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Shelley Peterson, Editor-in-Chief North Carolina State University Raleigh, North Carolina Volume LV

Dedication =

L. C. (Bud) Saylor-Administrator "Par Excellence"

by Eric L. Ellwood, Dean Emeritus

The strength of the College of Forest Resources not only lies in the quality of the faculty and staff but also, in large measure, the quality of its administrative support over the years. To a significant degree many of the administrative functions of a College are invisible—not only to outsiders, but also to students and frequently to the faculty and staff. Good administration, like bread and butter on the table, is often taken for granted particularly if things are going well. But behind the scenes there is much dedicated and caring administrative work to help steer the development of the College programs both in direction and in quality, as well as handle the continuously growing day-to-day operations.

Bud Saylor is one of the key administrators of the College who has been a major player over a period of 22 years in helping ensure the continuing quality of the College programs.

At an early stage in his professional career, Bud evinced an interest in administration and particularly in Forest Resources to which, as a cytogeneticist and tree breeder, he applied his skills. My predecessor, Dean "Dick" Preston, recognized his ability and appointed Bud as a part-time assistant and later (in 1969) as Assistant Dean of the School of Forest Resources. After my first few years as dean, I appointed Bud as Associate Dean for Academic Affairs to help cope with the then substantial growth and development of the College-a position which he still holds today. Over those years Bud has distinguished himself, not only as a highly capable administrator, but also one who has achieved the respect and trust of his peers here and nationally, and of the university administration because of his knowledge and understanding of the university of education-both academic and professional-and because of his soundness and balance, and his ability to work with people in a genial but professionally efficient way.

Bud is "the man" to whom is delegated the responsibility for overseeing the teaching programs conducted by the departments and most recently he represents the College of Forest Resources in our



close relationships with the College of Agriculture and Life Sciences through which our College of Forest Resources receives most of its state funds for research and extension.

But a few highlights of Bud's administrative role may be chronicled as follows:

When, after approximately 8 years of being in the queue for construction of a new building, funding for Biltmore Hall was authorized, it became apparent that the funding level (set 8 years previously) was inadequate to construct a facility of the size needed. Bud aggresively pursued means to raise funds from other sources which was successful and enabled us to have a better building. During the course of construction of Biltmore, Bud also played a lead role in coordination of the school's input and liaison with the architects which again he accomplished with distinction.

One of Bud's roles was working with honor students, university scholars, and other high ability students, and in so doing he established special programs for them to help round out their education. On one occasion several years ago, he conducted a special (non credit) class on wine appreciation with invited speakers for the honors students, and it was from this he himself developed an interest in enology which eventually led him to establishing the outstanding wine retailing store in Raleigh—"The

Wine Merchant"—an occupation he intends to "retire" into on a full-time basis when he concludes his career at the College.

Bud is also the affirmative action officer for the College and oversees all personnel actions relating to affirmative action. He also coordinates recruiting for minority students. Currently, he is directing a substantial affirmative action grant from the U.S. Forest Service. Statistics gathered nationally on minority enrollment in forestry schools show that our College has had for many years the highest percentage of minority students enrolled of any U.S. forestry college. He is also the director of cooperative education programs for the College, i.e., students intermix semesters attending college and working in a firm or agency. This program, which is one of the finest ways of obtaining a meaningful education and ensuring a running start on a career, has been variably popular over the years and really should get more participation from students than it seems to receive.

In the arena of graduate studies Bud, for much of his career, has been the College representative to the Graduate School and has impacted on university policies and procedures in graduate education as well as coordinated the graduate education programs in the College. He also has played a very significant role in program reviews of the College programs (also at the undergraduate level) by visiting teams-accreditation agencies and government agencies. Frequently is involved with the development of self study or planning documents working with the College departments. He has always placed a high priority in our student programs on fostering communication and facility with language, both writing and speaking. In this regard he was a strong supporter of required English proficiency testing and in more recent times gave much support to the program conducted by Gary Blank on writing skills, which is a notable success story. Even though the tasks of administration can be totally consuming, Bud has always put a high priority on working directly with students in a variety of capacities-advisor to students who have not chosen a specific curriculum, counseling cooperative education students, designing and leading programs for honors students and scholars, counseling and assisting students responsible for production of the "Pinetum" and so on. He has taken on a variety of special assignments including responsibility for the production of a needed complete history of the College at the time of its 50th anniversary. Amongst his many other responsibilities is supervisor of the student affair's office headed by Charlotte Swart and supported by Ruth Allen. This office is the daily point of contact at the college level for students. It is a well-run office and a place where students can find someone who will not only listen but also frequently be served cookies or candy—serving the psyche and the taste buds!

To many of the faculty, Bud is an advisor, counselor and at times a "father confessor" to those who either had concerns that were bothering then, or they wanted to talk over. While privy to confidential matters relating to faculty and staff, Bud respects that confidentially which further enhances the trust placed in him by others.

To me, Bud was an indispensable resource person in whom I had complete confidence and one who enabled me to better do my job as dean by doing his job well and protecting my priorities. And in so doing he has had to surmont some severe health setbacks which fortunately and hopefully are now behind him. Bud has a love affair with the College and as the time approaches when he will be looking to his next career, I think it is very fitting that the Pinetum pay tribute to his long and dedicated service to the College.

He is a person and a resource that the College and all associated with it are fortunate to have. Bud, my thanks and congratulations to you!



A Look Forward

by Larry W. Tombaugh, Dean

On February 1, 1929, Dr. J.V. Hofmann started his job as the Director of the newly established Department of Forestry at North Carolina State College. Dr. Hofmann was, in effect, the first Dean of College of Forest Resources. Coincidentally, I began my tenure as the fourth dean on February 1, 1989—precisely 60 years from the day that Dr. Hofmann began developing this unique institution.

This is a humbling thought to me. It means that only three people—Drs. Hofmann, Preston, and Ellwood—have served as the chief executive officer of this enterprise throughout its sixty year history. Based on the international reputation that the College now enjoys, on the excellence of the faculty, and on the quality of its students and alumni, it is clear that the College has been blessed with truly visionary and effective leadership. It is my fervent hope and desire to be able to live up to the standard of performance set by my illustrious predecessors.

We have a lot to do. Never in my twentynine years of professional life has the general public
shown more interest in our forest resources. It is
true, and somewhat regrettable, that this interest is
largely being driven by perceived problems—acid
rain, tropical deforestation, catastrophic fires, greenhouse effects, biological diversity, and others. But
the interest is nevertheless there. At the same time,
the forest products industry continues to be one of
the bright spots on the U.S. economic scene. This is
an area in which the United States currently has the
resources, the technology, and the managerial capability to maintain a position of economic leadership
in an extremely competitive world economy.

What an exciting world graduates of the College of Forest Resources face! Graduates in forestry should be—must be—better equipped than any other professionals to be able to assure the longrun health, vitality, and productivity of forested ecosystems. This is one area where we can have our cake and eatit, too. With good forestry, we can meet both industrial needs and non-commodity interests. Likewise, graduates in wood and paper must be



exceptionally well prepared to contribute to the economic health, vitality, and productivity of our wood-using industries. Graduates of recreation resources administration must be able to provide needed recreational services in the face of competing demand for resources better than any other group of professionals. And, of course, we must constantly be exploring new and better ways to transmit new knowledge—to extend the results of research into working forests, mills and factories, and tourism or recreation facilities.

We are, by and large, well postured to meet these challenges. The magnificent new building for the Natural Resources Research Center will be completed within the next few months. This new Center has the potential of moving the College and its cooperating units throughout the campus to a new plateau of service to the citizens of North Carolina. If we develop the concept properly, we should be able to provide the scientific basis for resolving enormously complex natural resource problems that transcend the knowledge base available to any one discipline. One issue of immediate interest will be to get a practical handle on the way that an array of atmospheric influences and pollutants are influencing our living natural resources.

Construction began in February for a new facility that puts us in a good position to maintain our educational excellence in the field of pulp and paper technology—a 30,000 square feet addition to Robertson Laboratory. Our industry-supported

regional pulp and paper program has been among the finest in the nation. This addition will go a long way toward allowing us to continue serving the pulp and paper industry by providing keen young graduates and innovative technologies to meet rapidly changing needs.

All of these facilities and the faculty housed within them have overriding purpose—to serve the students of the College of Forest Resources. When

all is said and done, it is the quality of our graduates that is the most consistent, reliable measure of our efforts. Of all the aspects of the College that I find the most pleasing, it is the spirit of the students I have met. Our students have a delightfully positive, "can-do" attitude that is an important ingredient of success. All of us on the faculty wish you the very best of luck as you enter one of the most satisfying professions available.

Reflections

by L. C. Saylor, Associate Dean for Academic Affairs



Having arrived on campus in 1958 when North Carolina State University had fewer than 6,000 students and Raleigh had a population of about 93,000, I have witnessed and been part of many exciting developments. Certainly, the growth of NCSU to 24,000 students and Triangle area to 630,045 residents is something none of us would have predicted 30 years ago. With such growth came many unique opportunities and of course a few headaches.

My personal career began in the Department of Genetics where most of my efforts for 12 years concentrated on basic research related to forest genetics. That was indeed a most challenging period as the school made its initial efforts to establish a Tree Improvement Program. It began with a

bold concept and the pioneering spirit of a few dedicated people (e.g. Dr. B.J. Zobel), and it has now become an internationally recognized program and the largest of its kind. It also set the pattern for other successful cooperatives between the college and various public and private organizations.

Administrative responsibilities began in 1966, when I had the opportunity to serve part-time as assistant to Dr. Preston, who was dean at that time. Initial efforts were in the area of research administration, but involvement with academic matters came quickly. One project initiated in the late sixties which I am especially proud of was the establishment of the first school student council on campus. Organized initially to help oversee the use of student receipts that come to the school and to provide a liaison between students and school administration, the council grew in function and importance. It set the pattern for others so that student councils are now an integral part of all colleges on campus.

During the past 19 years while I served as Associate Dean for Academic Affairs, many significant accomplishments have taken place in the college. One example involved the growth and strengthening of the programs in the Department of Recreation Resources Administration, which became a part of the college in 1967. Initially that department was involved in only undergraduate instruction, and it was an effort they did exceptionally well as in 1977 they became the first formally accredited recreation program in the United States. A masters level program was approved in 1970, and it has grown to now include 43 degree candidates. The department continually strengthened its research capabilities and clearly has postured itself to

now offer graduate education at the Ph.D. level; such a program hopefully will be approved in the near future.

In the other departments-Forestry and Wood & Paper Science-leadership consistently has been demonstrated in upgrading curricula to meet the changing needs of the professions. As a consequence, the programs have been recognized continuously as among the top in the nation. One example of innovative curriculum development that I am especially pleased to have provided administrative support for is the effort in communication improvement called writing across the curriculum. Implemented initially in the forestry curriculum, this program involves the coordinated use of writing (and speaking) assignments in courses throughout the curriculum. Under the direction and leadership of Gary Blank, the program has received national attention and next year will be an integral part of a campus wide experiment on how to improve writing skills

Another area for which our college has provided important leadership is the integration of computer skills into academic programs. Led by Dr. Tom Gemmer, our faculty were involved from the very beginning in developing courses and establishing facilities. We had one of the first and perhaps best equipped instructional laboratories on

campus, but unfortunately much of the equipment became outdated in a relatively short period of time. Recognizing the growing need for more and better computer instruction, the college made a second major investment in equipment in 1988 to bring the laboratory back to first class status. Parallel to the investment in new equipment were innovative efforts to increase the use of computers throughout the curricula. So once again we are in a leading position.

Space limitations unfortunately prohibit the description of other equally meaningful events. Suffice it to say that in my judgment the academic programs of the college are postured well to provide the types of instruction needed to meet the challenging issues of the future. And challenging they will be as we move into what I sense to be another era like the "Earth Day Movements" of the late 60's and early 70's. With this renewed concern about our environment, the proper use of our natural resources, and quality of life in general, one can't help but feel that the roles of the professions embodied in our college will become more important and the value of our graduates better recognized. I came at a very exciting time 31 years ago, and I will be leaving at an even more exciting time. One could hardly ask for anything more.

The Importance of Land and Environmental Ethics in Our Society

by Ellis Cowling, Associate Dean for Research

One of the very important events of 1988 in the life of North Carolina State University and the College of Forest Resources was a series of University-wide and College-wide seminars on "Ethics in the Professions and the Workplace." The University seminars began with a keynote address by Dean Dennis Campbell, Professor of Ethics and Dean of the Divinity School at Duke University. In that address Dean Campbell reviewed the meaning of the term profession and the role that professions play in our society. During the College seminar that followed, it was my assignment to review the subject of land and conservation ethics. I did so by referring to the work of two men who have made



distinguished contributions to these concepts and their meaning for the natural resource professional.

The ideals of stewardship as they pertain to the conservation and wise use of natural resources are outlined in Aldo Leopold's (1968) famous book A Sand County Almanac. Here he describes evolution in man's concept of ethics in the following poetic words:

"The first ethics dealt with the relation between individuals. Later accretions dealt with the relation between individuals and society. The Golden Rule tries to integrate the individual to society; democracy to integrate social organizations to the individual.

There is as yet no ethic dealing with man's relation to land and the animals and plants that grow upon it . . . The land-relation is still strictly economic, entailing privileges but not obligations.

The extension of ethics to this third element in the human environment is an evolutionary possibility and an ecological necessity . . . "

Van Renneslear Potter (1970) has extended Leopold's concept to embrace a world view of the relationship between the biological sciences and the human condition:

"Mankind is urgently in need of new wisdom that will provide "Knowledge of how to use knowledge" for man's survival and for improvement in the quality of life... We need biologists today who respect the fragile web of life and who can broaden their knowledge to include the nature of man and his relation to the biological and physical worlds . . . Ethical values cannot be separated from biological facts. We are in great need of a land ethic, a wildlife ethic, a population ethic, a consumption ethic, an international ethic, and so on . . ."

These ideas are providing one of the important foundations for continuing thought about the future of our College of Forest Resources, this fine University of ours, and our society in general.

"The extension of ethics to this third element in the human environment is [indeed] an evolutionary possibility and an ecological necessity!"







Building, building everywhere, but not a place to. park.



FACULTYE STAFF



Forestry Department Highlights

by A. W. Cooper, Head

This year has been one of continued change and accomplishment in the Department of Forestry. Our undergraduate program has continued to evolve, and our research efforts have expanded into new areas.

As a result of discussions with students, the faculty has initiated changes in the way computer usage will be taught to our majors. Greater emphasis will be put on learning to use software early in the student's career, and use of appropriate software will be included in virtually every required course in Forestry. Our concept is to develop computer use as a vertical, integrating theme in the same way writing and speaking are now taught.

At a recent Society of American Foresters meeting, representatives of each major group which hires young foresters stressed the need for new professionals to have greater "people-oriented," managerial, and computer skills than past graduates. Our curriculum has been restructured to provide just such skills, but not at the expense of the technical and professional skills that have been our strength in the past. About half of our present required hours are devoted to theory and the application of analytical skills, with the remainder devoted to practical skills.

We welcomed Dr. Leslie Tolley-Henry as a new colleague this year. Her expertise is in forest physiology and she will begin teaching Silvics in the fall of 1989.



The Department looks forward eagerly to occupying its assigned portion of the Natural Resources Research Center sometime this coming summer. With occupancy of this building and a move of international programs to a building close by, all of the units of the Department will be in close proximity for the first time in many years. Although the new building will provide little new teaching space, it will provide badly needed offices and labs.

During the past year or two, several major new research programs have been initiated. These include a program in the ecology and management of forested wetlands, designed to help foresters understand the management of wetlands better and to cope more effectively with regulations designed



Biotechnology--sitting: Anne Stomp, Hely Haggman; standing: Ben Bergman, Susan Kruse, John Parsons, Cherly Giles, and Heather Gladfalter.

to protect wetlands. Our program in biotechnology, although still developing the facilities it needs, is moving ahead with an emphasis on lignin chemistry of wood. International programs have expanded dramatically, and the number of international graduate students has grown. In March the department is scheduled for a major review of its research activities. We are taking this review as an opportunity to develop a plan for research growth and activity that will set our direction for the next five years.

The Hofmann Forest, although distant from Raleigh and not a major part of our academic programs, occupied much of our time during 1988-



Left to right: Larry Grand, Bill Smith, Steve McKeand, Russ Lea, Jan Laarman, Dennis Mengel, Art Cooper, Lesley Tolley-Henry, Jim Woodman, Lee Allen, Rich Braham, John

Brockhouse, Carlyle Franklin, Phil Doerr, Chuck Davey, Jerry Bettis, Bob Kellison, Joe Roise, Don Steenson, Ron Sederoff, Gary Blank, Doug Frederick, and Dick Lancia

1989. When the Hofmann Forest was turned over to the Forestry Foundation for management about three years ago, the department was asked to prepare a management plan for the area. This plan has been completed, and it indicated that the Hofmann Forest is, potentially, an enormously valuable resource for the college. Our goal is to help the Foundation in its efforts to make the Hofmann Forest realize its potential.

Loyal and capable students, an energetic faculty and staff, and new facilities—all point to a bright future for NCSU forestry.

Recreation Resources Administration Department Highlights

by Phillip S. Rea, Head

Since its inception in 1947 the recreation curriculum has experienced many changes. The program was originally developed in the School of Education as the Curriculum of Industrial and Rural Recreation. In the 1950's the recreation movement in North Carolina was evolving to the point where community recreation and park agencies were rapidly developing and the need for professionally educated graduates to manage those agencies grew as well. The focus of the curriculum changed to reflect the growth in public recreation programs and in 1959 the name of the curriculum was changed to the Department of Recreation and Park Administration.





Front: Phil Rea, Beth Wilson, Carol Love, Leigh Baggs, Tom Wells. Back: Robert Sternloff, Chrys Siderelis, Hugh Devine,

Roger Warren, Terry Patterson. Absent: Sondra Kirsch, Rick Perdue.

During the 1960's a public concern for the environment developed and federal agencies were in need of professionals to develop and manage land and water resources for recreation.

In 1967 the program responded to the growing need for natural resources recreation professionals by moving to the School of Forestry and changing the department's name to Recreation Resources Administration. As we appoach the end of another decade the emphasis of the curriculum remains basically the same but another professional direction is emerging in the form of tourism management. Tourism is the second largest employer in North Carolina and is third in total expenditures. In the years to come there is a distinct possibility that tourism planning and management may emerge as major areas of employment for the leisure service professional. As this article was being written the Department of Recreation Resources was in the process of selecting an additional faculty member to strengthen this emerging area of recreation and leisure services.

A number of activities occured during the 1988-89 academic year that deserve mentioning.

The Department reviewed nearly all of its undergraduate courses in an attempt to assure relevance and to reflect current knowledge. It is anticipated that some courses will change in content, others in name, as a result of the review. During the fall semester many of our students attended the North Carolina Recreation and Park Society Conference, and the annual congress of the National Recreation and Park Association in Indianapolis, where alumni receptions attracted numerous NCSU graduates.

Cindy Lee and Charlynne Todd were selected as co-recipients of the 1988 Outstanding Senior Award, and Dorothy Cook received a scholarship from the North Carolina Recreators' Foundation. Dorothy served as President of Rho Phi Lambda while Ward Swann was president of the Recreation Majors Club. Undergraduate enrollment remained steady at just under 130 students while the graduate program maintained at a nearcapacity level of 44. Exploring Leisure Alternatives, a course developed for nonmajors, has gained university-wide recognition under Dr. Carol Love's leadership resulting in a full class of 100 during the current semester. The department continued its rich tradition as a national leader in professional development as the Revenue Sources Management School celebrated its 25th year, the Maintenance Management School its 17th year, and the Sports Management School is 10th year. In addition, three new programs were developed by the department's Recreation Resources Service in the areas of computer applications, outdoor adventure programming and swimming pool management.

Tom Wells, Director of the Recreation Resources Service, received the Distinguished Fellow Award at the annual conference of the North Carolina Recreation and Park Society. This is the highest award presented by that organization and is particularly significant when considering that the program has been in existence less than two years.

Several former students were called upon during the past year as programs were developed or expanded: Terry Patterson, a graduate student in the recreation resources curriculum, was hired as a consultant with the Recreation Resources Service; Mark Wagstaff (BS '81, MS '87) returned on a temporary basis as a part time instructor; and Carter Betz (MS, '87) accepted a position with the department as a research technician. Harold Moses, who has served as an instructor since his retirement from the Division of Parks and Recreation, North Carolina Department of Natural Resources and Communications.

nity Development, has announced that he will be permanently retiring after the 88-89 academic year. Our students have been fortunate to benefit from Mr. Moses' many years of experience as a leader and practitioner.

Professor Sondra Kirsch served as a special assistant to the Chancellor during the spring semester and will continue in that capacity next year. Ms. Shirley Harper will join the RRA faculty in the fall as an instructor. She has 17 years professional experience in recreation programming and administration and is completing her doctorate at the University of Maryland. The addition of Ms. Harper, and another faculty member in the area of commercial recreation and tourism, will bring the total number of faculty in the department to 11.

Before the start of classes for the 1989 fall semester the new Natural Resources Research Center will be opening. While the Department of Recreation Resources will remain in Biltmore Hall, a new computer mapping laboratory under Dr. Hugh Devine's direction will be included in the new research center. As the Biltmore library moves into the new center, the Recreation Resources Service will move its offices into the existing library. Space will also be provided for the Office of Park and Tourism headed by Dr. Rick Perdue. It is also hoped that space can be found for student and faculty meetings.

Department of Wood and Paper Science Highlights

by Richard J. Thomas

At last, activity on the construction site for the 34,000 square feet addition to the Robertson Wing of Biltmore Hall! This new facility will provide a classroom, chemistry laboratory, paper testing laboratory and pilot plant for the undergraduate teaching program. Also included in the building are a number of chemistry research laboratories for use by graduates students, faculty offices, an interview room and a conference room. Total cost of the addition will be \$5.7 million, 80% to be provided by the State of North Carolina and the remaining 20% by the pulp and paper industry. Upon project completion in September 1990, the





L to R: Willard Dudley, Linda McMurray, Kevin Love, Technicians, Hodges Wood Products Laboratory.

department will have the finest pulp and paper teaching and research facilities in the country. Obviously, we look forward to "moving in day."

Employment opportunities for graduates of both curricula remain excellent. Starting salaries continue to escalate, with an average of \$33,500 for PPT graduates and \$23,000 for WST graduates.

Undergraduate enrollment continues to

decline. However, current applications have doubled over last year for the PPT program. An active recruiting program involving faculty, students, and alumni will be initiated for the WST program beginning in fall 1989.

The faculty continues to earn honors for teaching excellence. Joining Dr. Myron Kelly, who is currently an Alumni Distinguished Professor, is Dr. Josef Gratzl, who was named as an Alumni Distinguished Graduate Professor. Both awards carry a salary supplement of \$2,000 per year for a period of three years to reward the excellence in teaching each has demonstrated at both the graduate and undergraduate levels. The department is proud of their accomplishments.

The Wood Products Laboratory received a contribution of panel processing equipment worth \$55,000 from Holz-Her U.S., Inc. The equipment included a panel saw, edgebander, and drilling machine. Also, equipment complementing Holz-Her's gift was received from Mr. Gero Sassenburg, a consultant based in North Carolina. Contributions such as these are essential to the department's goal. of replacing out-dated equipment.



Front: Irving Goldstein, Hou-min Chang, Richard Thomas, Second: Robert Gilmore, Elisabeth Wheeler, John Heitmann Jr. Hasan Jameel, Third: C. A. Hart, William Bryan, Adrianna

Kirman, Back: Nicholas Weidhaas, Myron Kelly, Thomas Joyce, Abesnt: Heinz Olf, Josef Gratzl, Chen-Loung Chen.

A Year in the Life of Extension Forest Resources

by Mike Levi

1988 was a successful year for the Extension Forest Resources Program. Personnel were strengthened through the addition of Ed Jones as Extension Forest Resources Specialist (Wildlife and Youth): Ron Phillips, Forest Management Technician; and Jill Sidebottom, Research Technician (Fraser Fir IPM). Earl Deal received the NCSU Alumni Association Outstanding Extension Award, and Mike Levi the NCAES Award for Superior Leadership. The Department received almost \$100,000 from non-Extension sources for several projects ranging from developing a videotape on forest products exports to hosting the 1989 National Invitational 4-H Wildlife Judging contest. The USDA CSRS review of the Extension Wood Products program concluded that "it continues to be a (national) leader based on both the quality and the breadth of the program delivered." Information provided by the Department's specialists increased income for thousands of the state's landowners and forest products companies. It also helped improve the quality of the environment. The following are some highlights of the year's accomplishments.

A primary objective of Extension is to increase wealth for program participants. Preliminary estimates by Frank Hahn showed that a new microcomputer plywood and veneer quality control package resulted in first year savings of \$500,000 at 3 of the mills using the package. Information obtained at an Extension Wood Energy Workshop organized by Larry Jahn resulted in savings of \$72,000 a year for a pallet company. Steve Hanover's studies with a N.C. hardwood lumber processor and exporter on kiln scheduling resulted in a \$100,000 reduction in drying costs annually. Approximately 1300 forest owners increased their financial management and marketing skills after programs by Rick Hamilton, Bill Gardner and Leon Harkins. Continued emphasis by Bill Huxster and Jim McGraw on growing and marketing high quality trees through optimum shaping, nutrition, and pest control enabled Christmas tree growers in North Carolina to continue to expand their share of the national market.

Videotape is being recognized widely as a



valuable teaching tool, and its use continues to expand in the Department. Over 200 copies of the tape "Tree Felling Techniques for Professional Loggers" produced by Earl Deal and Clemson University were sold. The quarterly videotape newsletter "Technology update for Lumber Manufacturers" now has over 150 subscribers across the county. This is prepared by Joe Denig and Nick Weidhaas in the Department of Wood and Paper Science. Over 600 people have viewed a wood industry video correspondence course, Efficiency in Woodworking, consisting of 18 lessons each lasting 1 to 2 hours. This effort was coordinated by Nick Weidhaas. Steve Havover presented several of the lectures.

One of the greatest challenges facing Extension is anticipating needs and opportunities and developing programs to address them. Recent examples in the forest resources area include programs on management of forests for wildlife, low cost reforestation, sediment control during timber harvesting, pine straw production, quality control in lumber production, and wood products exporting. This year programs were initiated to address concerns about sawmill chip markets and Atlantic white cedar. A 1-day regional workshop on marketing sawmill chips attracted 94 attendees who learned about national and international market trends and



Front: Leon Harkins, Mike Levi, Larry Jahn, Back: Earl Deal, Joe Denics, Ed Jones, Bill Gardner, Dick Allison, Ron Phil-

lips, Bill Swint, Not Pictured: Bill Huxster, Jim McGraw, Rick Hamilton, Steve Hanover, Jill Sidebottom

alternate market possibilities. A joint industry, agency, and landowner group brought together by Bill Gardner developed a research/demonstration program designed to continue commercial production of Atlantic white cedar through plantations of rooted cuttings or seedlings and improved natural regeneration.

Project Learning Tree, a national environmetal education program for teachers and children
K-12 continues to grow in North Carolina. Started
in 1986 and sponsored by the Extension Service and
N.C. Forestry Association, PLT training has reached
a total of 2200 teachers who have attended one day
training sessions. Over 200 have attended 2-day
facilitator workshops including 80 forestry and
recreation seniors. It is estimated that approximately 60,000 children were involved in PLT last
vear. Leon Harkins is the State Coordinator.

Some of the other projects conducted during the year included a 5-day hardwood lumber grading

short course coordinated by Dick Allison, the release of a computer accounting package for loggers by Earl Deal, and pesticide certification programs for foresters by Jim McGraw. Specialists developed 16 publications, 8 articles, and 19 issues of 4 newsletters. They spoke at 130 meetings for 6,700 natural resource agency people, forest landowners, Christmas tree growers, and forest industry representatives. Finally, they responded to several thousand telephone calls and written inquiries.

If you are interested in learning more about any of these programs or about Extension in general, come see us on the 3rd Floor of Biltmore Hall.



Secretaries =



Front: Mary Walker, Jeanne Counihan, Penny Handlin, Jean Pittman, Second: Sue Rudy, Reggi Powell, Peggie Arnold, Millie Sullivan, Third: Lynn Peeden, Nancy Roberts, Debbie Cox, Forth: Ruth Allen, Jackie Evans, Vann Moore, Back: Virginia Woodruff, Charlotte Swart.



Below Left: Judy Rogers, Right: Laura Terry, Gail Fox, Elga Hahn.



Staff -

Liz House, Computer Coordinator.



Brian Wright, Duplicator Operator.





Phyllis Garris, Pam Rowland, John Abbott, Librarians.

Cooperatives.

Atmospheric Impacts Research



A.I.R.

Left to Right: Yemi Fulford, Harriet Stubbs, Ramma Logan, Cari Sasser, Tonia Evans, Mable Bullock, Thangam Arnemugham, Debby Cross, Janet McFayden, Walter Heck, Sirena Hardy, Jeanie Hartman, Kim Joyner, Clara Edwards, Ann M. Bartuska

Cooperatives ==



Hardwood



INFORDE



CAMCORE -

Left to Right: Joe Peters, Ralph Raymond, Jeff Donahue, Bob Kellison, Rita Barrera, Lilia Barrientos, Luis F. Osorio

Hardwood-

Left to Right: Tommy Tew, Dennis Mengel, Roman Chung, Robin Hughes, Tim White, Russ Lea

INFORDE ___

Left to Right: Doug MacKinnion, Lourdes Orejuela, Felipe Prado, Magdalena Cordova, Carlos Burbano, Elena Carrera, Fernando Guerron.

Cooperatives -



Small Woodlot



Tree Improvement



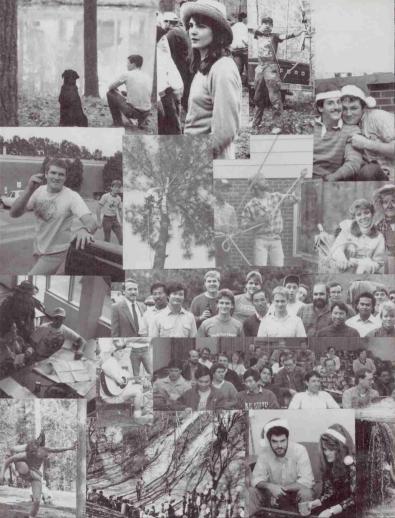
NCSFNC -

Left to Right: Beth Haines, Ed Lunk, Andy Gillespie, Joe Hockman, Travis Wilson, Lee Allen, Jane Mudano, Jon Anderson

Small Woodlot

Front: John Girgino, Martha Miller, Back: Carlyle Franklin, Gene Nocerino, Robert Wilson, Ian Munn, Dennis Hazel.

Tree Improvement Left to Right: J. B. Jett, Bob Weir, Steve McKeand, Floyd Bridgwater, Jackie Evans, Jerry Sprague, Jean Pittman, Addie Clark



CLUBS & OBGANIZATIONS



College of Forest Resources Student Council -

by C. Scott Mabry, President, 1988-89 CFR Student Council

During the past year the student council has been quite productive. We funded a <u>PINETUM</u> edition, began a peer-advising program, got the machinery rolling on revision of the teacher evaluation form and spent all of our money. If productivity were measured by money spent, we have been one of the most productive councils ever! Over the course of this past year, we have seen the retirement of Dean Ellwood and the beginning of Dean Tombaugh's term here in the college.

Those of us who have been here awhile have witnessed the grassy field next to Biltmore turn into the tall, glassy Natural Resources Research Center building. By summer's end this building will be occupied, and when the fall semester starts we will see more students on this side of campus than ever before. Things are going to be a little different come the first day of class this fall. We have also seen the beautiful oak tree on the comer felled to make way for the new pulp and paper labs.



This side of campus will never be the same. We hope the change will do us some good and allow the rest of the campus to realize what we do and who we are. Our student councils of the future can help this transformation take place. Change is upon us. Let us see if we can make it great.



Front: Kevin Gramelspacher, Scott Mabry, Anna Beam, Second: Jay Borrell, Laura Hause, Phil Campbell, Matt Vincett,

Dale Thrash, Back: Wyatt Latimer, Paul Eriksson

Xi Sigma Pi







Forestry/SAF Club

by Phillip Whitlow

For the Forestry/SAF Club, the last twelve months have been a time of excitement and surprises. The busy calendar of social events, competitions, and community service work provided the members with quite a challenge in time management. The club started 1988 with meetings every 1st and 3rd Tuesday each month. Meetings generally involved a business session and a guest speaker. The business session included a summary of club activities during the previous two weeks and planning for future events. The guest speakers provided knowledge and insight into the many opportunities and developments in the field of forestry.

Friday afternoons and Saturday mornings were spent doing tree jobs to raise money for the club. For the people on the tree jobs, lunch at Village Inn Pizza was a normal part of Saturday afternoons. During spring break, a few club members were fortunate enough to travel to Washington, D.C. to study forest policy. Ed Sontag's mother provided the group with housing and several meals while in D.C. Thanks, Mrs. Sontag.

Late March brought the challenges of

Conclave. The biggest challenge was traveling 16 plus hours on the bus. It was a true test in patience and endurance. We all enjoyed talking to old friends from across the South and meeting new people. April was another full month with Loggers Brawl and the Prince George Competition. A live band and large group of seniors helped to make Loggers Brawl a major success. An energetic group of friends from VPI resulted in a bash of a party at Prince George. Both events proved to be quite a throw down. With May came the end of school and the beginning of summer. For many it was that final period of co-op or that job experience so desperately needed. But for 24 fortunate people, it was the beginning of summer camp—an unforgettable experience, to say the least.

Crabfest, State Fair, Rolleo, and Wood for Warmth filled the fall semester. In October, a large group traveled to West Point, Virginia, to compete in the Crabfest Logging Competition. The day of festivities included a parade, the competition, and a large party for the competitors, during which we consumed three bushels of crabs. Rolleo provided another fierce intra-school competition. The jun-



Front: Steve Hyde, David Powell, Phillip Whitlow, Jeff Beutel, Second: Alex Smith, Patty Luhmann, Shelley Peterson, Thomas Hoffler, Yoni Johnson, Jim Shepherd, Brent Reed, Up Steps: Rodney Buchanan, Missy Crouch, Jamie Shern, Dr. Farrier, Bryan Smith, Brooks Rudd, Anonymous, Paul Eriksson, Anna Beam, David Lane, Marshall Thompson, Dale Thrash, Ed Sontag





iors never really challenged the seniors but spent most of their time fighting off the sophomores. Embarassing to say, the sophomores' team was composed of one guy and four girls.

In November, the club participated in the Wood for Warmth Project, which each year provides fuelwood for the needy of Wake County. The project went well and supplied an ample amount of firewood. Also in November, four club members traveled to Rochester, New York, to the Society of American Foresters National Convention. At the convention, members had the opportunity to meet SAF members from across the nation and attend meetings about environmental problems and professional ethics.

In conclusion, the Forestry/SAF Club has had an eventful year. The club traveled throughout the South to logging competitions and to Rochester



and Washington, D.C., for SAF events. The support and dedication of the members and advisors has been the key to the club's success in the past year. We hope this support, dedication, and success will continue into 1989.

Roanoke Rapids

by Paul T. Eriksson

What a weekend in Roanoke Rapids! You mean you missed it? The logging competition sponsored by Champion International at the Festival in the Park was just a part of the fun that the Woodsmen's team had September 16-17.

What did we do? Well, we took part in the usual pre-competition festivities. Did VPI ever come through with supplying the refreshments. Yoni sure came through with the watermelon (make sure you get a chunk with the hole in the rind next time).

The decorations, especially on the deer head, Brian, were nice, but what really caught my eye were all those rules and regulations. Amy, what was Rule 24? or was that 26? Anyway, the house was nicer than the rustic camping we had at Prince George last year. Brad's midnight swim had to be the high-point of the evening. He just seemed to get carried away in celebrating his 21st birthday. Of course, Ed, Frank, and Steve gave him a hand (or was that a toss?).

The competition on Saturday was fun. Patty and Tom could be a challenge to Alex and Shelley in the Jack-n-Jill. Melanie had a good cut in the bowsaw—better watch out Ed! Brent gave Jeff Beutel a scare in the pole-felling—he almost got a direct hit!

So how did the competition end-up? We won - BIGTIME!





Forestry Career Forum

by Paul T. Eriksson



The third annual Forestry Career Forum was held at the North Carolina State University Faculty Club on November 4, 1988. Faculty, students, alumni, and friends of the College of Forest Resources listened to the invited speakers' views on the importance of two elements for career success: setting career goals and refining communication skills.

The evening started off with a panel discussion moderated by Dr. Art Cooper, head of the forestry department. The panel of alumni (Sam Cook '85, Tom White '86, Martha Doss '84, Lynn Pownall '80, and Clark Beavans, Jr. '87) noted how they used the skills they had learned at NCSU and how they adapted to situations confronted on the

job. They also stressed the importance of refining communication skills and how those skills can affect career opportunities.

Following a buffet dinner, Dr. Charles Webb (class of '57) challenged present students to set career goals and to look for ways to advance themselves in the chosen career. Dr. Webb used examples from his own life experiences to illustrate his points.

The final speaker for the evening program, Mr. Robert Slocum, made the point that as foresters we must not alienate others with our ideas but instead communicate our ideas to others so that they see them through our eyes but in their terms. Using the alumni and faculty, Mr. Slocum illustrated this point.

The evening concluded on an upbeat note, as those present gained new insight into the "real" world of forestry.





Rolleon

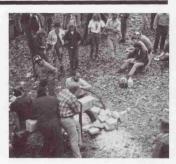
by David Powell

Dawn broke with rain filled skies and the promise of a wet day; however, this was not to be. It was the annual forestry skills competition of the N. C. State Forestry Club. The Rolleo pits teams from each class in friendly competition with one another. The day begins early at 9:30 when the contestants line up early for the knife-throwing competition. As the day progresses, the contestants slip and slide their way through many other traditional skills, like axe-throwing, two-man crosscutting, and chain throw (unwinding a 150-feet long steel tape and re-rolling it in the fastest time possible). The hungry loggers and loggerettes--who incidently competed in all the above events--break and enjoy a hearty lunch and each other's company.

After lunch came the audience's favorite event, log burling. The contestants slowly take off their valuables and change into old clothes, and stand nervously on the bank of Slocum pond. As the announcer calls the first contestants, he receives baleful looks as they begin to gingerly tread into the dark, cold water. As they progress deeper, the looks are replaced by high pitched howls. Once on the log. they became serious and only interested in winning. As this event finished, the loggers turned their attention to pole climbing and pole felling for accuracv. After these two events, the "big dawgs" grabbed their peavies and commenced to attack a log and roll it down a closed course and back as fast as possible.

Fortunately, as the day progressed, the weather cleared and everyone's mood lightened. The audience, now consisting of mostly faculty and new alumni, were smiling and chatting with one another. The Rolleo's general furvor and pace continued to increase as contestants grabbed their super-sharp bow saws to compete in men's and women's bow sawing. After these events, other mildly manical loggers grabbed their axes and toeguards and climbed upon a 10" by 10" yellow poplar and proceeded to chop it in half in the fastest time possible.

The day concluded with the pulpwood toss, an event composed of six man teams who tossed



five-foot long logs across a line fifteen feet away. While not always successful, the typical lumberiack enjoys getting dirty and wrestling with Mother Nature's finest. The day was concluded with a pig pickin' and an awards ceremony. Winners included:

> Knife Throw -- Frank West Chain Throw -- Dale Thrash & Ed Sontag Women's Ax Throw -- Patty Luhmann Men's Ax Throw -- Brad McGuire Women's Cross-Cut -- Shelley Peterson &

Anna Beam Men's Cross-Cut -- Dale Thrash & Ed Sontag

Jack-n-Jill Cross-Cut -- Shellev Peterson & Alex Smith

Log Birling -- Fred Schatzki Archery -- Keith Finch Pole Climbing -- JamieShern Pole Felling -- David Powell

Log Rolling -- Frank West & Steve Hyde Women's Bow Saw -- Melanie Burke

Men's Bow Saw -- Ed Sontag Speed Chop -- Tom Margo

Pulpwood Toss -- Dale Thrash, Frank West,

Steve Hyde, Brent Reed, & Rob Kidd

DBH Estimation -- Jeff Rentel Dendrology -- Jon Bogard Compass and Pacing -- David Powell

Chainsaw Demon

by Thomas Margo

The sound of chainsaws and falling trees echoed through the Schenck Forest on a Saturday morning as several students and teachers took a technical approach to felling trees.

Joey Wright, technical service representative at Mid-Atlantic Stihl, came to Raleigh on October 19 to instruct several interested people on chainsaw safety. Areas covered included chainsaw maintenance, safety precautions, tune-up tips, chain sharpening, dangerous situations, and felling, delimbing, and bucking techniques.

Joey, in safety clothes that would stop a high-speed chain upon contact, started by lecturing on the parts, maintenance, and accessories of the chainsaw. He salted his presentation with a few gory stories about how a chain, turning at 10,000 RPMs. treats human flesh.

After a two hour presentation and with the permission of Larry Jervis, we took all of our newly gained knowledge to the field to test on a few pines. As we approached our first victim, Joey walked around the tree, pointing out features to be aware of before beginning to cut. After the tree was studied, he continued by showing how "sights" and proper cutting positions of the saw aid in directing the fall of the tree. Three cuts later, the tree fell as predicted.

With the tree on the ground, a six-point delimbing process was demonstrated. This technique involves resting the saw's body on the base of the stems, which reduces the sawyer's bodily strain, and then rolling the saw. In this method both the top and the bottom of the chain are used.

Once the tree was delimbed, bucking techniques were demonstrated. Perhaps one of the most annoying instances of bucking is when the tree settles and pinches the bar. This was no problem for Joey. He simply inserted a plastic wedge by pounding it into the cut, lifting the tree and freein the bar.

Through the demonstration, all who participated gained a greater respect for the chainsaw and for the tree that was to be felled. January 8th's Parade magazine listed logging and chainsaw operations as the most dangerous blue collar job in North America. With this in mind, one can see the need for knowledge of and respect for the chainsaw and the forces generated by a falling tree.



Alahama Conclave

by Thomas Margo

The carry-all and the big green bus, loaded down with saws, axes, peavies, and 27 Woodsmen Team members rolled out of Raleigh late Thursday night with high hopes of returning as winners of the 31st Annual Conclave. With the last six rows of seats in the bus removed to act as sleeping quarters, the team headed south for the long trip.

Arriving at dawn in Atlanta, we stopped

for breakfast and then headed toward Montgomery, Alabama. Crossing the Alabama state line, we lost an hour and got on Highway 50 West. After a few back roads, a couple of U-turns, and 12 sleepless hours, we passed through the gates of the ASCCA camp in Jackson Gap, Alabama. Fourteen Southeastern forestry schools would pass through this same gate, just as predecessors had done for the past 30 years. Although it may have been a different gate and another time, each school still had the same

dream: to become the prestigious first place winner of that year's annual Conclave.

It was about one o'clock Friday morning by the time the bus was unloaded and we settled in our cabins. Outside it was cloudy with a slight mist, which later turned into a thunderstorm dumping about an inch of rain. What a welcome!

The competition started at seven with the sawing events. We competed under lights and up to our ankles in mud. Shelley Peterson and Marietta Singleton took 2nd place in Women's Crosscut, while Alex Smith and Shelley took 3rd in Jack-n-Jill.

Saturday morning brought more cloudy weather, the continuation of the physical events, and the technical events. John Howard placed 2nd in pole classification and Jamie Shern 2nd in dendrology. After lunch, the sun came out, the mercury rose, and shirts came off. Wyatt Latimer placed first in pole climbing, Jeff Beutel 3rd in Pole Felling, and Tom Margo finished the day with a 2nd place in Speed Chopping.

We placed 4th in the 31st annual Conclave. Did we have a good time? Well, the weekend was short, the trip was long, and the ride was rough. Rob and Alex entertained us while the band was playing. Marietta went swimming with Ed's help. A coffin inexplicably appeared at our doorstep. Quimby drove the competition axe into the dirt just an hour before competition. And we wasted away again in

Margaritaville. Yeah, we had a good time!!

Thanks to Larry Jervis and Heather Cheshire for putting up with the long days and short nights. Also many thanks go to the faculty and staff who assisted the Woodsmen Team in keeping Conclave a winning tradition. See you in Clemson!









by Amy Reese



On Saturday, October 1, 1988 the NCSU Foresty Club was invited to the annual Crabfest by Chesapeake Corporation. Woodsmens team members met at Hodges on Friday to leave for West Point, Virginia, where, along with our competitors from West Virginia and Virginia Polytechnical Institute (VPI), we spent the night in a local private kindergarten.

After some warm-up, the teams participated in a parade. The NCSU team was lucky enough to have a group of high school cheerleaders behind us. One of the elite members of our team, Marshall T., befriended these young ladies by teaching them some dance moves and forestry cheers.

When the parade ended, it was back to the competition site. We began our activities at 12:30 p.m. and dominated in almost every event. The women won the axe-throw (Patty Luhmann), women's cross-cut (Shelley Peterson/Anna Beam), women's log roll (Patty Luhmann/ Amy Reese), and women's bow saw (Shelley Peterson). The men did just as well: men's cross-cut (Ed Sontag/Dale Thrash), pole climbing (Jamie Shern), men's low saw (Ed Sontag). But the men and women together also won the Jack-n-Jill cross-cut (Alex Smith/ Shelley Peterson)

After a long day of intense competition and fun, we first wished Amy Reese a Happy Birthday by Saran-Wrapping her to a pole and leaving her, and then we went to a Chesapeake employee's house to eat some wonderful but messy crabs. Some of us wanted to remain in West Point for a continuation of the night of food, singing, and raising cain, but we decided to pack up and head home. But we had a GREAT time, didn't we!!







Students Go to SAF National Convention

by Paul T. Eriksson

The N.C. State and Duke Student Chapters of the Society of American Foresters got together for a joint trip to the SAF National Convention on October 16-19, 1988 in Rochester, New York. Six students, four from N.C. State and two from Duke, took the 12 hour van ride from Raleigh, North Carolina. The ride up to Rochester was a pleasant tour through central Pennsylvania and upstate New York. While riding along, N.C. State's student advisor Bill Smith gave us students some insight into forestry as it is practiced in that geographical region.

The convention at Rochester proved to be a valuable experience. We met not only SAF members from the Appalachian Society and alumni from the two schools, but also SAF members and students from across the country and around the world. We had a chance to tell how, as students, we see forestry (at the student speak-out and at the working group sessions). Information about the opportunities in the field was offered at another session for students—a career opportunities forum.



Left to Right: Gary Blank, Diana Broome, Paul Eriksson, Shelley Peterson, Jeff Beutel, Bill Smith.

The career opportunities forum also presented insight into what the various organizations are looking for in individuals seeking jobs in the profession.

Finally, the students had several opportunities to talk with Carl Stoltenburg, President of SAF, and get insight into the profession of forestry and the future of forestry in the U. S. and around the world. He also encouraged us to urge fellow students to ioin SAF.

Regional SAF Meeting

by Melanie Burke

The Appalachian Society of American Foresters held its 68th annual meeting this year in Richmond, Virginia. Six forestry students opted to sacrifice two days of classes for two days of meetings, beginning the morning of January 26th and ending the following day at noon. We were lucky enough to have Fred Schatzki (a forestry co-op student) put us up for the two nights. The meetings were held at the Hyatt Regency Hotel near downtown Richmond

The main topics of discussion over the two-day period included education, employment, policy influences, and forest taxation. During Thursday's luncheon we heard from SAF Executive Vice President, William Banzhaf. A student forum was also held Thursday afternoon. Representatives from Clemson, VPI, and NCSU talked about the use of computers in forestry. Dr. Art Cooper spoke on our behalf. Afterwards, everyone enjoyed the social

and free refreshments. We were all grateful to have this opportunity to meet and talk with prospective employers. Ed even got a job! We look forward to next year's regional and national meetings, as SAF is an excellent means of understanding forestry conflicts, issues, and developments.



Left to Right: Jeff Beutel, Paula Gray, Kiersten List, Ed Sontag, Melanie Burke.

Mississippi Research Trip

by Melanie Burke

Rubus briars, vicious jackalopes, mill-acre plots, overcup oak, the Dorsett, Evelyn's sandwiches. Fond memories of Lucedale, Mississippi, come pouring over as if it were yesterday. Fourteen forestry students, undergraduate and graduate, headed down south a week before Christmas to earn some extra money doing research work for Scott Paper Company. The project is the second phase of an ongoing study on bottomland hardwood management. Awatif Hassan, Bill Smith, and Joe Roise organized and headed the project.

Our journey began early Friday morning, the 16th of December—a time when most students were still agonizing over finals. After a 13-hour non-stop roadrace, we arrived in the thriving metropolis of Lucedale. The Dorsett Motel and the Coffeepot Restaurant were to be our accomodations for the week to come.

Rise and shine! We're up at the crack of dawn. A variety of culinary delights from the Coffeepot would provide us the energy for a hard day's work. On to the regeneration plots (# and species of seedling regrowth/mill-acre plot) and soil samples on a 53-acre clearcut. The data we col-



lected would be used to compare natural regeneration after different types of harvests. We fought the briars and cleared lines with PVC pipe that we would use to mark the plots. We worked hard in the cold chill of the morning and through the thrashing of briars, trying desparately to ignore the fierce cry of the jackalope.

When all was finally said and done, we almost hated to see it end. New strengths were realized (beer power!), new friendships were made, and a new line of designer jeans was produced. Damn those briars! Thanks for the memories!

1988 Summer Camp =

by David Lane, Phillip Whitlow, David Powell, Paula Gray, Melanie Burke

Memorable quotes:

"We're only going to drink two beers tonight."

"It takes a common S.O.B. . . . "

"Raynor's crew did it."

"There's a lot of bok on these trees."

"Quit it, Vann!"



Do you want adventure, excitement, and more? Well, then, we have the place for you—thirteen luxurious, well-ventilated cabins on water-front property, complete with the best of athletic facilities and gourmet cooking to help that slim, trim figure—"moooo." This rustic resort is situated 14 miles north of Durham, near the thriving metropolis of Rougemont. Fortunately, for those who wish to raise their spirits, the local grocery always has the \$2.65 special.

The nine week tour of North Carolina included trips to the mountains, Piedmont, and Coastal Plains—"Did you see that Blonde?" Pine and hardwood forests, black and red river bottoms, pocosins, and the Appalachian Mountains were main points of interest. Needless to say, there was little time for sleep. To help future vacationers, we have included our entire agenda:

Week 1: Surveying

Trying to find lost chains—while working on lats and deps . . "Geesh, he put the money in the wrong #*!*ing bank!" "We're only going to have two beers tonight."

Week 2: Cruising

"But, Doc, do we have to use whole tree heights? and do you really want us to D-tape every tree? We experienced advanced fire-fighting in the clear-cut... Raynor's crew did it!... I'm only going to have two beers tonight."

Week 3

Finished cruising and final map due . . . "We're only going to have two beers tonight . . . I feel BAAAD! Quit it, Vann!"

Week 4

Road trip to the beach . . . "Is there trouble officer? We're only going to have two beers to-night."

Week 5

"That's a sassafras?! We're only going to have two beers tonight."

Week 6

"Karen gets married!!! Have a happy future! In Kinston we were entertained by Barb and Eugene in the bare essentials. We'll only have two beers tonight."

Week 7

David Lane stabbed in back by Phillip. "Golly geeze-the damn bugs are still alive!! We're only going to have two beers tonight."

Week 8

Week 9

"Head for the mountains!!!"

"24 N.C. State forestry students found floating down Harper's Creek."

"THANK GOD IT'S OVER!"





The Porch Wasn't Big Enough: The Big Dawgs 1988

by Thomas Margo

I was sitting at the B.S. tables in Biltmore early on a Tuesday afternoon, trying to fill out a roster for an intermural softball team. The roster was due on Thursday. I was thinking how, during my three years of college, teachers always told students not to wait until the last minute to do homework, or in this case, fill out a softball roster I had five players signed up: Will and Brian from last year's team, Rob, Steve, and myself. I needed five more players to complete the team. Well, I was sitting at the tables drawing a blank, hoping a Babe Ruth or Micky Mantle would walk by. Surely someone in Biltmore could swing a bat and field a ball in such a way that I would not lose my composure on the field and respect for the game. That's when Frank walked by. Frank said he wasn't afraid of the ball, so I signed him up. Then came Dale and Chip. Both were eager to play, so their names filled the eighth and ninth spots on the roster. After a phone call, the tenth slot was filled by J.B.. I had a team!

As I walked to the intermural office to register the team, I realized I had a team with no name. I walked into the office and found the sign-up sheets. As I flipped through the sheets, searching for the B league teams, a name for the team still had not come to mind. When I found the sheet for the teams scheduled to play on Tuesdays at 5:30 p.m., I dropped my pencil to the paper and out came "The Dawgs". I thought for a minute. The Dawgs didn't sound intimidating or mean enough. The name didn't signify that we meant business; that we were out on the field to play ball. Then it came to me. I erased Dawgs and in big block letters wrote "THE BIG DAWGS"!

The Big Dawgs had two weeks to practice before the first game. We took full advantage of the time, practicing every chance we had. Chip Gray took the stern behind the plate. Brian "Catfish" Hooker was on the mound. Frank West took control of the infield at first base; while Will Haas and Rob Kidd controlled the double play arena at second base and shortstop. Tom Margo took the hot spot position at third base and occasionally coached

when he felt the need. Alex Smith outsmarted, pulled hitters in leftfield. Steve Hyde covered the holes in short field, that is, when his body could keep up with his legs. J.B. Runyan took centerfield, and Dale Thrash played the underrated position of rightfield

Practice went well. I was excited. Ifelt we might have a promising season. In the midst of a practice David Spence's team, "The Big Humpin' D", challenged us. We accepted. After seven innings of play, we lost. Another game was played and yet another. The Big Dawgs lost all three. Were we as good as anticipated? Only time would tell. Besides, these were only practice games. The games that counted started the following Tuesday.

Tuesday came quick, but the Big Dawgs were ready. The opposing team knew we meant business. Alex's sweatpants, taylored at a big and tall shop, kept the spectators amused. The sun blinded the batters, as the rays glared off of Will's Ray Bans. A smoke cloud formed on the mound as Brian puffed on his Marlboro Lights. The batter



didn't know what kind of pitch to expect. Should he time his swing for the high arching fast ball or the ever-so-deadly hooker sucker pitch.

The odds seemed to be in our favor. The game was tough, as first games usually are, and we fell behind early in the game, but we did not let up. The hair rose on our backs as we lunged forward with a rapid pack attack. "Grabit and growl" echoed across the field as we took the lead and the path to victory.

The second and third games were won in five innings. The Big Dawgs were running wild; a pack; a team. Nothing could stop us. Will and Rob were turning double plays as if they were routine. Steve insisted and proved that if J.B. didn't get in the way, he could run faster than a screaming shot hit to left center. "If you can't run with the Big Dawgs, just stay on the porch with the puppies" became our motto. The porch was getting full, but there was always room for another litter of pups. The fourth game was won as well as the fifth and sixth. The Big Dawgs finished the regular season at 6 wins and 0



losses, with a sure slot in the playoffs.

There were 64 teams in the playoffs. The Big Dawgs had the first week off and would start play in the final 32. We used that first week to prepare for a game against the only team who had beaten us in pre-season play: The Big Humpin' D.

This team was sure they were going to win. However, they were playing a different team; a team with a new bite, a bite to win. The Big Dawgs played flawlessly. Will and Rob turned four doubles. There were no errors on our side and plenty of fielding practice on theirs. After five innings of play, the Big Dawgs threw yet another team on the porch.

The following game was won in five innings also. In the final 8 against Delta Sig, the Big
Dawgs fell behind. It was a tough game, but we
pulled together and won. Delta Sig said they couldn't
believe they got beaten by a bunch of rednecks.
They didn't lose to a bunch of rednecks. They got
beaten by a bunch of Big Dawgs, who were a better
softball team.

Who would have thought we would be in the final four? But here we were. Tension was high on both sides. A standing room only, sellout crowd came to see the outcome of the game between the Big Dawgs and the Over-the-Hill Gang. The Over-the-Hill Gang laid on a massive attack. The Big Dawgs fell behind. Rob seriously sprained his ankle, reducing his mobility, so Rob and Tom switched positions which changed our strategy. The Big Dawgs' counterattacked with a massive furry of hits and runs, but the attack was too late. The Big Dawgs lost their first game.

The Big Dawgs finished the season at 10 wins and 1 loss. Although it took 11 games for Frank to finally realize that "a left handed batter was going to hit the ball down the first base line, and with Steve and J.B.'s "I gotit... no I gotit... WAAM!" approach to catching high flies, we had a great season. So if you ever hear a Big Dawg say "Grab it and grow!", get out of the way; he means business. Thank you Kathy and Melody for a great score-keeping job, and thanks guys for a great season. "I see a Dawg over there....!!!"

The Rec Club

by Ward Swann

This year's Rec club officers have tried to work under the philosophy of a recreation department not only for Rec students, but for everyone, programming weekend adventures to bowling alleys, skating rinks, football games, and anything else that happened to strike interest among the students. Our intramural teams established that it's not whether you win or lose. it's why you play the

game, . . . most of the time. I personally would like to thank Jonelle Nuckolls for her guidance. She made the Rec Club a real learning experience. Next year's officers will not let you down, as long as you support your local Rec Club.

Left to Right: Greg Toggle, Aubry Clayton, Paulette Barrett, Ward Swan, David Fix, Anna Beam, Shelley Peterson, Gina Fuller, Paul Eriksson, Dorothy Cook



Senior Games

by Anna Beam

Four hot, sweltering days of intense competition and three nights of good 'ole kick-up-yourheels fun were two of the goals of the North Carolina Senior Games held this fall at the Athens Drive High School. But there was also a more serious side of the games: the promotion of health and fitness for older adults.

This event was made possible with the efforts by recreation students of Dr. Wilson's Recreation Programming class and by volunteers. The students were sent on a mission to obtain volunteers to help work the games. This was a major task which included lassoing people from all walks of life but especially former recreation programming students and close acquaintances.

The day before the games started, the students filled holes, spread sand, set-up fences, and painted poles, but their job was not yet finished. They were given the job of managing the different sporting events: badminton, track and field, swimming, tennis, shuffleboard, etc. The students also



gained experience in dealing with the public, like handling scoring disputes, and giving directions to the North Raleigh Hilton and the NCSU tennis courts!

The Senior Games is a rewarding experience. The top three athletes in every event receive medals of gold, silver, and bronze. Seeing the participants win an event and receive a medal in front of a cheering crowd is very moving. Their faces break into glowing smiles and grins of knowing they are winners! They also qualify for the U. S. Senior Olympics held in St. Louis, Missouri.



Halloween Trail

by Ward Swann

As dusk set on peaceful Durant Nature Park, nervous knees shook, sane people muttered to themselves, and kids prepared for an adventure through time, space, and reality. Once again the RRA 442 (Interpretation) class taught Raleigh youth about actual and natural history by dressing up in relevant costumes. Not only students of RRA 442 but also some Rec Club members helped. The success of this program has brought interest from other parks around the state for similar programs.





Rho Phi Lambda

by Dorothy Cook

Rho Phi Lambda started the 1988-89 year with the Department of Transportation's Adopt-A-Highway program. Rho adopted a section of Western Boulevard to pick up litter four times a year. The Fall Banquet welcomed Mark Woodrow and Cindy Stevens into the fraternity. Our Christmas project

this year was the Toys for Tots program sponsored by the Salvation Army.

Spring semester was busy designing a brochure for the Rho Phi Lambda National office. The Spring Banquet was held on April 15, 1989, at the Faculty Club. Induction of new members was held at this banquet. BEST WISHES TO THE GRADILATING SENIORS!!!!!



Recreation Internships 1988

by Dawn Bodenheimer

Recreation students at NCSU are unique in that each student must do an internship with a recreation field-related agency. During the summer of 1988, 24 students learned a little more about the real world of recreation and a lot about themselves. Professor Sondra Kirsch was the Internship Coordinator.

The Internship class began last spring semester by making contacts with various agencies at the RISE Conference, writing letters to potential internship sites, and preparing resumes to be sent out to agencies. Students attended Internship class meetings that helped them prepare for the summer ahead. By the middle of April, students had selected internship sites, hence begun their exciting, challenging, and learning experiences.







Each student's experience was as unique as the students themselves. Many students kept in touch over the summer, and all had 'war stories' to share upon their return to school in August. Stories and topics ranged from getting lost in the woods while blazing a trail, hiking with Professor Kirsch, visiting fellow interns, and being pulled by a park ranger while trying to find them, playing the part of a producer and the fun of making a video to represent an agency, setting off fireworks that did not go off, developing a 'real' maintenance plan, and planning special events.

Every happy camper had to do a special project that would help his or her agency. These special projects were important and in many cases were a test of the creativity and knowledge the students obtained in classes.

During the fall semester, students attended post-internship classes. In September, students presented their internship experience to the faculty, fellow students, and friends. Interns were required to present a twenty minute slide presentation. The nervousness and excitement of each intern showed how important their experience really was to them. In October, students completed their internship experience by presenting Professor Kirsch a written report of the Internship Experience and a written explanation of their special project. The students ended the Internship class with a party in honor of the end of a real experience.

A special thanks goes to all those who made the successful internships possible.

National and State Conferences

by Ward Swann

At the start of the school year someone said "GO"! The students in Recreation have tried very hard to live up to that command, by attending the National Recreation and Park Association Conference (NRPA) in Indianapolis, Indiana (Oct.), and the North Carolina Recreation and Park Society's Conference (NCRPS) in High Point (Nov.).

Our arrival at Indianapolis was dampened by the absence of promised hotel rooms at 4:00 in the morning. Even with the initial disappointment and confusion, the group kept a stiff upper lip and turned it into a great experience for all. The State Conference could not have expected N.C. State's student representation to come in force, as we did. With at least 14 students, we drew attention to N.C. State by exemplary behavior in sessions and on the dance floor. Jill Brooks and Lee-Ann O'Neal impressed the crowd with their Telekinetic powers at Pictionary, Jeff Green stunned the dancers with his feats at limboing, and somehow Ward Swann pulled the wool over the sheep's eyes and took Vice President of the Student Division for NCRPS while no one was looking.

Next year's Conferences are at San Antonio, Texas (NRPA), and Virginia Beach, Virginia (NCRPS). We'll be going, will you?

TAPPI

The TAPPI (Technical Association of the Pulp and Paper Industry) student chapter had a great fall semester, and plans were being made for an even better spring semester. Regular meetings included excellent speakers from Procter and Gamble, Hercules, Weyerhaeuser, and Measures. In addition to the meetings, we attended several receptions hosted by companies such as Mead, Betz Paperchem, and Combustion Engineering who were interested in hiring our graduates.

In September, a group traveled to Hendersonville, North Carolina, for a TAPPI Local Section Meeting. This conference was followed by another Local Section Meeting in Franklin, Virginia, at which one of our professors presented a paper.

Activities included midnight bowling and our Fall Picnic, which featured the semi-annual hillside volleyball game.

In the spring, we plan to attend the TAPPI Process Control Conference in Orlando, Florida and the Local Section Meeting in Lynchburg, Virginia. At the Local Section Meeting, two of our members, Jim Bradbury and Carol Bronsdon, will present technical papers in the annual Frank Ferrel Awards Competition.

Activities planned for the spring include officer elections, a service project for the Girl Scouts, and the presentation of the TAPPI gift to the department, a tradition begun last year with the donation of a microwave oven.











Forest Products Research Society

by Jay D. Borrell



The NCSU Student Chapter of the Forest Products Research Society offers students interested in forest products a link between the classroom and the many aspects of the wood industry. Our chapter meets bimonthly and features speakers associated with wood industries, consulting firms, government agencies, and employment services, to name a few.

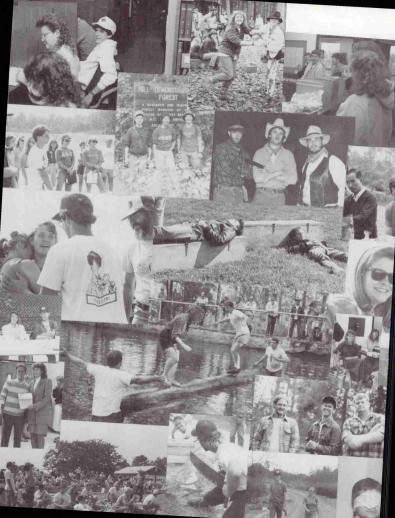
This past fall we started the year by setting up and manning the Open House display for the Wood Science and Technology curriculum. At our booth, potential students interested in WST could pick up information and ask questions pertaining to the field of study. We had several great speakers for our meetings and were able to send four representatives to the Forest Products Research Society Caro-

Left to Right: Jay D. Borrell, Jim Snyder, Reynolds Trull, Gary Jenkens, Jack Ragan, Carl Bradsher, and Shawn P. Mullen

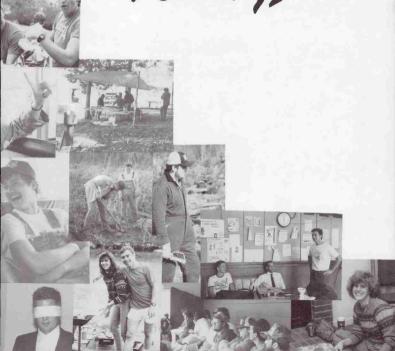
lina-Chesapeake district meeting in late October.

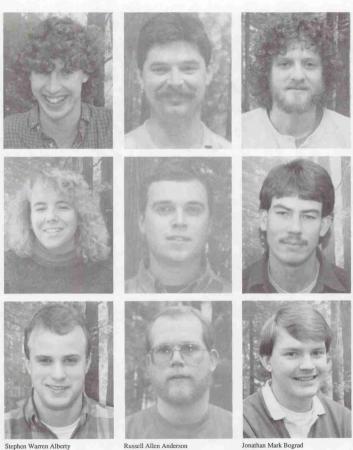
Our spring plans include having speakers at our meetings, a furniture raffle, a Mid-Term Social, a Year-End Social, and the hosting of the Third Annual FPRS Log-Jam Boat Race, which will be held in April on Kerr Lake. Last year we were not able to attend the race due to scheduling conflicts, but we are ready to make this year's race a great success.

Current officers for 1988-89 are Jay D. Borrell, President; Jack Ragan, Vice President/ Program Director; Reynolds Trull, Secretary/Treasurer; and Dr. M. W. Kelly, Chapter Advisor.



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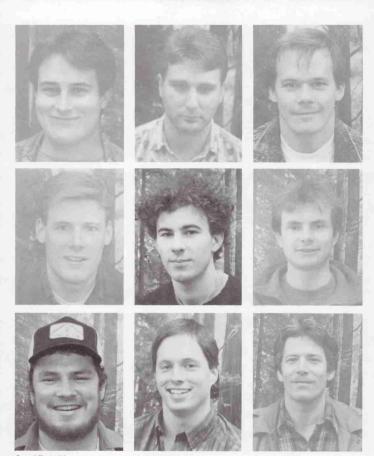




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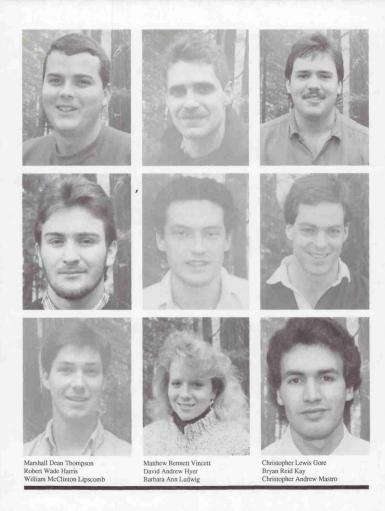
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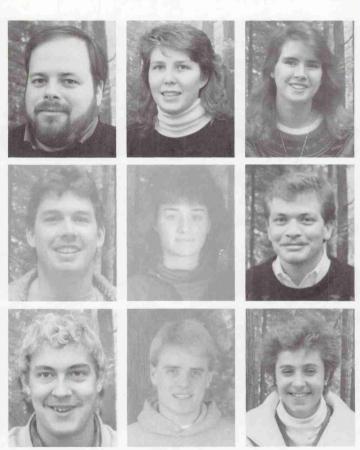




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Nancy Carol Gurley Kristen Lee Minnich William C. Rhinehardt, Jr.

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Leonard Ellington Byrd Shawn Patrick Mullen



Bruce Hine Spainhour, Jr.



Stephen Movers Strand

Not pictured:

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Augustus McKeithan Purcell
PPT: Joseph William Johnson
Derek Scott Owens
Jeffrey Wilson Thornton

John David Weatherman
RRA: Brian Tony Asbill
Kristen Fortney
Betty Jean Gray

Betty Jean Gray
Cathe Ann Grosshandler
Lori Anne Rose
Gregory Todd Tuggle
David Paul Ladd
Janet Marie Smith

WST: Scott Durand Grissom

Remembering a Friend

by Darrin Farrow

A very special part of our world was lost last May when we lost our friend and classmate, Gary Hager, to an unfortunate accident. For those of us who were fortunate enough to know Gary, there lies an empty space in our hearts which was once filled with his good humor and laughter.

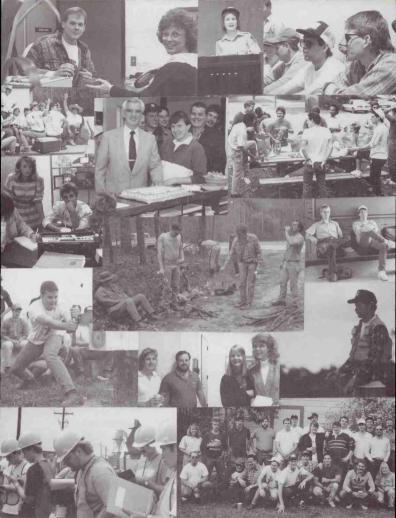
Gary spent most of his life giving to others and made the world a better place in which to live. His involvement with his church youth group was a blessing to all involved. Gary was, in all ways, a perfect example of a good and righteous person. He also put his recreation education to good use through his involvement with the Raleigh Parks and Recreation programs. His leadership abilities and strength of character brought joy to children and parents alike.

Gary was all you could ask for in a friend. He had a way of making the darkest situation bright and the greatest pain a little more bearable. Although Gary will not have the opportunity to fulfill his goal of graduation, he will be with us in mind and



spirit. As each of us takes a separate path, may a little part of Gary's goodness live within us. We miss him!

The Graduating Class of 1989 RRA—N.C. State University



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BROOME, DIANA LEA

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Long, Samuel H.	1949	Raper, Charles F.	1954
McConnell, Marietta & Brad	1988	Raymond, Jr., A. G.	1969
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McGee, Greg	1983	Reid, Joseph	1951
McInnis, Jr., David F.	1969	Rogers, Walton W.	1967
McIver, John E.	1941	Ross, V. R.	1952
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Moore, Bernie	1964	Shelby, Jr., C. E.	1961
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Peek, Dianne M.	1988	Smith, L.	
Pettit, Charles C.	1936	Smith, Walton	
Pickard, John E.	1971	Smith, Mark D.	1980
Pollock, Kenneth A.	1978	Smith, Jr., James R.	1977
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Pridgen, J. P.	1960	Summer, T. Larry	1959

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Wyatt Latimer - Business Manager

Anna Beam - Assistant Editor

Patty Luhmann - Typist



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This is my chance to say whatever I want to, so here it goes ... This is my third AND FINAL year as PI-ME-TUM editor (I am graduating in December 1989, so no one can even attempt to talk me into this job again). I always "enjoyed" the process of begging and bribing people to write articles, provide infor-

mation, and show up to have their pictures made. And, truthfully, I will miss it.

i will also miss this college and the friends I have made here. Graduation is such a big step, and it is scary in a way, but I think I am ready for it. I have grown up a lot in the past five years. I have learned so much between my classes and my jobs co-oping with the N.C. Forest Service and working this past summer in Finland. I thany of the graduating seniors have had similar experiences with internships, Co-op work, and summer jobs that I am sure have helped them feel more prepared for this big step into their future. The changes in people are only a part of the changes in the College of Forest Resources.

In the relatively short time that I have been a student at NCSU, the name and the face of our fine college have changed dramatically. We have changed from the ranking of "School" to a "College," and the land around Biltmore Hall has been pushed around on all sides for major additions. The Natural Resources Research Center was almost completed this school year, and the ground has now more than been broken for the addition to the Robertson Wing on the other end. These additions have created a lot of noise and a tre-

mendous mess, and depleted most of the parking, but it will soon be worth the inconvenience.

I guess I can not leave out the change in the "dreaded" computer room. It looks much more professional and many people have had fun on the purple chairs, but It was much more crowded (and so hot). Computer work was added everywhere and you were lucky to get on a computer between labs and before the

Last year I failed in my quest to find the origin of the name of the Journal of Forest Resources. This year Harry R. Wright of the Class of 1935 wrote me a letter explaining how PI-NE-TUM got its name. Dr. Lenthall Wyman, Silviculture Professor in 1933, suggested to the class that a journal be made an annual event. Each of the students were to suggest a name, the top two winners were B. H. Corpenius (PINETUM) and Harry Wright (Sylvanian). The class voted and it was close, but PINETUM won. The thinking seemed to be that pine trees out number all other trees in the South, which is certainly true today as well as then."

I will end with a BIG THANK YOU.

- ... First, to my "mother" and friend, Charlotte Swart, for making my life so much easier in every way, and for letting me talk to you, cry with you, and laugh with you—you ALWAYS "make things better."
- To my Mom and Dad for loving me and always standing behind me "no matter what"-I Love you.

.. To Dean Ellwood and Dean Saylor for all your support the past few years.

... To Dean Tombaugh, the Forest Resources Student Council, and others who have contributed to and supported the creation of this 1989 edition of the PI-NE-TUM.

.... To my sister Barbie for giving in and creating such a great cover.

... To Ellis Ledford for watching out for me when I was alone at Biltmore at all hours in the night while working on this journal.

... To my staff (we had a few mix-ups, but it is over).

... To Gary Blank for taking on the job of advisor for the PI-NE-TUM and learning how to use Pagemaker. ... And finally to my friends for all the good (and not so good) times we have shared through the years... I miss you already... Please keep in touch!

I hope you enjoy this 1989 edition of the PI-NE-TUM, the Jou<mark>rnal</mark> of the College of Forest Resources.

Shellery Shelley Peterson Editor-in-Chief

The Pride of the Papermakers

When we came to North Carolina, we came here to make paper

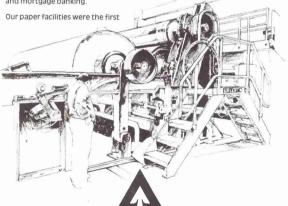
In 1987 papermakers at our Plymouth mill celebrated 50 years of pride and progress in pulp, paper and paperboard. From that spirit of pride and progress we expanded to New Bern, Butner and Charlotte adding fluff pulp and container manufacturing.

Through the years we've branched out into other areas as well: lumber, treated wood and specialty products and services like real estate, land development and mortdage banking.

of their kind in eastern North Carolina and, today, the highquality products we make here are shipped around the world

Quality products, service to our customers and commitment to the quality of life in our communities has marked Weyerhaeuser Company's growth throughout North Carolina.

The pride of those early papermakers in Plymouth lives on today in all Weyerhaeuser facilities...and reaches out to tomorrow.



Weyerhaeuser

The Tree Growing Company...and more.