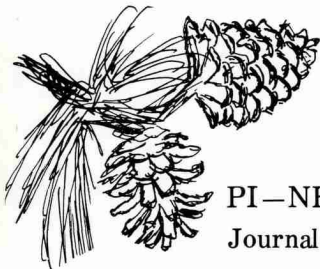


Pi-ne-tum



1985



PI-NE-TUM

Journal of Forest Resources

For fifty years the students of the School of Forest Resources have published the Pi-ne-tum. Each year dedicated students and staff put in overtime hours to maintain the quality of this journal. It is no easy task representing every aspect of the School of Forest Resources which has greatly increased in size and variety over the years.

The Pi-ne-tum is your journal, which serves as a reminder of the ideas, activities and personalities of students, faculty and staff. We the 1985 staff are proud to present the 51st edition of the Pi-ne-tum and this long-lasting tradition on its second 50 years.

Perry Johnson

Jeff Hall

North Carolina State University

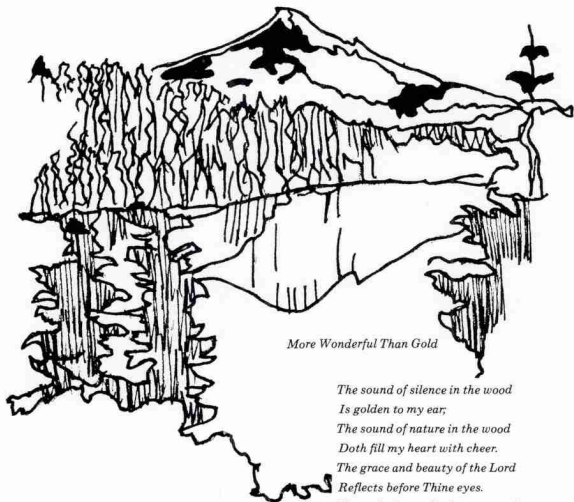
Raleigh, North Carolina

Susan Saunders

Zony McBane

Volume LI

1985



More Wonderful Than Gold

*The sound of silence in the wood
Is golden to my ear;
The sound of nature in the wood
Doth fill my heart with cheer.
The grace and beauty of the Lord
Reflects before Thine eyes.
The rock, the earth, the grass and trees
A reaching to the skies.
To smell the flowers and the wind
And know that it is pure;
To taste the water of a stream,
Reminds me of John Muir;
To touch the creatures of this earth,
All wonders to behold.
Tells me in life the treasures are
More wonderful than gold.*

- Robert L. Wilder

DEDICATION



Each year the opening page of the PINETUM is reserved for a special person who stands out in the minds and hearts of those associated with the School of Forest Resources. With deep appreciation for her tireless effort and valuable contribution to the school, we dedicate the 1985 PINETUM to Mrs. Charlotte Swart.

Since December of 1981, Charlotte has managed the student affairs office. Ranging from welcoming new students to maintaining a wealth of student data, Charlotte's efforts serve to ensure that our school functions with efficiency. Her job is one of administrator, counselor, public relations officer, data processor, and general problem solver.

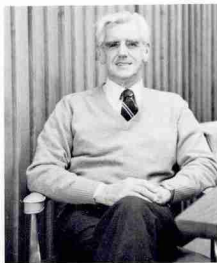
Always cheerful and calm, Charlotte manages to balance the daily confusion by extending a sincere concern for the many students that beat a path to her door. New students, current students, and recent graduates alike know her as a source of useful information as well as a source of moral support.

The PINETUM staff would like to personally thank you, Charlotte, for lending a hand and helping when you had better things to do. Your warmth and guidance is felt by us all and will remain long after we leave.



YOU CAN'T LEARN IT ALL IN COLLEGE

The Dean's Message To The Students



Eric L. Ellwood
Dean

B.S., M.S., Univ. of
Melbourne
Ph.D., Yale Univ.

From a number of sources increasing concern is being voiced about the context of college curricula. For the technically oriented student, is the curriculum so heavily loaded in science and technology that the student is "short changed" in the social sciences and humanities, therefore limiting understanding of societal values and complexities? For the social science and humanity majors, is there adequate exposure to science and technology to provide an understanding of its role in the world of today and tomorrow? For all students, does the university curriculum provide the framework for adaptability, social responsibility, and a broad perspective on life?

In large part these questions and criticisms are a result of two trends. One is the time spent on essentially "remedial" teaching in the basic skills of English and mathematics, for example, in which universities seem to be undertaking what is more properly the role of high school. But perhaps the more important trend is the increasing emphasis on science and engineering curricula, both in terms of enrollment (perception of that's where the jobs are) and the problem of incorporating rapidly developing new scientific knowledge and technologies in these curricula. Curriculum crowding is a result at the expense of courses which could broaden the perspectives of students.

In other words, are our universities producing an ever-increasing number of skills oriented technocrats or technicians who may lack the broad perspectives of life? By perspectives, I mean understanding political, social, and ethical values, the complexities and ambiguities of society as well as the forces that lead to change, and the arts.

Yes, I personally believe there is some truth to the criticism that, as a generalization, technically-educated people tend to lack broad perspectives. The consequences of this can limit upward mobility in managerial or administrative positions as well as limit the full potential contribution of the individual to society.

A number of high level executives believe that lack of broad perspectives, rather than lack of technical knowledge, is the principal barrier to promotion of technically-trained peoples to upper levels of management. Also, in a study made of successes of some 70 technology based companies, success was not determined so much by technical issues as it was by people issues. But first and foremost, unless high ability persons in science and/or technology were employed in the technology-based company it would not be a viable enterprise in the first place. Additionally, at the entry level position, an employee's performance in the science or technology in which the person specializes, determines his initial rate of advancement in the enterprise. As the person's career progresses in managerial or administrative responsibilities different qualities are successively called into play. Specific technical knowledge becomes less important and interpersonal and synthesis skills, and understanding of broad perspectives become more important.

What is the answer to the dilemma of providing "the complete education" to a student in four-year baccalaureate technical curricula?

There is a tendency to believe that if you haven't studied a particular field in college you are condemned to the ranks of the "ignorant" in that particular field. But real life experience does not substantiate this.

I submit that although a four-year college curriculum can do many wonderful things for people ranging from finding spouses to stretching the minds and aspirations of the students, it can't do it all. The curriculum cannot, and should not, be expected to provide all of the educational experiences of value to the graduate.

A four-year technical curriculum should provide sound knowledge and understanding of the science and/or technology major, strengthen communicative and analytical abilities, provide an appreciation of the elemental forces of society, develop learning skills and instill a desire to learn.

Completion of the baccalaureate degree, however, is but part I, II or III of a continuous and lifelong learning process. If you, as a college graduate, recognize the fact that individual development and growth—both from a job oriented and personal perspective—is a continuing process, you should have no great concern that you did not study courses x, y or z while in college. In fact, this should be an incentive to you to plan personal educational goals as you progress through your career and lifetime. Fill in the gaps and further strengthen your knowledge in your central interests. Opportunities abound for lifelong

learning in formal ways: from local educational institutions, professional societies, employer firms, short courses, from daily experience, and most important of all, reading and thinking about things on your own.

If you maintain the frame of mind that you can always learn and make a conscious effort to do so you will eventually find that the principal thing that college did for you was help you build a framework for learning and set a direction to start. Most of what you will essentially know in the broader perspectives of life will be learned in your post-baccalaureate years.

If you make the continuing effort, you can be broadly and deeply versed in any area you wish. Make the most of your learning opportunities in a lifelong fashion and, if knowledge is power, your potential and accomplishments should also grow with you.

Harkins Presents Hand-Carved Seal

by Susan Saunders

" Leon Harkins, Extension Forest Specialist, presented the Faculty Club with what must be classed as an elegant work of art - an intricately carved seal of the University - May 31, 1984.

" The carving detail reveals the numbers on the clockface, the actual number and positions of the granite blocks on it, and the 50 stars and 13 stripes of the flag waving at the tower base.

" In return for the carving, Max E. Gregory, Extension Professor of Food Science and (then) president of the Faculty Club, presented Harkins with an honorary lifetime membership in the club.

" Harkins' gift is the result of a long effort by club officers to obtain a University symbol for the lobby. Harkins spent more than 500 hours carving the basswood seal.

" The seal is Harkins' most ambitious carving to date. It is 28 inches in diameter and 2 inches thick. Its value has been placed in excess of \$5,000."

This is also the only carving in which Harkins has gotten personally involved. It is the only carving he has signed or initialed, and the time on the clock is the exact time of his daughter's birth.

- Credit to Agricultural Extension Publication and the Official Bulletin and Calendar of N.C.S.U.





The Associate Dean for Research and Graduate Education in the School of Forest Resources 1985-1990

RESEARCH

Responsibilities and Five Year Goals

My primary goal as Associate Dean for Research is to assist the Dean, Department Heads, faculty, and graduate students in further improving the real and perceived climate for research and related graduate education in the School of Forest Resources and in other schools and departments at North Carolina State University.

Progress toward this general goal will be achieved by working with the Dean of the SFR, with SFR and other Department Heads, SFR and other faculty (both individually and in small groups), and graduate students to:

- 1) increase the personal satisfaction of faculty and graduate students in the discovery, publication, and transfer of new knowledge through basic and useful research.
- 2) increase the amount, quantity, and efficiency of space and facilities for research both in the short term (through further renovation, rented or purchased space) and in the long term (through the Natural Resources Research Center).
- 3) help provide both tangible and intangible rewards for creativity in the sciences that undergird forestry and related renewable natural resources and for increasing the impact of SFR research on the management of natural resources in North Carolina, the southern region, the U.S., and abroad.
- 4) increase the funds available for research and graduate education in the SFR by:
 - a) further improving our participation in the Change Budget process particularly with regard to the choice of change budget items and the amount of funds obtained.

b) increasing membership in the Southern Forest Research Center.

c) further strengthening our existing cooperative programs with industry and state governments.

d) increasing the yield of faculty grants, contracts, and cooperative agreements from competitive as well as from Forest Service, Park Service, and other "sweetheart" sources.

5) help improve the quality of communication and mutual support among the Department Heads, Deans, faculty, graduate students, and SPA personnel about research and research administration within the SFR and N.C.S.U.

6) continue plans for the development of the Natural Resources Research Center as a focal point for improved understanding of the nature, value, management, and use of natural resources in North Carolina.

7) encourage the N.C.S.U. and N.C.A.R.S. research administrations to develop more flexible and clearly understood policies and procedures for:

- development of multidisciplinary programs of research and graduate education
- assessment of indirect costs on grants and contracts
- allocation and use of overhead funds
- patent arrangements
- service contract arrangements and reporting
- subcontracts for research with other institutions
- cash-flow budget information for trust fund accounts

8) obtain authority for the SFR to accept cooperative agreements directly from the U.S.F.S. as well as from the National Park Service.

9) further improve the climate for cooperative work with research scientists and extension agents
- in other schools and department at N.C.S.U.
- in other forestry schools in the U.S. and abroad
- in other federal, state, and private research and extension organizations
- among the extension, small woodlot, and academic departments in the SFR
- among the cooperative and "non aligned" faculty.

10) encourage increased faculty use of off-campus scholarly assignments, change of duty assignments, consulting opportunities, leaves without pay, and other mechanisms for faculty self improvement.

11) further encourage faculty and graduate students to develop masters thesis and PhD-dissertation research in a form suitable for publication before the students leave N.C.S.U.

12) represent the School of Forest Resources and/or serve the N.C.S.U. community generally in the following committees:

- Assistant Director and Liaison Representative for the SFR with the North Carolina Agricultural Research Service

- SFR Representative - Administrative Board of the Graduate School

- SFR Representative - N.C.S.U. Research Operations Council

- Co-chairman - Planning Committee for the Natural Resources Research Center

- Member and Staff Assistant the SFR School Advisory Committee

- Chairman - N.C.S.U. Climatology Committee

- Chairman - N.C.S.U. Computer Graphics Center Advisory Committee

- Chairman and N.C.S.U. Representative - Executive Committee, Southern Appalachian Regional/Resource Management Cooperative

- Chairman - Section of Applied Biology and Agricultural Sciences, National Academy of Sciences

- Member - Board of Directors, Friends of the College.

13) encourage further development of the N.C.S.U. Atmospheric Deposition Program and the National Atmospheric Deposition Program, and their contributions to the School of Forest Resources and the National Acid Precipitation Assessment Program.

14) maintain some credibility and self-confidence as a scientist in my own right.

15) increase the efficiency and improve the appearance of my office!

Academic Affairs



L. C. Saylor

Associate Dean
of Academic Affairs

M.S. and Ph.D.
Genetics, NCSU

During the past year, we have been involved in a major school effort to improve planning procedures and to redefine major objectives. Recognizing that the primary function of the Academic Affairs Office is to provide service to students and faculty, we established the following major goals for the 1984-85 period.

• Develop data base systems in the School of Forest Resources along with the capability to access the developing university systems to provide more quickly a wider variety of information useful for decision making and planning. (Appropriate computer hardware has been purchased and staff members have

taken a variety of computer courses.)

• Improve communication so faculty and students are fully aware of the services available.

• Improve means of recognizing outstanding efforts in teaching.

• Strengthen and improve school honors programs to increase participation and to provide more enriching experiences. (Last year a Scholars in Residence Program was started for entering freshmen with outstanding academic credentials.)

• Expand and improve the School tutoring program to respond quicker and more efficiently to needs.

• Improve efforts in promoting Work Study Cooperative Education Program so students in all curricula are fully aware of opportunities available.

• Develop more attractive and informative brochures about School programs. (Top quality, full color brochures were developed this year for four undergraduate programs.)

In the area of program development, two initiatives were taken. (1) A proposal requesting approval to plan a Ph.D. program in Recreation Resources Administration was approved and forwarded by NCSU to the State University system's general administration for consideration. (2) A thorough study was started to determine ways of providing more education in the field of forest engineering. Assistance with these efforts will continue into the next academic year.

FORESTRY



Left to Right: AWATIF E. HASSAN, Ph.D. Univ. of California; THOMAS R. FOX, M.S. V.I.P.; LARRY JERVIS, M.F. NCSU; CHARLES B. DAVEY, Ph.D. Wisconsin; LARRY MORRIS, Ph.D. Univ. of FL; STEPHEN MCKEAND, Ph.D. NCSU; CARLYLE FRANKLIN, Ph.D. NCSU; RICHARD A. LANCIA, Ph.D. Univ. of MA; THOMAS O. PERRY, Ph.D. Harvard Univ.; RUSS LEA, Ph.D. SUNY Coll. of Env. Sci. & For.; JAMES D. GREGORY, Ph.D. NCSU; JERRY BETTIS, B.S. Univ. of Idaho. HOWARD LEE ALLEN, Jr., Ph.D. NCSU; ROBERT J. WEIR, Ph.D. NCSU; RICHARD R.

BRAHAM, Ph.D. NCSU; ROBERT KELLISON, Ph.D. NCSU; FLOYD BRIDGWATER, Ph.D. Oklahoma State Univ.; GARY B. BLANK, M.A. Univ. of Idaho. NCSU; ARTHUR W. COOPER, Ph.D. Univ. of Michigan; JOHN FRAMPTON, Ph.D., NCSU; JOSEPH P. ROISE, Ph.D. Univ. of WA; DANIEL LESTER HOLLEY, Ph.D. NCSU; D.H.J. STEENSEN, Ph.D. Duke Univ.; STEVE ANDERSON, M.S. Univ. Wash.; DAVID A. ADAMS, Ph.D., NCSU; WILLIAM L. HAFLEY, Ph.D., NCSU; DOUGLAS J. FREDERICK, Ph.D., Univ. of Idaho; RANDY OAKLEY, B.S., NCSU

Forestry Department Highlights

by Arthur W. Cooper

The 1984-85 year, in many ways, has not been as hectic as the year that preceded it. Much time was spent assimilating the results of the previous year's SAF and CSRS reviews. In addition, the year was marked by extraordinary activity within the various Forestry student organizations.

The SAF review found NCSU to be "clearly one of the nation's leading forestry schools." The review was particularly helpful in that it allowed the faculty, with student input, to develop some important modifications in the Forestry curriculum. These include incorporation of a forest policy course, relaxation of the concentration area requirement to allow the more flexible use of forestry technical electives, widening of our pool of undergraduate advisors, and development of an entirely new orientation program in which all Forestry freshmen take orientation together just before the start of school in August. The CSRS review of the Department's research program also gave us a strong rating for our work and some timely suggestions for improvement.

One of the most pleasing aspects of this year has been the renewed interest among undergraduates in aspects of their life in the Department of Forestry other than those associated with the classroom. A number of undergraduates assisted with the freshman orientation program in the fall. The Forestry Club and the Student SAF chapter have merged their by-laws so that, although each organization maintains a separate identity, cooperation between them is much more effective. The result has been a much stronger program for both organizations. Technical programs at Forestry Club meetings have been excellent. In addition, the Student SAF chapter travelled to Washington for two days over fall break, meeting with SAF, U.S. Forest Service, and other figures on the Washington forestry scene. The group even got to eat lunch with the Chief of the Forest Service! In addition, an active group attended the Appalachian SAF meeting in Norfolk in January.

Although enrollment was slightly higher than in 1983-84, our program still reflects national trends that show declining interest among high school graduates in the natural resources. Major efforts have been directed toward recruiting this year. Mr. Jerry Bettis visited a number of high schools, and students manned a booth containing information on forestry at the State Fair. Our graduate program continues to be

strong, with total enrollment almost exactly that of last year. One of our doctoral students, Michele Schoeneberger, won the coveted St. Regis Fellowship in national competition. She is the second NCSU student to win this fellowship in the last three years!

We welcomed a new faculty member, Dr. Joseph P. Roise, in late fall. Dr. Roise is a specialist in management decision-theory and will teach introductory computer science to sophomores and a course in his specialty to seniors. Joe comes to us from the University of Washington—we are pleased to have him with us!

During 1984, the job situation improved rather markedly, which is excellent news to all of us. A number of students got good jobs in Forestry before graduating and a number of others got them over the summer. We think this reflects both a slight improvement in the general job outlook and Dr. Jim Gregory's increased efforts to develop a stronger placement program. This year, for the first time, Dr. Gregory has put together a pamphlet containing resumes of all graduating seniors. This has been sent to a number of potential employers and we believe it will increase their awareness of the fine students that are graduating.



**SAF Norfolk Convention
Dismal Swamp Tour
"Swamps is Swamps"**

WOOD AND PAPER SCIENCE



L to R, first row: RONALD G. PEARSON, B.C.E., B.A., Univ. of Melbourne; ADRIANNA G. KIRKMAN, M.S., N.C.S.U.; C. ARTHUR HART, Ph.D., N.C.S.U.; ELISABETH A. Wheeler, Ph.D., Southern Illinois Univ.; HOU-MIN CHANG, Ph.D., Univ. of Washington; JOSEF S. GRATZL, Ph.D., Univ. of Vienna, Austria;

L to R, back row: HEINZ G. OLF, Ph.D., Technical Univ. of Munich; MYRON W. KELLY, Ph.D., N.C.S.U.; RICHARD J. THOMAS, Dept. Head, Ph.D., Duke Univ.; IRVING S. GOLDSTEIN, Ph.D., Harvard Univ.; RICHARD H. CORNELL, Ph.D., Institute of Paper Chemistry.

Not Pictured: WILLIAM S. BRYAN, M.W.P.S., N.C.S.U.; CHEN-LOUNG CHEN, Ph.D., Univ. of Heidelberg; ROBERT C. GILMORE, M.W.T., N.C.S.U.; ROBERT G. HITCHINGS, Chairman, Pulp and Paper Science and Tech., M.F., Duke Univ.; THOMAS W. JOYCE, Ph.D., Purdue Univ.

WPS Department Highlights

by Dr. Richard J. Thomas

Undergraduate enrollment remained essentially level with 178 students in the pulp and paper program and 78 in the wood science and technology curriculum. Academic performance was good with 24 students earning Dean's List status in the Fall 84 semester. Merit scholarships continue to play an important role with 82 students receiving these awards.

No changes in faculty number occurred during the recent academic year. A change in status involved the promotion of Mrs. Adrianna Kirkman from Research Assistant and Teaching Assistant to the rank of Instructor. Dr. Josef S. Gratzl won the TAPPI R&D Division Aiken Prize of \$1,000 for his outstanding research contributions in the field of pulping chemistry. Dr. Myron W. Kelly was the School of Forest Resources nominee for the Alumni Distinguished Professor Award. The Forest Products Research Society elected Dr. Richard J. Thomas to the office of President-Elect.

A staff change that will have a significant impact on the department is the retirement of Everett Morgan. Everett has been with the department for 29 years as a Wood Products Laboratory Mechanic. The title in no way reflects the many duties and responsibilities placed on Everett. Machinist, carpenter, electrician, welder, mechanic, paper machine tender, air conditioning repairman, millwright and steamfitter were among the many roles filled by him. Student contact with Everett was confined to WPS 403 and the spring break mill trips for the pulp and paper students and the summer practicum for the wood technology students. However, behind the scenes activities were responsible for the properly functioning equipment that greeted students in the laboratories of Robertson and Hodges. Almost all faculty have at one time or another been the recipient's of Everett's many skills. As a result, all of us were able to do our jobs more quickly and efficiently. Everett Morgan was a highly valued and important member of the department. He will be missed.

In May of 1984 the Wood Science and Technology curriculum was evaluated for the purpose of accreditation by the Society of Wood Science and Technology. The Accreditation Committee report to the Society concluded that "the curriculum exceeded all elements specified in the Society's standards and clearly meets all specified program objectives." Accordingly the curriculum was accredited and has the distinction of being the first officially accredited program in the area of wood science and technology.

The crowded spring interview schedule indicates that the 1985 graduates will not encounter much difficulty obtaining employment. A strong demand for our graduates exists among the wood-based industries. An important factor in this demand is the continued migration of the wood-based industries to the south and the accompanying personnel requirements. In our view, future career opportunities for graduates of both curricula will remain excellent for some time to come.



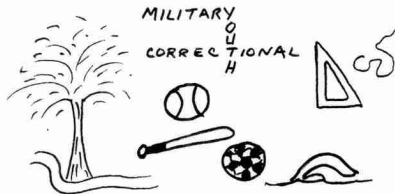
RECREATION RESOURCES ADMINISTRATION



Bottom Row, L to R: DR. CAROL LOVE, Ph.D. NCSU; DR. RICHARD PERDUE, Ph.D. Texas A & M; DR. BETH WILSON, Ph.D. NCSU; Middle Row, DR. HUGH A. DEVINE, Ph.D. Penn State; DR. DAVE CULKIN, Ph.D.; SONDRAL KIRSCH, M.S.

UNC- Chapel Hill; Top Row, L to R: DR. M. ROGER WARREN, Dept. Head, Re.D. Indiana Univ.; DR. CHRYSOTOS D. SIDERELIS, Ph.D. Univ. of New Mexico; DR. ROBERT E STERNLOFF, Ph.D. Univ. of Oregon; DR. PHILLIP S. REA, Re.D. Indiana Univ.

INSTITUTIONAL PLANNING
 INTERPRETIVE NATURAL RESOURCES MANAGEMENT
 COMMERCIAL PLANNING
 GEOGRAPHIC MANAGEMENT



RRA Department Highlights

by Dr. Roger Warren

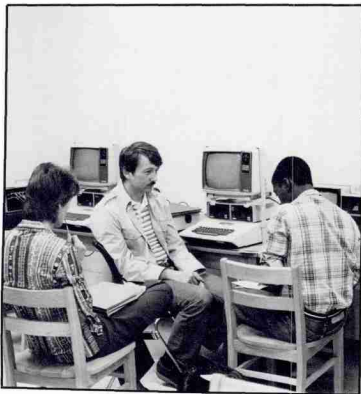
Two particularly noteworthy events highlight the year in the Department of Recreation Resources Administration: (1) the development of a Ph.D. degree proposal, and (2) approval of major changes in the commercial recreation concentration.

The department has expressed a desire to institute a Ph.D. program in all of the recent planning documents produced by the department. This year a major step was taken toward accomplishing this goal. The department has requested permission to plan a Ph.D. program. This request has been approved by the NCSU Graduate School Administrative Board and forwarded for consideration and approval by the University of North Carolina General Administration.

The primary reasons for the request for a Ph.D. program are to fulfill a void in this region for such a program and to strengthen the department's growing research commitment. There is no doctoral program in any college or university in North Carolina nor does such a program exist in any of the neighboring states. Growth of professional preparation programs in the recreation and park field has been impressive. In 1960 there were 63 programs in the United States and in 1982 the number has grown to 500. The growth of professional recreation education in North Carolina has been equally impressive. In 1950 only two programs existed in the State, NCSU and UNC-CH. Currently 28 two and four year programs exist, with 15 located at four-year colleges and universities. With this growth it is not surprising that the demand for Ph.D.'s in recreation and parks is increasing.

A Ph.D. will provide the department with an opportunity to attack from within problems related to recreation resources. Recreation research must be more than an interesting area in which foresters, economists, and sociologists can apply their theories and models. Recreation research must provide a basis for integrating behavioral and resource studies.

A Ph.D. program will provide an opportunity for students and faculty to perform the integrative function of explaining how bodies of theory in sociology, psychology, economics, and ecology fit together in explaining recreational behavior and in solving recreation problems.



Computer Teaching Lab

Under the leadership of Dr. Richard Perdue, major changes were made in the commercial recreation concentration courses. In addition to the core curriculum, the concentration courses are designed to provide a sound foundation in the commercial recreation and tourism industry and in the knowledge of the theoretical foundations of travel and tourism behavior. The concentration courses will provide an opportunity for students to expand their knowledge and abilities to provide recreation, hospitality and tourism programs. They will gain a knowledge of marketing and promotion skills as well as the ability to conduct market analysis for commercial recreation and tourism programs and facilities. Finally, students will have the opportunity to develop a knowledge of business operation and skills. Three new courses have been approved as follows:

RRA 220, Commercial Recreation and Tourism

RRA 320, Convention and Visitor Services

RRA 420, Resort Management and Operation

The program will be initiated beginning with the Fall semester, 1985.

EXTENSION FOREST RESOURCES



Front Row from Left to Right:

JOE DENIG, Ph.D. Virginia Tech;

LEON H. HARKINS, M.S. Colorado St. Univ.;

BILL SWINT, M.F. N.C.S.U.

DICK ALLISION, M.F. Penn. St. Univ.;

Not pictured:

MIKE LEVI, Ph.D. Leeds Univ. England;

ROBERT HAZEL, M.S. Penn. St.;

LARRY G. JAHN, M.B.A. Penn. St. Univ.;

Back Row from Left to Right:

MORELAND GUETH, B.S. N.C.S.U.;

EARL L. DEAL; M.S. Univ. of Georgia;

JAMES R. MCGRAW, Ph.D. Univ. of Florida;

BILL HUXSTER, M.W.T. N.C.S.U.;

BILL GARDNER, M.S. N.C.S.U.;

BILL STANTON, M.F. N.C.S.U.;

RICK HAMILTON, M.F. Duke Univ.;

Forestry Extension Highlights

Tightening of State and Federal budgets has lead to increased emphasis on accountability and program evaluation in Extension. The impact of educational programs can be measured in numerous ways.

These range from tabulation of the number of publications distributed, meetings held, and people in attendance, to quantification of actual changes in attitudes or practices as a result of the educational programs. The former methods are simplest and have been used most frequently; the later are more difficult, more expensive, but more meaningful. Some examples of both are as follows:

1) Approximately 60 counties in North Carolina have formed landowner forestry associations with assistance from the Extension Service.

2) Extension specialists spoke at 140 meetings, field days and tours for forest owners in 1984 attracting over 5,500 people.

3) A survey of forestry program participants showed that 53 percent of the participants saved money on income taxes, 40 percent on property taxes, and 40 percent increased income by improving forest productivity.

4) Examples of individual savings include one landowner who using Extension marketing advice received \$72,000 for a stand of timber compared with an initial offer of \$10,000, and another who saved \$70,000 in income tax after attending a taxation meeting.

5) In 1983, Extension Forest Resources programs for professionals reached 2,000 people. Topics ranged from tax workshops to pesticide certification training and from yield seminars for the furniture industry to an industrial Energy Workshop and trade shows.

6) Largely as a result of Extension efforts, the number of Christmas trees planted in North Carolina has increased 8 fold in the last 7 years. Growers received approximately 35 million dollars in 1984 from the sale of 3 million trees.

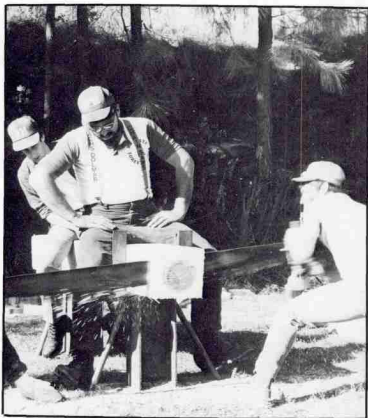
7) Approximately 30 non wood products industrial and institutional facilities are using wood for fuel, thus saving \$15 million dollars in fuel costs or the equivalent of 27 million gallons of oil annually.

8) Sawmill, furniture and lumber export companies have saved several hundred thousand dollars after implementing improved drying procedures recommended by Extension Specialists.

9) Renewable Resource Extension Act funds have been used to fund an area forestry agent, a specialist who assists the sawmill industry (cost shared by industry) and several special projects including development of a correspondence course for forest landowners, computer software to enable landowners to determine the economic returns from forest management, and a handbook on animal damage control.

The area agent has established contact with over 800 landowners. Case studies on approximately 100 of these landowners show marketing assistance on sales totaling over 5 million dollars, tax savings of at least 10 percent, and reforestation assistance on approximately 7,000 acres.

These highlights demonstrate that the Extension Forest Resources Program is significantly increasing the income of both forest landowners and forest industry and is meeting its goal to take information from the University to the people of the state.



Moreland Gueth Forestry Extension Staff

SECRETARIES



SECRETARIES

1st row: MARY WALKER, Acct. Tech., SFR; PENNY HANDLIN, Sec., PPT; PEGGY ARNOLD, Sec., FOR; 2nd row: CHARLOTTE SWART, Stud. Serv. Mgt., SFR; SUE HARKINS, Admin. Sec., FOR; JUDY ROGERS, Sec., FOR; ELGA VACA, Sec., Ext. FOR RES; ANN PLEASANT, Sec. Stud. Affairs, SFR; 3rd row: MILLIE SULLIVAN, Sec., WPS; NANCY ROBERTS, Admin. Asst., SFR; SALLY PATTERSON, Sec., SFR; 4th row: BETH LEWIS, Sec., FOR; LORENE NICDAO, Sec. Ext. FOR RES; BHAVANA AJMERA, Sec., WPS; 5th row: PAT LINEBACK, Sec., RRA; ANGIE BRANTLEY, Sec. Ext. FOR RES. Not pictured: REGGI POWELL, Sec., RRA.

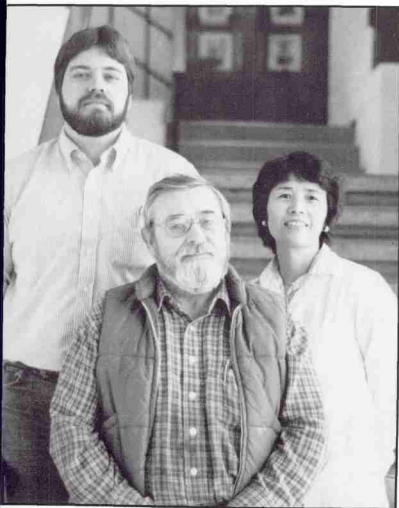


LIBRARIANS



LIBRARIANS

Left to Right: DONNA HALL, BARBARA CLEMENTS, PAM ROWLAND.



STAFF

Left to Right: WILLIAM C. WYATT, Research Technician; EVERETT H. MORGAN, Wood Products Research Mechanic; YOSHIKO K. CHEU, Research Technician.

COOPERATIVES

CAMCORE

Central American & Mexico Coniferous Resources



JUAN JURADO BLANCO, B.S. NCSU; BILL DVORAK,
M.S. NCSU ; MELISSA SALAZAR

FERTILIZATION



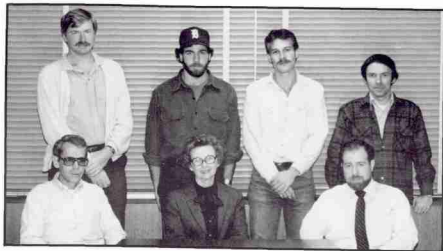
Left to Right: BOB MAIMONE, B.S.SUNY SYRACUSE; MIKE WISNIEWSKI, B.S. NCSU, MR.ST. NCSU; SUE HARKINS; STEVE ANDERSON, B.S. RUTGERS UNIV.,M.S. UNIV. OF WASHINGTON; TOM FOX, B.S. UNIV. OF MAINE, M.S. V.P.I.; BETH HAINES, B.A. APPALACHIAN STATE UNIV.; BARRY WEINMANN B.S. OREGON STATE, M.S. NCSU.

FORESTRY EQUIPMENT



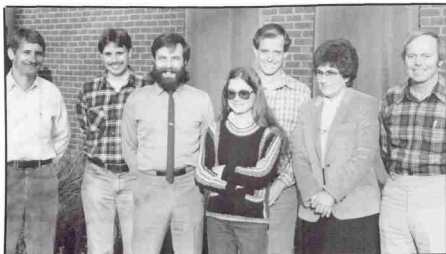
Left to Right: BILL HADDOCK, M.S. N.C.S.U.; CARL THURNAU, B.S. Univ. of Maine, Orono; RANDY OAKLEY, B.S. N.C.S.U.; AWATIF E. HASSAN, Director, Ph.D. Univ. of California, Davis.

HARDWOOD



Left to Right seated: ROBERT C. KELLISON, Director, Ph.D., N.C.S.U.; MARTHA HOLLAND, Secretary; KENNETH R. ROEDER, M.S., Univ. Florida standing: PAUL MARSH, M.S., N.C.S.U.; JIM ORRELL, B.S., N.C.S.U.; RUSS LEA, Ph.D., S.U.N.Y.; DOUGLAS J. FREDERICK, Ph.D., Univ. of Idaho.

SMALL WOODLOT



From Left to Right: DENNIS HAZEL, M.S. N.C.S.U.; LES HUNTER, B.S. N.C.S.U.; GARY D. KRONRAD, Ph.D. UNIV. MASSACHUSETTS; MARTY HOOD; MARK SMITH, B.S. N.C.S.U.; MARTHA MILLER, Secretary; CARLYLE FRANKLIN, Director, Ph.D. N.C.S.U.

TREE IMPROVEMENT



Left to Right: STEVEN E. MCKEAND, Ph.D., N.C.S.U.; J.B. JETT, Ph.D., N.C.S.U.; ADDIE BYRD ROBERT WEIR, Director, Ph.D., N.C.S.U.; FLOYD BRIDGEWATER, Ph.D. Oklahoma State Univ.; BRUCE ZOBEL, B.S., M.F., Ph.D., Univ. of California, Berkley; JUDY STALLINGS, Secretary; JOHN FRAMPTON, Ph.D. N.C.S.U.; JERRY SPRAGUE, B.S. NCSU ; GREGORY U. FERGUSON, B.S., N.C.S.U.; VERNON JOHNSON, Agriculture Research Technician.



Nothing great was ever achieved without enthusiasm
- Emerson

STUDENT ORGANIZATIONS

F P
R S



Forestry
Council



T A P I



RE Club



F R A G S



FRAGS

Social and Academic Leadership

by Mark Megalos

The Forest Resources Association of Graduate Students (FRAGS) is composed of all the graduate students from Forestry, Recreation Resources and the Wood and Paper Science Departments. FRAGS is an integral part of the Graduate Student Association, a campus-wide governing body for graduate academic and social matters. The chairperson, treasurer and a representative from each department form the Executive Committee, which works actively with the school administration in solving academic and policy disputes. Serving until the end of April, were past-chairman and past-treasurer Mark Megalos and Carl Thurnau. Also aiding in graduate affairs are the

individual department representatives. This years representatives were:

Wood and Paper Science-Bruce Griggs
Recreation Resources Administration
-Lydia Lavelle
Forest Resources-Eric Schmeckpeper
-Peter Ades (alternate)

The whole FRAGS group sincerely wishes the best of luck to the PINETUM staff and, as always, appreciates the opportunity to contribute to this traditional publication.

The Forestry Council Keeps it Running

by Joe Roberts

The Forestry Council is composed of representatives from each club, honor fraternity, and department within The School of Forest Resources. It is their purpose to serve as the voice of the undergraduate. The council's president and student senators represent The School of Forest Resources in the University Student Government.

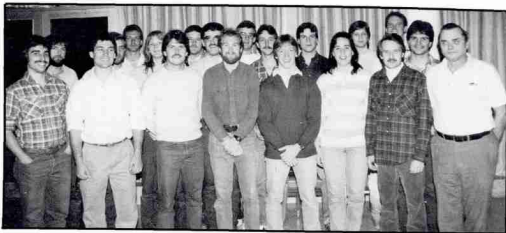
The Forestry Council is given the responsibility of fairly distributing among the organizations within the School of Forest Resources the money given to them by the university. These funds come from student fees. Several organizations, including TAPPI, Forestry Club, and Rec Club, have received funding through the Forestry Council for educational field trips. The PINETUM was partially financed by this money, also.

This year's Forestry Council nominated Dr. Richard Braham for the University's Outstanding Teacher Award.



Thanks From Xi

by Scott Gordon



Since 1940 the Mu Chapter of Xi Sigma Pi has served to honor the student who excels scholastically and who has a personality that would tend to make him successful in the forest resources profession. Each academic year new members are added and invited to participate in the activities of the year. During the fall semester we had the pleasure of sharing Doc's famous chili recipe at the annual Chile and Wine Dinner. Events that followed this were the Steak Dinner and the final Senior Picnic.

In addition to these culinary pursuits the fraternity continued the tutoring services that are available to students of the School of Forest Resources. The officers for the 1984-1985 year were:

Forester: Scott Gordon
Assistant Forester: Jon Reynik
Fiscal-Sec. Agent: David Holt
Ranger: Ronnie Steger

None of the functions of Xi Sigma Pi would have been possible without the valuable help of three people: Dr. Donald Steensen, Charlotte Swart, and Ann Pleasant. They actually do much of the behind the scenes work. So this year Xi Sigma Pi would like to publicly thank Doc, Charlotte, and Ann for their unlimited support, patience, and help in dealing with our organization. We could not have done it without you.

Forestry Club/SAF: A Successful Merger



by Todd Wilson

Dramatic? - Yes. Controversial? - Maybe. Successful? - Definitely! This year will be remembered, not for Scott Fortner's 180 degree pole fell at Rolleo, not for Mike Tedder's come from behind winning tobacco spit, nor for Todd Wilson's demonstration on how to quickly exit a topped-tree; No, 1984-85 will be remembered for the merger of the N.C.S.U. Forestry Club with the Student S.A.F.

Since its conception, the N.C.S.U. Forestry Club/S.A.F. boasts 44 national S.A.F. members out of the current 55 in the club. Eight faculty members actively participate as advisors.

This has been, without a doubt, the most active year for our organization. Delegates traveled from Washington D.C., to southern Georgia, to West Point, Virginia to learn about their profession, and compete in old-time logging events. Rolleo, Conclave, Logger's Brawl, and Pig-Pickin' remained as steadfast traditional annual events.

In addition to these activities, the club supported an Orientation Program for incoming freshmen, held a cookout for new members, set up an exhibit at the State Fair, and visited the S.A.F.'s National Headquarters, the A.F.A., the N.F.P.A., and the U.S. Forest Service in Washington.

The club also traveled to West Point, Virginia for the first annual Crabfest Day Logging Competition. Finally, the club sponsored University Volunteer Services' "Wood for Warmth" project which provided firewood for the needy in Wake County.

What's in a name? We, the charter members of the Forestry Club/S.A.F. are really proud of our new name. We believe we have laid the ground work for a very progressive organization. We hope to be reading future Pinetum's which will tell us how the club has built on our ground work.



Rho Phi Alpha

Rho Phi Lambda

by Perry M. Daum

Rho Phi Alpha (RPA), Honorary Professional Recreation Fraternity, is a fraternity that was established by Thomas I. Hines and a group of students in 1958.

The fraternity is designed to recognize, promote, and encourage potential professionals in the field of recreation.

The 1984-85 school year brought about the induction of 7 new members into the fraternity. Rho Phi Alpha worked with RRA faculty during open house in October. Rho members spoke with high school students, parents, and other visitors who were interested in Recreation Resources Administration. The fraternity sponsored a speaker, Harry Anderson, manager of the NCSU Faculty Club, to speak on commercial recreation and his experiences as a manager of a commercial recreation facility.

A major event this year was the first official meeting on the merger of Rho Phi Alpha and Sigma Lambda Sigma, the other honorary recreation fraternity in the country located at Florida State University. The meeting was held at the National Recreation and Park Association Conference in Orlando, FL. Many new ideas and revisions surfaced at this meeting, and all who attended left with positive feelings about the merger. One revision that was made was to change the name of the fraternity to Rho Phi Lambda which stands for Recreation, Parks, and Leisure. The complete merger of the two organizations will be finished within two years.

Rho Phi Alpha once again, with the help of the Recreation Majors Club, headed up the selection process for choosing the outstanding senior in the RRA curriculum. This award, the Thomas I. Hines Award, is given to the student who best displays scholarship, integrity, and contribution to the betterment of the recreation profession.

Raleigh was this year's host of the Southeastern Regional Recreation Conference and Rho Phi Alpha assisted to help make the conference enjoyable and informative. Members were on hand to give information about conference activities and to answer questions about Raleigh itself.

Rho Phi Alpha, along with the Recreation Club, was involved in the planning and execution of the Recreation Banquet held March 31. The banquet encouraged fellowship among students, faculty and alumni and a good time was had by all.

Rho Phi Alpha closed the year with the annual 'end of the year recreation picnic'. Hot dogs and hamburgers were on the menu and the old touch football game left some bumps and bruises as a memory of the fun we had.

Rec'ers Pursue Activities



by Phil Campbell

In April, 1984, new officers for the 1984-85 North Carolina State Recreation Majors Club (REC Club) were elected. They were as follows: President, Phil Campbell; Vice-president, Terry Johnson; Secretary, Cathy Adkins; Treasurer, Lori Zuersher; and Forestry Council Representative, Angie Fellers.

We began our year with our 1st Annual "Hog Day". This was a fun time which included a pig pickin', games and time to just sit around, get to know each other and wear our new REC Club t-shirts.

Several club members, under the direction of Susan Saunders, got together and did a rush job for the Cary Parks and Recreation's Halloween Carnival at Cary Village Mall. We sponsored a "Go Fishin'" Booth and it seemed to be the hit attraction at the carnival.

Intramurals have played a large part in the success of the club this year. First of all we played co-rec football for the first time and even made the playoffs. Co-rec bowling was next on the schedule and we ran the other teams out of the alley for the finals in which two REC Club teams bowled each other. In the spring we started with men's and women's bowling and women's basketball. The women's basketball enjoyed exercise(exhaustion) and sportsmanship(football season's over!) but lost a lot of close ones. The men's bowling team had a successful season but lost a close one in the semifinals and the women's bowling took the championship. To finish the year we had co-rec volleyball and softball as well as a women's softball team. Thanks to Terry Johnson, we have done well in supporting intramurals this year.

Another big event was the banner contest which replaced the homecoming parade. Well folks, we did it again. Some of the club members spent all day one Saturday painting the banner. We went to Carter Finley Stadium on the morning of the homecoming game, hung the banner and yes, we won second place, had our club's name announced and now have a plaque.

We have also had club meetings among the various activities. At Christmas, we sponsored a child through the Salvation Army. Cathy Adkins was responsible for purchasing an outfit, and also putting an article in the Technician to challenge other clubs to also sponsor a child.

Between the beginning of the spring semester and spring break we had a party at one of the local apartment club houses and were pleased to have some Forestry students also show up.

The Club had great success with the RISE Conference under the direction of Paulette Irvin, Terry Johnson and Dr. Beth Wilson. Other events included a volunteer project to work on an interpretive trail, at the B.W. Wells House located near Falls Lake. Cathy Adkins headed up the day of work with the help of a few dedicated club members.

There was also the 2nd Annual Recreation Banquet co-sponsored by Rho Phi Alpha, and the final event of the year, the traditional picnic at Schenck Forest.

All in all I believe this has been a most successful year. Our attendance at meetings has increased and so has our participation in campus functions. Thank you members and officers for your continued support in making this year a great success.



by John Lyons

The North Carolina State Student Chapter of the Forest Products Research Society entered its 33rd year making it the oldest student chapter in the history of the society.

The chapter began with the intent of providing an opportunity for students interested in the forest products industry to keep abreast with the state-of-the-art technology and develop a greater appreciation with respect to the diversity of situations which the industry holds for graduates.

This years officers were: president, Joe Roberts; vice-president, Todd Brown, secretary, Gordon Freshwater; treasurer, Craig Ferry; program chairmen, Scott Allen, Tracy Speas and Mark Winters; athletic chairmen, Neill O'Quinn and Frank Willey with advisor, Dr. Elizabeth Wheeler.

In keeping with the objectives with which the chapter was founded, a variety of speakers enlightened us with a wide selection of topics including how the Extension Forest Resources serves us, utilizing fuelwood for electricity, laminated I-beams, and the North Carolina State Government.

Club activities began with a once-again successful Open House under the direction of Dr. Wheeler.

The fall pig-pickin at Schenck Forest was a huge success with many enjoying the day-long event. The club wishes to extend special thanks to Moreland Gueth, for it was through his efforts that the event was made possible.

Extracurricular activities this year included members attending three FPRS Chesapeake-Carolinas section meetings on drying Southern pine, finishing, and a furniture conference. Through these types of meetings valuable personal contacts were made along with greater exposure for our chapter.

After a winning season of intramural volleyball and softball, the club closed the academic year with a new twist at the spring picnic. Pounds of barbecue chicken and hamburgers on a spring Sunday afternoon proved to be the right combination to reflect on the memorable times.



TAPPI

TAPPI (Technical Association of the Pulp and Paper Industry) is the world's largest professional association and serves the pulp, paper, converting, and allied industries. TAPPI also sponsors student chapters at universities with pulp and paper and related curricula.

The North Carolina State chapter of TAPPI is the second oldest of the student chapters and a very active one. The 1984-1985 year has been a good one for TAPPI. Attendance and participation have increased dramatically from previous years at both student meetings and the local section TAPPI meetings.

The meetings consist of technical speakers from all areas of the industry. These speakers help to develop the students' insights into the industry and prepare them for the future.

TAPPI also has a social side. Fall and spring picnics are highlights, as well as several small events during the year. TAPPI can play a large part in the students' lives.

Officers for 1984-1985 are as follows: President, Michele Woodson; Vice President, Clark Rhodes; Program Chairman, Tommy Riddle; Secretary, Barbara Gilmore; Treasurer, Steve Scheye

STUDENT ACTIVITIES

Summer Camp 84:

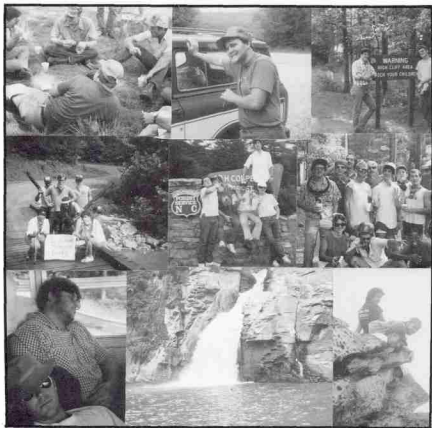
The Way It Was

by Clark Beavans

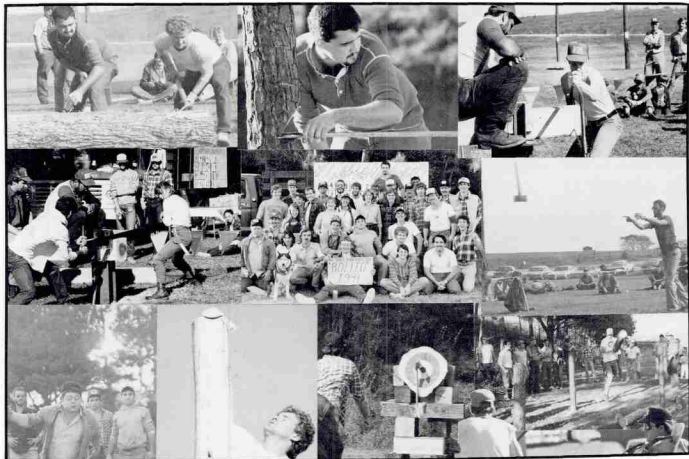
If you had asked me at the time, I would have griped long and loud about it; the heat, the food, the bugs, the sweat, the frustration. The eternity spent on THE MAP and THE 43. Isn't it funny how time sort of smooths over the bad and plays up the good in your memory? One tends to forget the agony of food poisoning and the mental fatigue caused by several sleepless nights spent feverishly working to meet a deadline. I no longer remember the utter disgust of staring a buckwheat "pancake" in the face at 6:30 a.m., or the difficulty of staying awake in a hot, muggy classroom, or the relentlessness of those bloodthirsty flies, or the loneliness as the dust cleared in the parking lot at 5 p.m. on Friday afternoon.

No, when I think back on the summer camp experience, I only remember the good things. The office parties. The parties every Friday with Larry Jervis. The thrill of the chase, hot on the trail of the

elusive checkered beetle. That old familiar act of bending over and holding your ankles. The inspirational strains of "Rock of Ages" whistled in unison by 25 or so devoted dendrology students out for an afternoon quiz. Volleyball. Schaeffer's. The black bear in the road at the Hoffman Forest. Sorting out a pile of oven-dried forest litter at 1 a.m. Dressing up for wildlife day. The prescribed "smolder" The Nash Hardy Memorial Highway through Lower Cambodia (pleasure route by the river). Sweet sounds coming from the cook's cabin on those sultry nights. The satisfaction of seeing the last of buckwheat pancake mix disappear into the muddy water of the Flat River. The mountains and more volleyball. Walking up Mt. Mitchell. The big splash at Linville Falls. Midnight dendro quiz with Jose Cuervo. The Quest for the Brown Mountain Lights. The SIMULATOR at fire school. All joking aside, the best part of summer camp is getting to know your classmates and fellow grunts better than most people (some better than you'd like to). And by golly, you even learn a few things about forestry. My fondest memory of the summer spent at the Fantasy Forest, however is THE END!



ROLLEO



Armed with axes, two-man saws, logs, 300 pounds of barbecue pork, and four cases of Levi Garret chewing tobacco, about 150 lumberjacks and "lumberjills" of the N.C. State Forestry Club paid their respects Saturday to woodsmen of days gone by with an old-fashioned "Rolleo."

The group spent the day in NCSU's Schenck Forest off Reedy Creek Road west of Raleigh indulging in ax throwing, wood chopping and crosscut sawing that would have made Paul Bunyan proud.

It was the 48th annual Rolleo and besides highlighting interclub rivalries, it served as training for national forestry competition. The NCSU club has been a power at the nationals, called the "Conclaves," consistently placing in the top five for the past 10 years. "Rolleos started in the old days when the men in logging camps didn't have anything to do on the weekends," said 6-foot-5 Moreland Gueth, who looked every bit the 19th century lumberjack, complete with bright orange suspenders. Gueth is a faculty advisor to the club. "What we're doing is preserving a tradition," he said.

Saturday's Rolleo was divided into 11 point events and three non-point events with club members separated into freshman, sophomore, junior, and senior teams.

The point events reflected traditional forestry skills such as wood chopping, crosscut sawing, ax throwing, pole climbing, and tree felling, while the non-point events were of a more social nature- tobacco spitting, beer chugging and "firefighting." In that event, four people each light a cigar and don water packs, with the winner being the first to extinguish the other's stogie.

"We're trying to keep in touch with what the old days were like," said senior Todd Wilson who is head of the school chapter of the Society of American Foresters. "Technology has gotten so far advanced that even chainsaws are almost obsolete."

Another thing that has advanced since the old days is the number of women involved in forestry programs. While they didn't enter all of Saturday's events, there were about 10 "lumberjills" in the sawing competition.

Gwen Amick a sophomore from Ann Arbor, Mich., said she became interested in forestry when she was 12 years old.

"One day I just got the urge to cut a tree down," she said after the "Jack and Jill" crosscut sawing competition. "I get kidded a lot, but I grew up with three brothers. It gets me motivated."

And motivated she was. Along with Scott McGee, the 100 pounder sent sawdust flying and ripped through a ten-inch block of poplar in 23 seconds, putting her team in first place.

But there is one event that women club members rarely participate in, speed chopping, considered the Rolleo's ultimate test of endurance. Participants stand side by side on wood blocks and when the official says go, they start chopping.

Freshman Vic Parrish looked nervous as he adjusted his grip on his ax and readied for his debut in the speed chopping competition. On the sideline, teammate Ian Shannon yelled encouragement.

"You hate that log, Vic, remember, you hate that log!"

But apparently Vic's animosity wasn't enough to win. The best time was 1:23 while Parrish grunted, groaned and sweated to finish in 4:43.

After the wood was finally split Parrish did a somersault and collapsed in the grass.

"I think I need to work on that one," he said.

Not all of Saturday's events left contestants in pain. Senior Mike Tedder insisted he was warming up as he relaxed in a lounge chair, resting a beer on his stomach, and placing a large tobacco plug between his cheek and gum. Only the trained eye would know that Tedder was warming up for the tobacco spitting contest.

"I've been chewing for as long as I can remember," Tedder said. "Heck, I can put a plug in one side and eat a sandwich in the other."

Tobacco spitting did not count in the final tally. The favored seniors were unable to take first place due to the unexpected challenge by the sophomores. The junior and freshman classes placed third and fourth, respectively.



ROLLEO circa 1940
Hofmann Forest

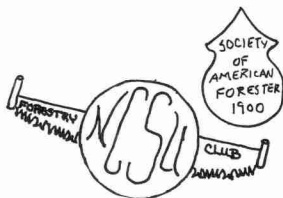
LOGGER'S BRAWL

by: John Robertson

As darkness closed upon the Hill Forest on the 16th of March, the nocturnal critters stirred from their burrows and perches in their usual night to night forays. This night was different, however, as pair after pair of lights roared down the dirt road and grouped together in the clearing just up from the river. These critters tensed and tried to sense what new animal was invading their territory. As these lights winked out, the new creatures could be seen moving into a den that had great smelling food aromas coming from it. They sure are noisy eaters! Now they are going into another den, and it sounds like they're trying to stomp it to pieces! All the whooping and hollering! All the clapping and screaming! This isn't the place for me to be

The event just described was the annual Forestry Club/S.A.F. Logger's Brawl, as witnessed by the more common local inhabitants. As students, faculty, and guests met at the Hill Forest Summer Camp, fed on delicious pork barbecue, and danced to primo Bluegrass music, they all gave "wildlife" a new definition. This year we were fortunate enough to obtain the musical talents of the Wake County Ramblers, a group mostly composed of N.C.S.U. faculty. Their renditions kept the event rolling along to its official conclusion; however, the party was still going strong for those who chose to remain for the night.

This year there were several changes made in the way this event is usually held. In order to reduce costs and to stay in line with the stricter alcohol policy of the university, we decided on B.Y.O.B (bring your own beverage). However, some members elected to B.Y.O.K. (bring your own keg). A feature from last year we continued was to provide cots and mattresses to sleep on. This allowed a safe means for participants to drink and not litter the highways with inebriated drivers. We also had a Pig Pickin' for which a nominal sum of \$1.00 for Forestry Club/S.A.F. members and \$2.00 for others was charged. Everything else was provided at no charge. All in all, the attendance this year tripled that of last year, costs were reduced, and everyone seemed to have a great time. Y'all come next year, ya' hear!



by Dr. Phillip Rea

Each March finds a group of twenty students and one or two faculty members from Recreation Resources Administration heading west to participate in the annual Outdoor Recreation Consortium. The Consortium involves four other universities (Indiana University, University of Illinois, Western Illinois University and University of Missouri-Columbia) and is conducted at the Tennessee Valley Authority's 170,000 acre Land Between the Lakes outdoor recreation demonstration area on the Kentucky and Tennessee border.

The five-day program is a highly productive educational experience. Technical staff from Land Between the Lakes serve as instructors. Lectures and audio-visual presentations are supplemented with actual demonstrations and hands-on experience. Topics range from forestry and wildlife management to campground design and outdoor programming.

The Consortium program is intensive but rewarding in many ways. Management concepts taught on campus are experienced in a real life situation. Additionally, the opportunity to get to know professionals as well as students and faculty from other universities is exciting and beneficial in making career and graduate study decisions.

10 Years

of

Land Between the Lakes



R.I.S.E.

by Phil Campbell

After many long hours of meetings and making plans, the 1985 RISE Conference was held January 30 at the University Student Center. The conference was held from 9:00-12:00 noon with a luncheon from 12:00 noon-2:00.

Paulette Irvin and Terry Johnson were co-chairpersons along with Dr. Beth Wilson as Faculty Adviser. Special thanks go to Dana Simonsen for her extra effort the day of the conference and for computerizing the mailing list.

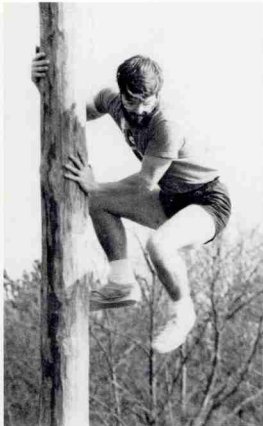
The response for the conference far surpassed previous years. Forty-five agencies were represented offering a total of 12 full-time openings, 50 internships and 250 summer jobs to the 175 students who attended in the RISE Conference.

Thanks go to everyone who made this important function a real success for the Department of Recreation Resources Administration.

CONCLAVE

April 11-13

Georgia



Forestry Students Go To Washington, D.C.

by Todd A. Wilson

Members of the N.C. State Forestry Club/SAF recently hung up their boots and compasses and headed to Washington, D.C. to meet with the Nation's top brass in forestry policy-making.

The trip was designed to offer members a chance to tour the SAF headquarters in Bethesda, Maryland, meet with its leaders, and also to give members a better understanding of how decisions related to our country's forestland are made.

While in Washington, the group attended prepared forums with the U.S. Forest Service, the American Forestry Association, and the National Forest Products Association. Each organization described itself and explained how they were involved in the policy-making process. Current topics such as the acid-rain controversy and U.S. Forest Service debit timber sales were discussed with each group. Several

high-ranking leaders in the forestry profession were on hand for these meetings. They included John Barber, Executive Vice-President of SAF (a graduate of NC State), and Max Peterson, Chief of the U.S. Forest Service. On behalf of the N.C. State Forestry School, the group presented Mr. Barber with a plaque commemorating his service with SAF.

Also, the members visited such historical landmarks as the Lincoln Memorial, the Washington Monument, and Teddy Roosevelt Island, a memorial to the president who stood for conservation and preservation.

In two short days, this group traveled to our Nation's Capital to meet and exchange ideas with the people who shape the policy of the forestry profession. It is a rare chance indeed for an student to be able to take advantage of.

Now, back to the books-boots and compass, please.



If you want inner peace,
find it in solitude, not speed,
and if you would find yourself,
look to the land from which you came
and to which you go.

-Stewart Udall

FOREST RESOURCES SENIORS

All the time I think of tomorrows
and yesterdays....

Let me spend my todays
with you.

Conservation

KATHY VINCI
Hometown - Forest Hills, New York

Forestry Club
Forestry Council
S.A.F.



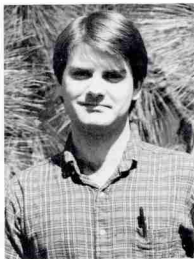
Recreation Resources Administration

WILLIAM STACY BARBOUR
Hometown - Rocky Mount, N.C.

Rho Phi Alpha
Recreation Club
Forestry Council

VALERIE BURGESS
Hometown - Raleigh, N.C.

Recreation Club
Conservation Club





JOE G. CREECH, JR.
Hometown - Garner, N.C.

PERRY DAUM
Hometown - Woodbury, N.Y.

Rho Phi Alpha - President
Recreation Club



ANGIE FELLERS
Hometown - Fayetteville, N.C.

Recreation Club
Forestry Council
N.C.R.P.S.
N.R.P.A.



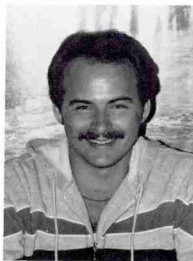
MILLIE GAMEWELL
Hometown - Salisbury, N.C.

Alpha Delta Phi Sorority



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Hometown - Clarkton, NC

Quarters Club



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Hometown - Monroe, NC

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Sailing Club
Outing Club



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Hometown - Charlotte, N.C.

Recreation Club - Vice President
Pinetum Staff - Editor 1984-85
R.I.S.E. Co-Chairperson



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Hometown - Asheboro, N.C.

Rho Phi Alpha - Sgt.-at-Arms
Women's Soccer Club - President
University Civic Orchestra



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Hometown - Concord, N.C.

Recreation Club



WESLEY POPLIN
Hometown - Ronda, N.C.

Recreation Club



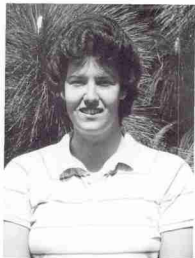
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Hometown - Troy, N.C.

Recreation Club
Pinetum Staff
N.C.S.U. Collegiate 4-H Club
Alpha Epsilon Rho - Honorary
Speech-Communication
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Recreation Club



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Hometown - Raleigh, N.C.

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Forestry Council - Secretary
Rho Phi Alpha - Vice President



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Hometown - Shelby, N.C.

Rho Phi Alpha - Vice President, Historian
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N.C.R.P.S.
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Alpha Gamma Rho Fraternity
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Rho Phi Alpha - Secretary
REC Club - Treasurer
Women's Volleyball Team

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S.A.F.
Forestry Club
Co-op - Rayonier



KELLY BLACKWELDER
Hometown - Statesville, NC

Forestry Club



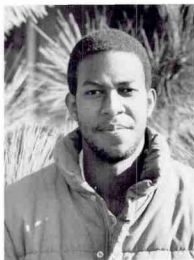
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Hometown - Lenior, N.C.

Xi Sigma Pi
Forestry Club
Farm House Fraternity
Crescent



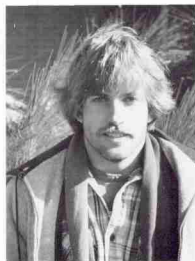
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Hometown - Cary, N.C.

Biltmore Work Scholarship
S.A.F.



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S.A.F.
School Forest Work Crew



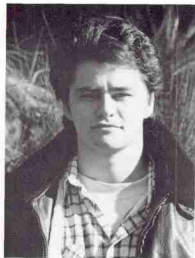
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Co-op - Brunswick
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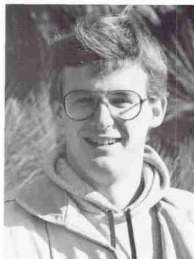


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Gamma Sigma Delta
Xi Sigma Pi
Forestry Club
The Chain Gang



WILLIAM (BILL) A. HONEYCUTT
Hometown - Wilmington, N.C.



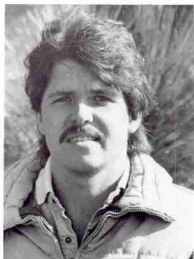
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Co-op - Brunswick Pulp
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S.A.F.
Xi Sigma Pi
School Forest Work Crew



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Hometown - Charlotte, N.C.

Xi Sigma Pi
School Forest Work Crew
Pinetum - Business Manager
Biltmore Work Scholarship



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Outing Club - Vice President, President
S.A.F. - Vice Chairman
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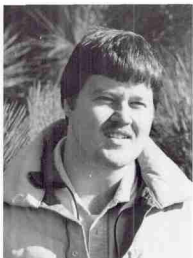
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Hometown - Gastonia, N.C.



JORGE PERICCHI
Hometown - Caracas, Venezuela



RON PHILLIPS
Hometown - Wilmington, N.C.

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S.A.F.
Garden Club Scholarship



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Forestry Club - Treasurer
Xi Sigma Pi - Vice President
The Chain Gang



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Forestry Club
S.A.F.



JIMMY ROBINSON
Hometown - Salisbury, N.C.

Forestry Club
S.A.F.



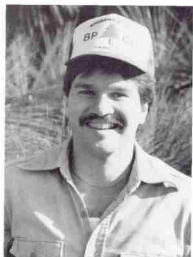
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Hometown - Clarkton, N.C.

Xi Sigma Pi



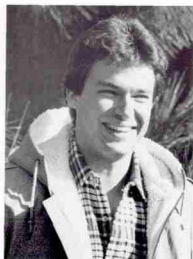
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Hometown - Fayetteville, NC

Forestry Club
SAF, Bus Driver



ALLAN SHORT
Hometown - Raleigh, N.C.

Xi Sigma Pi
S.A.F.
Co-op Program - Brunswick Pulp Land Co.



RICHARD SHORT
Hometown - Emporia, Virginia

S.A.F.



NICOLE SHRIMPSON
Hometown - Yorkshire, England

Honors Senior Seminar



DEBRA SMITH
Hometown - Roanoke Rapids, N.C.
Forestry Club



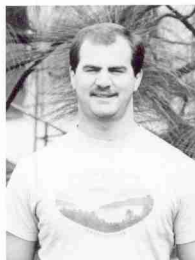
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Co-op -Rayonier
School Forest Work Crew
Xi Sigma Pi
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Xi Sigma Pi - Ranger
School Forest Work Crew



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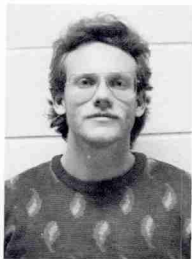


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Rugby Football Club

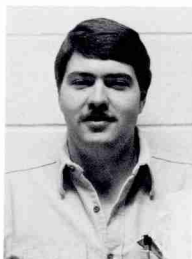


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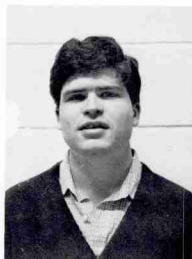


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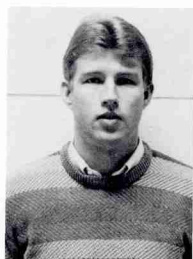
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Club Soccer Team



ERIC HOWELL
Hometown - Statesville, N.C.

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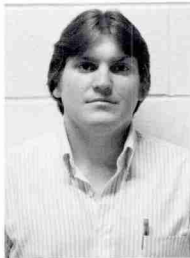
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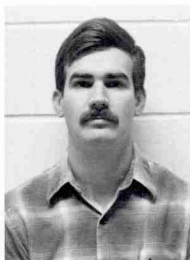
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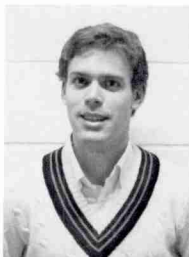
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Campus Crusade
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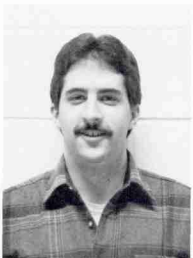
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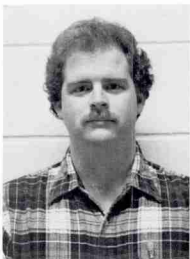


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Hometown - St. Simons Island, Ga.

Lambda Chi Alpha Fraternity
North Carolina Fellows Program
Teacher Evaluation and Effectiveness
Committee
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LARRY WARREN
Hometown - Canton, N.C.



JONATHAN WINT
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MICHELE WOODSON
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Wood Science Technology

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Hometown - West Millington, N.J.

FPRS
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Rugby Club



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Hometown - Fayetteville, N.C.

FPRS
Xi Sigma Pi



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Hometown - Mebane, N.C.

FPRS



JOSEPH CARL GRANT
Hometown - Laurinburg, N.C.

JERRY VAN MIDYETTE
Hometown - Engelhard, N.C.

FPRS
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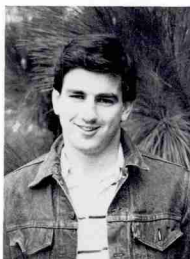
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Hometown - Cary, N.C.

FPRS
Forest Resources Council
Xi Sigma Pi



BRENT WARREN
Hometown - Mebane, N.C.

FPRS



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Recreation

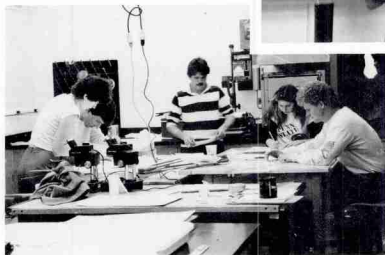
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Helene Blumenaur
Ben Chastain
Darryl Cregger
Billy Dove
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Debbie George
Cathie Grosshandler
Tami Harmon
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Sue Modlin
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Wilbur Owen
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Jeff Peterson
Beth Schumacher
Peter Solomon
Brad Starnes
Eddie Truelove

Forestry

Brian Goodin
Jeff Sawyers
Terry Holdselaw

At a Glance



Dr. Hassan playing with her to ys.

When did you say this damn thing had to be in?

Bill, are you sure this is the right way to Norfolk?

PI-NE-TUM STAFF

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Terry Johnson

BUSINESS MANAGER
Jeff Lane

ASSISTANT EDITOR
Susan Saunders



PHOTO EDITOR

Tony Mebane

The PI-NE-TUM staff would like to thank the following people for their support and guidance.

Dr. Saylor
Charlotte Swart
Ann Pleasant
Gary Blank
The Forestry Council
Scott Bertness & University Graphics
Amber Wilcox
The Technician Editors

Larry Jervis

Without the help of these individuals the publication of this journal would have been a lot harder.

...and so there ain't nothing more to write about, and I am rotten glad of it, because if I'd a knowed what a trouble it was to make a book I wouldn't a' tackled it, and ain't a-going to no more

-Mark Twain from The Adventures of Huckleberry Finn

Patrons

James F. Shotwell, Jr. 1965

W. Jack Waters 1964

Vincent R. Ross 1952

Ardith Garden 1952

James Dobbin McNatt 1959

D.M. Crutchfield 1959

William R. Ball 1961

E.H. Ericson, Jr. 1941

T.B. Wood 1958

W.E. Cooper 1932

J.S. Kelley 1957

W.R. Broadwell 1957

Peter Leavitt 1957

Will Mabry 1981

Harry S. Muller, Jr. 1981

Joe T. Evans 1950

W.E. Taylor, Jr. 1965

R.H. Beal 1956

J.E. Pickard, Jr. 1971

R.P. Tayloe 1957

M. Goral 1941

W.W. Rogers 1967

P.M. West 1949

W.C. Aiken 1936

P.O. Campbell 1950

Gelbert & Company

W.T. Jones 1949

Greg Birk 1983

W.S. Callahan 1967

J.R. Spratt 1935

T.L. Summer 1959

H.C. Martin 1939

B.B. Newton, Jr. 1973

S.M. Hughes 1952

L.R. Cantliffe, Jr. 1950

J.O. Artman 1931

Larry Bloomer 1969

J.E. Thornton 1936

L.G. Griffin 1971

S.W. Gregg 1959

R.W. Brake 1940

Mike Wienholt 1983

Lissa Wienholt 1982

G.W. Pettigrew 1933

W.H. Geddes 1949

G.H. Jones 1974

J.P. Harper 1949

J.C. Wessell 1953

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- J.A. Heitman, Jr. 1966*
R.I. Solow 1948
A.C. Edwards 1950
O.C. Tissue, Jr. 1953
W.J. Barton 1947
Barre R. Mitchell 1963
John Bradfield 1979, 1982
Robert A. Holcombe 1944
Jack Sherill 1972
T.F. Icard 1948
D.E. Augspurger 1973
C.C. Hills 1964
J.V. Jackson 1952
Jon Jeffries 1965
T.M. Hasell, Jr. 1949
K.M. Corbett, Jr. 1953
R.D. Byerly 1959
R.B. Phelps 1952
E.M. Tate 1965
K. Wearstler, Jr. 1979
V.D. McDonald 1950
T.B. Gardiner 1935
R.R. Benvenuti 1964
H.W. Culp Lumber Co.
- K.A. Pollock 1978*
L.A. Kilian, Jr. 1956
John Palmer 1973
T. L. Thrash 1954
Jim Pridgen 1960
S.K. Hudson 1936
V.W. Herlevich 1948
J.D. Gardner 1963
John S. Vass, Sr. 1936
Thomas L. Suggs 1951
Steven Wilhelm 1964
G.E. Jackson 1935
Nevin Dayvault 1948
Samuel V. Mace 1961
Gerald Dowless, Sr. 1957, 1961
Edward D. Parks 1966
Mahlon B. Kunselman 1958
Jeff Pardue 1978
J.C. Masten 1951
N.B. Watts 1938
John C. Barber 1950
C.W. Comfort 1935
C.E. Blackstock 1948

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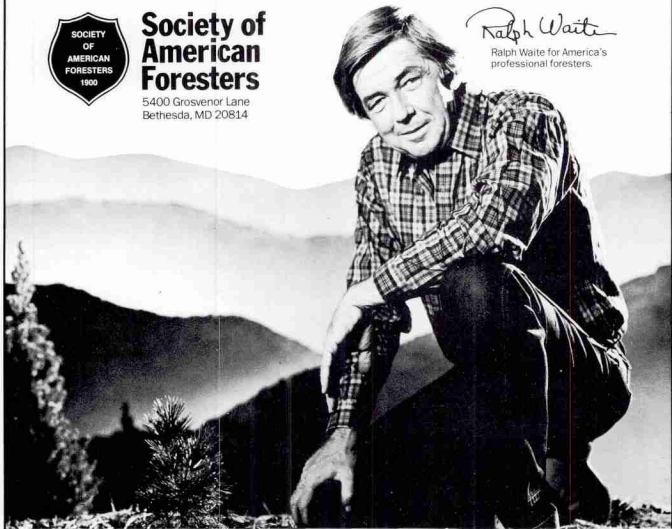


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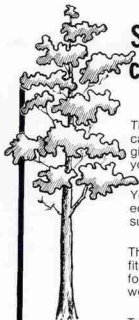
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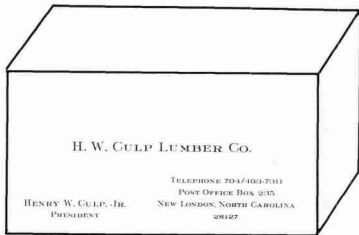
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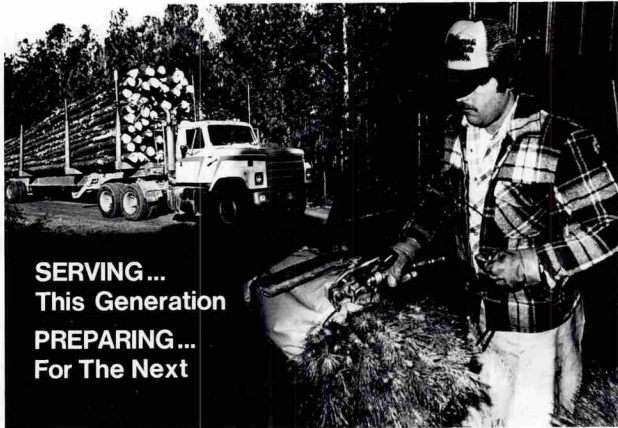
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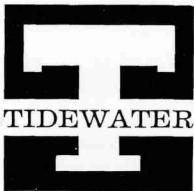


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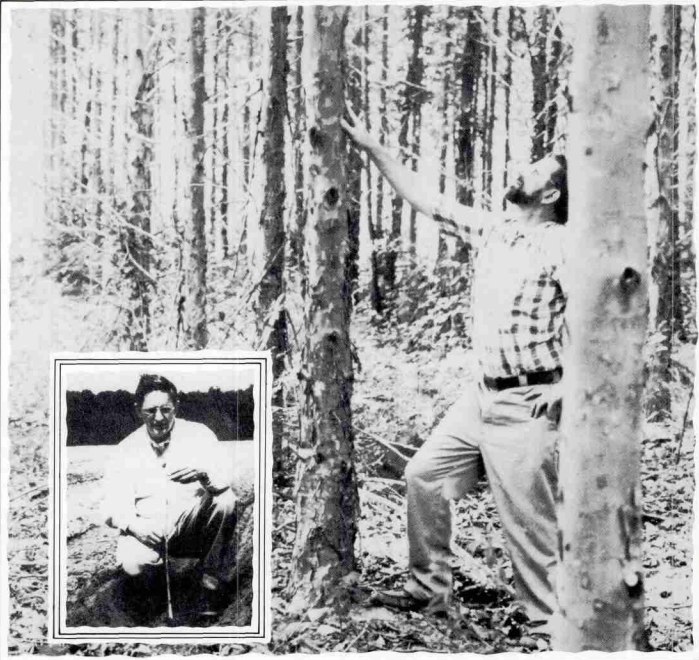
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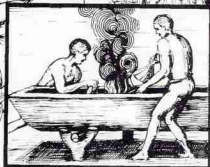
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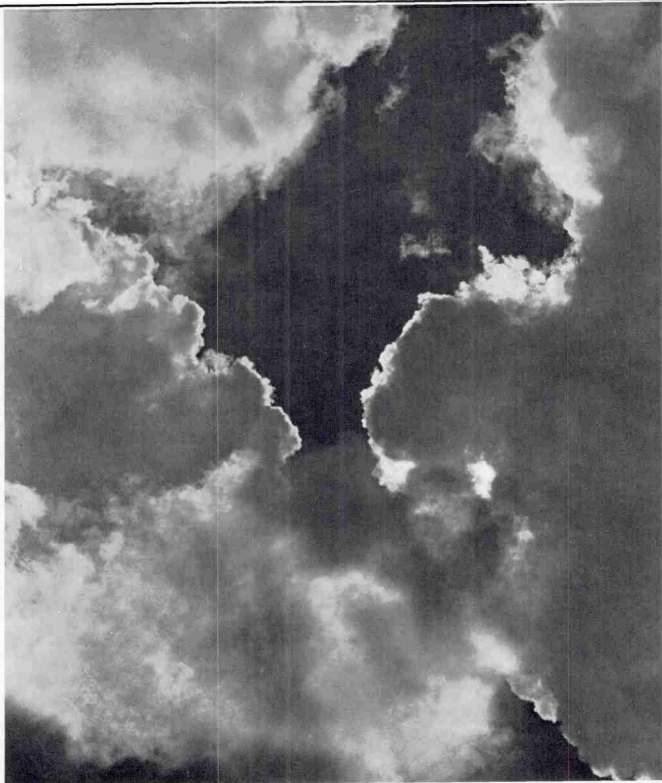
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