES W.; 1966, 17333 Annchester, Detroit, Mich. 48219.

THEISEN, PAUL A.; 1962, P. O. Box 89, Tejayeaneng, Lesotho, Southern Africa.

THEISEN, PETER A.; 1958, 1470 SW Batlow Place, Beaverton, Ore. 97005.

THOMPSON, WALTER J.; 1952, P. O. Box 475, Olla, La. 71465. Forest Manager, Georgia-Pacific Corp., Crossville Div.-Urania.


TREPTOW, KEVIN P.; 1968, Cambria, Wis.


TUCKER, GARY F.; 1959, Yellowstone Ct. N. 8th St., West Riverton, Wyoming 82201.

TYLER, WILLIAM H.; 1964, 392½ Laurel Street, Chillicothe, Ohio 45601. Forester, Timber Mgmt. Section, Ohio Div. of Forestry and Reclamation.


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WACKER, PETER J.; 1970, 476 McIntosh Lane, Belford, N. J. 07718.


WAISANEN, PETER B.; 1962, 705 8th St., Post Falls, Idaho 83854.

WALIMA, GEORGE J.; 1961, Deceased.


WALL, CHESTER O.; 1951, 1101 Arrowhead Rd., Duluth, Minn. 55803. Engineering Aid, Earle Ruble & Associates.

WALTHER, WOLFGANG; 22 Fern Ave., Dumont, N. J. 07628. 2nd Lt. USAF.

WARREN, JOHN H.; 1964, Rt. 1, Menasha, Wis. 54942. Park Manager, High Cliffs State Park.

WATSON, DOUGLAS B.; 1958, 4396 Country Lane NE, Salem, Ore. 97303. Right-of-Way Agent, Forester, Oregon State Highway Dept.

WATSON, JACK C.; 1954, West 2nd St., Cle Elum, Wash. 98922. Resource Assistant; U.S. Forest Service.


WATTS, LYNN W.; 1968, 1017 Amelia St., Royal Oak, Mich. 48073. Admissions Counselor, MTU.


WEBER, ALAN R.; 1964, 13 First St., South Range, Mich. 49933. Assistant Area Forester, Mishwabic State Forest, Michigan Dept. of Natural Resources.

WEINBERG, GLENN; 511 Brompton Ln., North Bend, Ore. 97459.

WEISINGER, RUSSELL J.; 1962, P. O. Box 77, Baraga, Mich. 49906.


WENZEL, DUANE K.; 1951, 200 N. 5th St., Crystal Falls, Mich. 49920. Game Biologist, Michigan Dept. of Natural Resources.


WHIPPLE, JAMES W.; 1964, 206 Clay, Neillsville, Wis. 54456. Assistant District Forester, Wisconsin Dept. of Natural Resources.


WHITE, JAMES A.; 1960, 320 Meadow Lane, North Bend, Ore. 97459.
WHITMARSH, BRUCE G.; 1957, 128 Columbia Way, Montrose, Colo. 81401. Area Manager, Bureau of Land Management.

WICHMANN, MICHAEL E.; 1970, R. R. 1, Greenville, Wis.

WIDDER, JAMES J.; 1967, 623 W. Merrimac, Dodgeville, Wis. 53533. Forester, State of Wisconsin, Dept. of Natural Resources.


WILKE, WILLIAM K.; 1970, 1225 Western S. W., Canton, Ohio 44710.


WILLIAMS, THOMAS; 1963, Rt. 1, Box 237, Eveleth, Minn. 55734. Assistant Nursery Supt., USFS Eveleth Tree Nursery.


WOOD, LEONARD F.; 1950, Rt. 5, Box 250, Zanesville, Ohio 43701. Superintendent, Zanesville State Nursery, State of Ohio, Dept. of Natural Resources.

WOOD, ROBERT D.; 1960, Rt. 2, Box 168, Traverse City, Mich. 49684.

WOOD, WILLIAM B.; 1963, 780 Meadow Dr., Rhinelander, Wis. 54501. Assistant Manager, Hugo Sauer Nursery, Wisconsin Dept. of Natural Resources.

WOODWARD, RICHARD A.; 1962, 1360 6th St. E., Wenatchee, Wash. 98801. Forester USFS.

WRIGHT, CHARLES J.; 1961, Box 494, Dodgeville, Mich. 49221. Graduate Student, MTU.

WYLLIE, DENNIS J.; 1970, 3318 10th Avenue, Port Huron, Mich.

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YANKEE, RICHARD A.; 1957, 114 Lincoln St., Lake City, Mich. 49651. Regional Superintendent, Wood Procurement, Packaging Corp. of America, Div. of Tenneco, Inc.


YOUNGS, FRANCIS G.; 1941, 1222 Mich. 48837. Plant Manager, MacGillis & Gibbs Co.


Z

ZAUG, DALE A.; 1965, 5021 Tomahawk Trail, Madison, Wis. 53705.

ZEMSKE, ARTHUR R.; 1949, 8100 Noid Ave., Minneapolis, Minn. 55428.

ZENKE, TIM C.; 1962, 3452 Stark St., Eugene, Ore. 97402. Forester, BLM.


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