Pi-ne-tum

School of Forest Resources



1986



PI-NE-TUM

Journal of Forest Resources

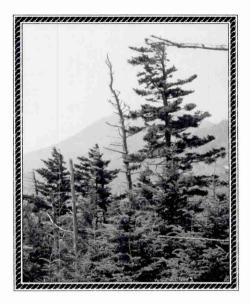
North Carolina State University Raleigh, North Carolina Volume LII 1986

Susan Saunders Ulendy Parker

The PI-NE-TUM, a symbol of quality, pride, and tradition for the School of Forest Resources.

For over fifty years, dedicated students and staff within the school have worked long and hard trying to capture, put together, and reveal the true spirit of the School of Forest Resources. It has not been an easy task, for over the years, we have grown rapidly in both size and variety.

The PI-NE-TUM is your journal. It serves as your reminder of the people, ideas, and activities that represent your school and your Mahle Apronio Eddie Williams lifestyle. We, the 1986 PI-NE-TUM staff, are proud to present to vou the 52nd edition of the PI-NE-TUM and its long-lasting traditions. We hope you will enjoy it now and for many years to come



The pleasure of working The dignity of simplicity The worth of character The power of kindness The influence of example The obligation of duty The uisdom of economy The Wittle of patience The improvement of talent The Joy of creation THE FOUX, Bald Head Island, 1986

DEDICATION



For the past 51 years, the PI-NE-TUM staff has had the honor of dedicating this journal to someone within the School of Forest Resources whose devotion, hard work, and consideration for students, faculty, and staff stands out beyond many others. This year is no different. We are proud to dedicate the 1986 PI-NE-TUM to Mr. Larry Jervis.

After receiving both his B.S. and M.S. degrees from NCSU, Larry joined the School of Forest Resources in 1973 as an Assistant Professor. His job now consists of being an Associate Professor, managing the school's forests, teaching at summer camp, and being in charge of the school's work crew. Students and faculty alike see Larry's deep personal feeling for people. Students learn through him and by their association with him. His hard work, competence, professionalism, and down-toearth attitude make him an excellent role model for us all. He is definitely an integral part of our school.

Larry, the PI-NE-TUM staff would like to thank you for your patience, dedication, and leadership. Without your help many of us would be at a loss. Your motivation to teach us and help us learn through practical application is something that will live forever in our minds and in our hearts.

The Dean's Message To The Students

Lessons From A Bout With Adversity

by Eric L. Ellwood

On May 7, 1985, a singular event occurred. In the course of a second, my life was transformed from one of a high level of activity, both mental and physical, to that of teetering on the brink of survival, and subsequently to a long and constrained period of convalescence. A motorcycle accident can do that.

Fortunately, nature's way of dealing with severe trauma is to block out the memory of most of the painful experiences so that for much of the time surrounding the accident, and for some time afterward, my recollections are still hazy except for near photographic glimpses, almost at random, of my experiences.

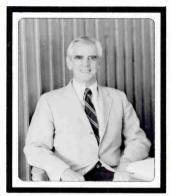
Immediately after the accident and during the sessions in the emergency room, my physiology took over and my conscious mind had little influence. It was only later that I recall the almost subconscious will to not only survive, but to get out of the hospital. But progressively, my conscious thoughts reflected first anger about why this should happen to me: then, as physical stability and recuperation took over (and the tubes and devices were progressively removed), a mental depression began. This was aided and abetted by pain and the drugs, in which I saw myself physically constrained for life from doing things I wanted to do and whereby small concerns became major problems to me. Then came the discipline and induced pain of physical therapy and the adjustments dealing with becoming physically mobile again-all of this occurring over several months. And progress seemed so terribly slow, even though the doctors said my recovery rate was very good and-be natient!

^A After about seven months, I returned to work at the school on an eight-hour basis. I am now very much in control of myself, and my energy is returning, although I do have some physical mobility limitations which I am working to mitraget. Life looks better again.

Never had I experienced anything like this physical and mental impact to my system. I believe that it changed me somewhat, and here are some of the lessons and realizations this experience brought home to me.

First was the closeness and support of my family. The crisis brought us all closer together and emphasized our mutual dependencies. This relationship is all too easily taken for granted.

Then there was the goodness of people. The profusion of support which people showed in many ways- calls, cards, letters, visits, donations of blood, books, flowers, food, rides, and simply monitorings of my condition-was greatly appreciated. People from all walks of life-my university colleagues and friends, professional and civic club acquaintances,



Eric L. Ellwood Dean B.S.,M.S., Univ. of Melbourne Ph.D., Yale Univ.

neighbors, students, and people up the street I hardly knew-showed their concern and support. There is no way I can adequately thank all those who gave me their support and sympathy during those difficult times. Also, in the main, the medical doctors, nurses, and physical therapists really cared and took a personal interest in helping me. Even the city policeman, who was first on the scene of the accident, kept coming back to the hospital to see how I was doing. This makes one feel good about the emergency health system and renews my faith in it and the people involved.

I think worthy of particular mention is the special empathy which I feel that the women projected-friends and colleagues who helped support me as well as the nurses and therapists who worked with me. I do think that women have special talents and qualities in communicating and dealing with people who are handicapped or otherwise under stress. And I am appreciative of it.

There was also the learning of the discipline of coping-coping with pain, depression, and with limits on my physical mobility. This was tough because these had to be dealt with and overcome and at a time when I had little energy left. However, I believe I am a stronger person in some ways as a result and can also now relate better to those who have physical handicaps or who have to deal with depression.

All of these experiences have, I think, increased my sensitivity to people and have renewed my faith in a number of aspects of our society. Hopefully, I have also gained some additional strengths in coping.

Finally, I would like to express my gratitude to my close associates, Dr. "Bud" Saylor who acted as dean in a superior manner during my absence, and Drs. Cowling, Cooper, Thomas, Warren, and Levi, who, together with Dr. Saylor, made sure that the school programs were kept on track and, of course, Nancy Roberts, my administrative assistant, whose lovality and support was ocontinuously helpful.

One thing I did not have to worry about during my enforced absence was the administration of the school. The results record that it was in good hands.

I enjoy being back.

DEAN ELLWOOD -- 15 YEARS OF SERVICE

Fifteen years ago, the School of Forest Resources was lucky to have an Australian-born forester and wood scientist become its Dean. As of July 1, 1971, Dr. Eric L. Ellwood succeeded retiring Dean Richard Preston. Before becoming Dean, Dr. Ellwood was head of the Wood and Paper Science and Technology Department.

The following is an exerpt from an article written about Dr. Ellwood when he became our Dean.

"Dr. Ellwood brings to his new assignment a rich and varied experience, a proven administrative ability, a logical mind that sweeps through the brush to the important aspects of every problem, a forward looking and progressive philosphy, a passionate desire for work of high quality and a reputation as a scientist of international repute.

A native of Melbourne, Australia, Dr. Ellwood received his early education in Victoria institutions. He earned his basic forestry degree from the Victorian School of Forestry in 1942, and his Bachelor's and Master's degrees from the University of Melbourne in 1944 and 1951. In 1951 he came to the United States and enrolled at Yale University, earning the Ph. D. there in 1953.

After serving as a senior research officer in the Division of Forest Products, Melbourne, from 1983-59, he accepted an appointment to the staff of the Forest Products Laboratory at the University of California. In 1961 he came to N.C. State from California to head the Department of Wood and Paper Science.

Dr. Ellwood held Fulbright and Sterling Fellowships at Yale from 1951-53. In 1953 he was winner of the Forest Products Research Society "Wood Award." He has served in many professional capacities with the Australian Institute of Foresters, the Forest Products Research Society, the Technical Association of the Pulp and Paper Industry, and as President of the Society of Wood Science and Technology.

Dr. Ellwood's research interests are broad, including wood-liquid relations; mechanical properties of wood, timber, and paper; physics; and pollution abatement. Dr. Ellwood is a member of Phi Kappa Phi and Sigma Xi and in and in 1968 was elected Fellow in the International Academy of Wood Science."

Since that time, Dean Ellwood has received many other awards, some of which include: Fellow of the Technical Association of Pulp and Paper Industry (TAPPI), Fellow of the Society of American Foresters, and Governor's Forestry Award.

On May 7, 1985, all of us held our breath when we heard of Dean Ellwood's tragic motorcycle accident. Thank goodness he is back with us today and is continuing to work his way back to health.

DEAN ELLWOOD, we the students, faculty, and staff within the School of Forest Resources are proud of you and your accomplishments. You mean a lot to us, and we feel very fortunate to have such a distinguished and honored man to head our school.

We hope that you are able, and will continue, to lead us through the coming years.



L.C. Saylor Associate Dean of Academic Affairs M.S.,Ph.D,Genetics,NCSU

Academic Affairs by L.C. Saylor

(Answers to Some Important Questions)

In the past several months, changes in the environments in which our professions operate have occurred in such a way and to such a degree as to cause fundamental changes in the way the forest and recreation industries operate. As a consequence, many believe there will be changes in the type of professionals hired and the types of education needed.

To help us better understand what possible changes the School of Forest Resources should consider in its academic programs, we asked members of the School Advisory Council to respond to a number of key questions at the annual fall meeting. The following is a summary of the discussion of these questions by Council members who represent a variety of public and private organizations:

 QUESTION: How would you describe the current environment in which your organization and/or profession operates? What do you predict for the next 5-10 years?

RESPONSE: The forest products industry is definitely going through a period of evlaution, definition, and redefinition that will take at least into the 1990s to get the sorting our completed. There has been a tremendous reduction in depth of personnel-so much so that many are concerned as to where the professionals will come from in the future to fill many key management positions as they become vacant.

To be competitive worldwide will require increased efficiencies and improved technologies.

The placements of two year graduates (technicians) is being more clearly defined. In all areas (i.e., private, public and consulting organizations), they are recognized as having definite limitations for growth into management.

Recreation is not going through the depressed cycle affecting the forest products industry. Interest and investment continues to grow and produce many exciting challenges.

The professions all need to be more innovative and resourceful in upgrading their image. In forestry, for example, there is a need to divorce the "logger image" from that of the true professional.

2. QUESTION: Do you believe, as some say, that we have reached a time (crossroad) when the role of the professional is being redefined? If so, what type of professional will be hired in the future? What type of skills should they possess?

RESPONSE: Professionals of the future will continue to need a solid foundation in a number of disciplines, but will need to develop managerial skills sooner and in greater depth. Strong communication and interpersonal skills are essential for dealing with other professionals both inside and outside of the "firm" as well as with the general public.

3. QUESTION: With regard to our existing curricula:

a) What specific changes would you recommend to develop the characteristics you proposed in question two above? b) What changes are needed to enhance the upward mobility of our graduates to top levels of management? c) To produce a more "well-rounded" graduate, do you favor an increase in general education requirements, even if it would result in a decrease in technical courses?

RESPONSE: Timing is the key as to when various subject matter areas should be emphasized. A solid foundation is needed on which to build continuing education programs; thus, basic disciplines and technical courses should not be reduced. Improvement in communication and interpersonal skills should be integrated into professional courses. Some basic business skills should be included in all program areas. For forestry, more emphasis is needed on multiple use management (water management being an especially key area for the future). There is a need to develop sounder land, resource, and conservation ethics. Emphasis must be placed throughout all curricula on the development of solid professional ethes. (Faculty must be committed and provide role models.) For upward mobility, management skills must be developed. A key question is how soon to build in these skills. In general, it seems these skills are best developed as postbaccalaureate educational experiences as a part of in-house and other continuing education programs. Regarding general education courses, there is no strong support or strong resistance to a possible proposed increase of 9-10 hours. If need be, these hours could be obtained by reducing overlap among courses and by concentrating more material in some courses. Students should be encouraged to develop strong minors and second degrees (e.g., business). Co-op programs also provide valuable experience and should be promoted more.

Continuing education is key to many concerns, such as developing and improving management skills, keeping technically updated, and meeting certification standards (and certification renewal).



Ellis B. Cowling

B.S., M.S., State Univ. College of Forestry at Syracuse

Ph.D., Univ. of Wisconsin; Ph.D., Univ. of Uppsala(Sweden)

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

A Natural Resources Research Center For North Carolina by Ellis B. Cowling, Associate Dean of Research

One of the most important recent activities affecting the future of the School of Forest Resources has been planning for a new Natural Resources Research Center for North Carolina. This planning effort has extended well beyond the usual discussions with architects about sizes of offices, layout of classrooms, and space and placement of library and conference rooms. It extended to the very purposes and methods of operation of the School itself and its relationships to other Departments of the University and to the cities and towns and industries and governments of our state.

In recent years, inadequate space for existing programs of teaching, research, and advisory service has become a serious constraint on many schools and departments at North Carolina State University. Also, leaders in state and local governments, industries, and the universities have recognized that many of the crucial issues relating to natural resources in North Carolina no longer can be dealt with wisely by personnel within a given department of any organization. The need for space at the University and the need for holistic thinking about issues of water quality. forest productivity, and minerals development, etc. converged to stimulate the creation of a new organization to better serve the changing needs of the people of North Carolina.

The result of more than two years of facilities and organizational planning is a legislative appropriation totaling more than \$11,000,000 for construction of a new Natural Resources Research Center. This Center will be built in the vacant space immediately east of Biltmore Hall. It will house the following units: the NCSU Department of Marine, Earth, and Atmospheric Sciences within the School of Physical and Mathematical Sciences:

the Water Resources Research Institute of the Consolidated University of North Carolina; Portions of the University of North Carolina Sea Grant College; the NCSU Center for Environmental Studies; the NCSU Computer Graphics Center; and the NCSU Departments of Forestry and Wood and Paper Science within the School of Forest Resources.

The Natural Resources Research Center will also provide a focal point where agencies of state government, county and municipal governments, regional associations, industries, environmental organizations, and trade associations can turn for careful studies of natural resources issues. This new capacity to develop more comprehensive understanding of these issues promises to be one of the most important challenges and opportunities for the School of Forest Resources in the decades ahead. We believe it will have a profound and constructive influence on the teaching, research, and advisory service functions within our School and also on the quality of natural resource management of our State.

Changes For The Hofmann Forest -

A New Era



Mr. G. E. Jackson

By Dr. Stephen G. Boyce, President of North Carolina Forestry Foundation

Hofmann Forest is an increasingly important focus of the North Carolina Forestry Foundation. Why? Because the Hofmann Forest is growing toward the 21st century with renewed vigor. Alumni, as well as faculty, students, and extension specialists, are asked to participate. How this is happening is the subject of the following report.

On December 31, 1985, Eddie Jackšon retired as Hofmann Forest Supervisor. Eddie served the North Carolina Forestry Foundation faithfully in this capacity for more than 50 years. Over this same period, with the foresight of "Doc" Hofmann, the first distinguished leader of our forestry program, and Eddie Jackson's outstanding dedieation, the mortgage on the forest was paid. The Forest is now fully owned, without debt, by the Endowment Fund of North Carolina State University, and responsibility for management is contracted to the North Carolina Forestry Foundation.

A particularly significant opportunity to adjust the management of the forest came on December 12, 1985, when, by mutual agreement, a 40-year contract for timber harvesting and development came to an end. The contract began in 1945 between the North Carolina Forestry Foundation and the Halitax Paper Company, passed through several corporations, and rested finally with Champion International Corporation. This same contrat, beneficial to all parties 40 years ago, is today obsolete because of changes in harvesting, regeneration, transportation, wood technology, pulp and paper chemistry, and how the forests are used. The termination of this agreement greatly increases our opportunities to direct uses of the forest resources in the 21st century. Much attention will be given to jointly producing wildlife habitats, water, recreation, timber, tourism, and increased support to the local economy.

The Foundation employed H.C. "Butch" Blanchard as the new Forest Supervisor on January 1, 1986. You are likely to see Butch in Biltmore Hall and on the Forest in coming months and years. One of the Foundation's desires is to involve all functional areas of the School of Forest Resources and alumni in using the Hofmann Forest. We want to increase opportunities for all concerned to participate in making the forest an example of leadership in the effective use of forest resources.

Opportunities to use the Hofmann Forest to aid your career development while setting high standards for maximum forest resource utilization are exciting. Such opportunities can happen because of people like you, our present students and alumni of the future. The North Carolina Forestry Foundation welcomes your suggestions, concerns, and ideas for a new era on the Hofmann Forest.





"Now I see the secret of making the best persons. It is to grow in the open air and to eat and sleep with the earth."

-Walt Whitman

FORESTRY



Left to Right, back row: Arthur W. Cooper, Dept. Head, Ph.D., Univ. of Michigan: Larry Jervis, M.F., NCSU: Charles B. Davey, Ph.D., Wisconsin; James D. Gregory, Ph.D., NCSU; Lee Allen, Jr., Ph.D., NCSU: Floyd Bridgwater, Ph.D., Oklahoma St. Univ.; Bill Smith, M.S., NCSU; Jackson B. Jett, Ph.D., NCSU: Robert J. Weir, Ph.D., NCSU: Robert Frampton, Ph.D., NCSU; DH.J. Steenson, Ph.D., Duke Univ.; Richard R. Braham, Ph.D., NCSU; Daniel L. Holley, Ph.D., NCSU; Josh, P. Roise, Ph.D., Univ. of Wash; Stephen McKeand, Ph.D., NCSU; Gary Blank, M.A., Univ. of Idaho. Not Pictured: Awatif E. Hassan, Ph.D., Univ. of Calif: Carlyle Franklin, Ph.D., NCSU; Richard Lancia, Ph.D., Univ. of Mass.; Thomas O. Perry, Ph.D., Harvard Univ.; Jerry Bettis, B.S., Univ. of Idaho; Robert Kellison, Ph.D., NCSU; Steve Anderson, M.S., Univ. of Wash.; David A. Adams, Ph.D. NCSU; William Hafley, Ph.D., NCSU; Douglas Frederick, Ph.D., Univ. of Idaho; Randy Oakley, B.A.,NCSU.

Forestry Department Highlights

by Arthur W. Cooper

As anyone associated with forestry knows, the profession has been undergoing some dramatic changes since the last Pinetum appeared. Mergers and takeovers in the industry, budget cutbacks in the U.S. Forest Service, and personnel reductions throughout the profession have led to a period of introspection and thought for the profession's future. The educational sector of the profession has not been immune from re-examination of its programs.

The Southern Region of the National Association of Professional Forestry Schools and Colleges sponsored a half-day symposium devoted to the education of the forester in 2010 at its recent meeting in Atlanta, and the School of Forest Resources Advisory Committee spent its fall meeting in a discussion of the School's educational programs. Through all of this introspection runs a concern for whether our current forestry programs are really educating today's graduates for the demands that will be placed on them in the future.

As a result of such deliberations there appears to be agreement that a certain body of knowledge and skills is essential for the forester of tomorrow. Included are communications skills; skills in people subject matter of economic analysis; knowledge of computers and training in decision theory; continued emphasis on the basic sciences and technical skills that has been characteristic of good forestry programs in the past; and the knowledge that the forester, as does any professional, will require continued education and technical updating throughout his or her entire career.

You will recognize that many of these themes such as emphasis on communications and understanding of the role of computers permeate our programs at NCSU. Other themes are not now as well integrated as they should be. During this year our undergraduate courses and curriculum committee, under the able guidance of Dr. Jim Gregory, has been considering these matters in an effort to update our curriculum so that it will be both educationally and technically sound, and also at the cutting edge of modern forestry education. What you have gotten in your four years here at NCSU is as good an undergraduate education in forestry as can be gotten. The goal of these deliberations is to make it even better. The Department's graduate program will, in March, undergo its ten-year review as required by the Graduate School. The graduate program is very sound with its enrollment, now at 85, higher than it has ever been. Quality of students is also excellent. However, with competition for new students becoming keener and with research dollars becoming scarcer it is essential that everything we do be of the highest caliber. The occasion of this review will be used to examine our program and make the adjustments necessary to maintain continued excellance.

This year has been a busy one for our students and faculty. The Forestry Club and student SAF Chapter have continued to meet together in a format which seems to strengthen both organizations. Trips to the annual conclave, this year in Texas, and to Washington, D.C., are being planned. Assistance was also provided this year at the State Fair and in the annual Open House. Dr. Awatif Hassan spent the fall and early winter on leave studying in England, and Dr. Dick Lancia was also on leave during the fall teaching wildlife management at the University of California-Berkeley. We are pleased that our faculty members are sought out for such assignments. Dr. Bruce Zobel garnered yet another honor-the Bernhard Fernow Award of the American Forestry Association- to add to the others that mark his long and distinguished career. Dr. Rich Braham received his second award as Outstanding Teacher in the School. Those of us who know him know that these honors have been richly deserved and that they stand as testimony to his belief in the importance of teaching. Finally, we congratulate Dean Ellwood on his election as a Fellow of the Society of American Foresters.

"Sharing, Striving, Succeeding" -Anonymous

WOOD AND PAPER SCIENCE



Left to Right, back row: Robert G. Hitchings, M.F., Duke Univ.; Bjarne Holmbom, Visiting Prof., Finland; Josef S. Gratzl, Ph.D., Univ. of Vienna, Austria; Heinz G. Olf, Ph.D., Technical Univ.; Richard H. Cornell, Ph.D., Harvard Univ.; Richard H. Cornell, Ph.D., Institute of Paper Chemistry: Co. Arthur Hart, Ph.D., NGSU; Myron W. Kelly; Ph.D., NCSU. Front row: Chen-Loung Chen, Ph.D., Univ. of Heidelberg; Hou-Min Chang, Ph.D., Univ. of Wash; Adrianna G. Kirkman, M.S., NCSU; Ronald G. Pearson, B.C.E., B.A., Univ. of Melbourne: Richard J. Thomas, Dept. Head, Ph.D., Duke Univ.

Not Pictured: Thomas W. Joyce, Ph.D., Purdue Univ.; Elizabeth Wheeler, Ph.D., Southern Ill. Univ.; Robert C. Gilmore, M.W.T., NCSU; William S.Bryan, M.W.P.S., NCSU.

WPS Department Highlights

by Dr. Richard J. Thomas

Presently the department consists of 14 faculty, 2 research associates, 2 visiting professors, 6 technicians, 7 post-doctorals, and 3 secretaries. Permanent faculty and staff numbers remained constant, but the number of visiting professionals increased by three. Enrollment declined slightly to 255 undergraduates (139 PPT and 60 WST) and 26 graduate students. Despite the present economic difficulties of the wood-based industry, job placement remains good. The average starting salary for 1985 graduates from pulp and paper was \$29.000 and for the wood science and technology graduates, \$20,000.

The department has the nation's largest undergraduate enrollment of students studying for carcers in the wood-based industry. This is appropriate, considering the economic importance of the wood-based industry to the region. The department has over 1000 graduates, 87 percent of whom are employed by the wood-based industry or associated suppliers. In addition, the department's research program has gained an international reputation for excellence. Thus, the Department of Wood and Paper Science, through its teaching and research programs, continues to play an important role in support of the wood-based industry.

On a sad note, Dr. A. J. Stamm, Reuben B. Robertson Distinguished Professor Emeritus, died on November 25, 1985. Dr. Stamm joined the faculty in 1959 upon his retirement from the Forest Products Laboratory, Madison, Wisconsin. Although he officially retired from the University in 1968, Dr. Stamm continued writing and publishing the results of his research through 1976. He made numerous and significant contributions to the physical chemistry of wood, cellulose, and related products. His research in the areas of wood moisture relations, stabilization and permeability has had far-reaching effects upon the wood and paper industries. His work resulted in more than 150 journal publications, two books, eleven patents, the SWST Distinguished Service Award and the American Chemical Society Payen Medal. His love of teaching and dedication to students were recognized when he received a University Outstanding Teacher Award. His contributions to the profession will continue in importance for many vears to come.



RECREATION RESOURCES ADMINISTRATION



Left to Right, back row:

Hugh A. Devine, Ph.D., Penn. St. Univ.;

M. Roger Warren, Dept. Head, Re.D., Indiana Univ.;

Phillip S. Rea, Re.D., Indiana Univ.;

Chrystos D. Siderelis, Ph.D., Univ. of New Mexico;

Dave Culkin, Ph.D., Univ. of Oregon;

Robert Sternolff, Ph.D., Wisconsin;

Front row:

Carol Love, Ph.D., NCSU;

Sondra L. Kirsch, M.S., UNC-Chapel Hill;

Beth Wilson, Ph.D., NCSU:

Not Pictured:

Richard Perdue, Ph.D., Texas A&M;

RRA Department Highlights

by Roger Warren, Department Head

The Department of Recreation Resources Administration is gradually widening its focus. Traditionally, the park and recreation profession has been oriented toward the public sector inational, state, and local park and recreation agencies). This emphasis is broadened somewhat by including the private, non-profit agencies (e.g., boys' and girls' clubs, scouts, YMCA, and YWCA): however, only in recent years has the commercial sector been recognized as a major provider of leisure services in the United States. Tourism, one component of commercial recreation, is the third largest industry in the United States, generating 25.1 billion dollars in 1984. In North Carolina, tourism is a four-billion-dollar industry employing 164.000 persons.

The Department of Recreation Resources Administration has moved to capitalize on these developments by strengthening our commercial recreation concentration. During the 1985-86 academic year, two new courses were taught for the first time: RRA 220, Commercial Recreation and Tourism; and RRA 420, Resort Management and Operations.

A second significant nation-wide change is the emphasis on fitness, wellness, and sports participation. The wellness movement emphasizes good health habits, nutrition, and exercise (generally aerobic exercise). The magnitude of interest is evident: to managers of local recreation and park departments whose constituency demands more and better jogging trails, sports facilities, and fitness related programs; to industry, as programs for employees are developed; and to private businesses, such as health spas and athleticallyoriented businesses.

The department is already stressing many of the components of fitness and sports management in our undergraduate program. Through careful choices of elective courses, an undergraduate student can emphasize these areas in the program management concentration. A new effort has been developed on the graduate level with three new courses dealing with the psychological and sociological foundations of sports, the physiological basis of sports participation, and the problems associated with the administration of sports programs. These two new emphases, commercial recreation and sports management, present exciting challenges for future park and recreation professionals.

I also want to highlight the RRA faculty's participation in community affairs. We believe our outreach to the local and statewide community is an important part of the mission of our department, and our faculty and students fulfill the role in exemplary fashion. For example, students and faculty alike were heavily involved in the inaugural North Carolina Senior Games during the fall semester. Both Dr. Beth Wilson and Dr. Carol Love now serve on the Board of Directors of N.C. Senior Games. Dr. Wilson also serves on the National Task Force on the Arts. Dr. Rea serves as a member of the National Fitness Coalition and President's Council on Physical Fitness and Sports. and as a member of the Raleigh Park, Recreation and Greenways Advisory Committee. Dr. Sternloff serves on two committees for the Raleigh Parks and Recreation Department-the Aquatics Study Committee and the Lake Johnson Park Master Plan Committee. Dr. Warren is an appointed member of the Board of Directors, Land Stewardship Council of North Carolina and serves as a member of the Land and Water Conservation Fund Review Committee. Dr. Perdue was involved in the design and construction of a playground for the White Plains Children's Center in Cary. Dr. Love serves on the Wake County Park and Recreation Commission.

Other highlights for the department are the formation of Rho Phi Lambda and faculty honors. These items can be found elsewhere in the Pinetum.

"Ideas are the roots of creation." -Ernest Dimnet

EXTENSION FOREST RESOURCES



Left to Right, back row: Larry Jahn, M.B.A., Penn. St. Univ.; James R. McGraw, Ph.D., Univ. of Flas. Bill Gardner, M.S., NCSU; Moreland Gueth, B.S., NCSU; Bill Huxster, M.W.T., NCSU; Earl L. Deal, M.S., Univ. of Georgia. Front row: Richard Allison, M.F., Penn. St. Univ.; Mike Levi, Dept. Head, Ph.D., Leeds Univ., England; Bill Swint, M.F., NCSU; Joe Denig, Ph.D., Virginia Tech.

Not Pictured: Rick Hamilton, M.F., Duke Univ.; Leon H. Harkins, M.S., Colorado St. Univ.; Robert Hazel, M.S., Penn. St. Univ.; Steve Hanover, M.F., Yale.

Forestry Extension Highlights

by Mike Levi

Extension Forest Resources can generally be divided into 2 categories - programs in forest management designed to improve multiple-use management of forest land by private landowners, and programs in wood products utilization designed to expand markets for forest products or increase the efficiency and profitability of mills.

An important program bridging the gap between these two major areas is on timber harvesting, led by Earl Deal. North Carolina has one of the oldest and most comprehensive extension harvesting programs in the country. At the core of the program is the Tarbeel Timberman, a bimonthly newsletter mailed to 1500 loggers, foresters, and others associated with the logging industry. The newsletter emphasized developments in technology, cost-saving tips for loggers, personnel and business management, and regulatory news. It provides an effective way to reach an audience that traditionally has not attended meetings and workshops.

Another element of the program involves applied research to evaluate new technology. This includes pioneering work on whole-tree chipping systems, logging small diameter trees on steep slopes, and a study just starting on monitoring truck load weights at the loading point, designed to reduce raw timber product costs and increase transportation profits. Software development for microcomputers is another aspect of new technology that has not been ignored. A program on "logging cost analysis" is helping loggers and equipment dealers better understand their costs of operation and compare prices of alternative equipment systems. A "cost accounting system" designed specifically for loggers will be finished later this year and will enable loggers and their accountants to have a clearer understanding of their operating costs. Extension has taken the leadership in organizing demonstration of the latest logging equipment. Demonstrations range from operation and evaluation of single pieces of equipment to static and working displays of a wide range of items. The Western Piedmont Farm and Forestry Expo and Carolina Log'N Demo co-sponsored by the N.C. Forestry Association have now become established events for the logging industry where last year over 2,000 people gathered to compare notes and costs on the latest equipment.

Workshops and meetings form the final component of Extension's program in harvesting. Topics have ranged from 'eost accounting' to 'improving water quality through implementation of forestry best management practices.' Educational activities are not limited to loggers and foresters. A program on 'life after the harvest' has proved very popular with landowner groups. This program emphasizes the logging contract and the costs of harvesting, encouraging landowners to consider the long-term costs of the harvesting job before accepting the highest price offered for their timber.

It is hoped that these various programs result in more efficient and competitive loggers and more knowledgeable foresters and landowners. If this is the case, we are being successful.



"OH, That Heavenly Bod!

Mr. 1986

SECRETARIES



Left to Right, back row: Millie Sullivan, Sec., WPS; Lorene Nicado, Sec., Ext. For. Res.; Jaura Terry, Sec., Ext. For. Res.; Martha Holland, Sec., Hardwood; Charlotte Swart, Student Serv. Mgr., SFR; Pat Lineback, Sec., RRA; Richard Price, Sec., For; Nancy Roberts, Admin. Asst., SFR; Elga Vaca, Sec., Ext. For. Res.; Judy Rogers, Sec., For; Jan Stevens, Sec., For., Reggi Powell, Sec., RRA. Not Pictured: Bhavana Ajmera, Sec., WST; Peggy Arnold, Sec., For., Penny Handlin, Sec., PFT; Sue Harkins, Sec., For. Net., Sally Patterson, Sec., SFR; Mary Walker, Acet. Tech., SFR; Virginia Woodruff, Sec. SFR.

Right:

Tom Zack, Computer Coordinator



LIBRARIANS

John Abbott, Librarian Donna Hall, Library Assistant Pam Rowland, Library Assistant



STAFF C.A. LaPasha, Research Technician, SFR; William C. Wyatt, Research Technician, SFR; C.W. Dudley, Engineering Research Technician, SFR



COOPERATIVES

CAMCORE

Central American & Mexico Coniferous Resources



Left to Right: Bill Dvorak, M.S., NCSU; John Brouvard, M.S., Oxford; Juan Jurado Blanco, B.S., NCSU; Mike Kane, M.S., NCSU; Melissa Salazar, B.S., Univ. of Rio Piedras, Puerto Rico.

FERTILIZATION



Left to Right: Sue Harkins, Secretary; Beth Haines, B.A., Applachian State Univ; Lee Allen, Jr., Ph.D., NCSU; Tom Christensen, B.S., Univ. of Ill.; Mike Wisniewski, M.S., NCSU.

HARDWOOD



Left to Right, back row: Chen-Wen Robert Chu, Ph.D. Candidate, Operations Research, NCSU; Robert Kellison, Director, Ph.D., NCSU; Russ Lea, Ph.D., SUNY; Martha Holland, Secretary. Front row: Douglas Frederick, Ph.D., Univ. of Idaho; Dennis Mengel, M.S., Univ. of Idaho; Robert Maimone, B.S., SUNY.

SMALL WOODLOT



Left to Right: Martha Miller, Secretary, Les Hunter, B.S., NCSU, Carlyle Franklin, Director, Ph.D, NCSU; Mark Smith, B.S., NCSU; Dennis Hazel, M.S., NCSU.

TREE IMPROVEMENT



Left to Right, back row: Vernon Johnson, Ag. Res. Tech.; J.B. Jett, Ph.D., N.C.S.U.; Robert Weir, Director, Ph.D., N.C.S.U.; Mark Hubbard, Ag. Res. Tech.; Bruce Zobel, B.S., M.F., Ph.D., Univ. of California, Berkley; Tyson Dublin, Ag. Res. Asst.

Front row: Steven E. McKeand, Ph.D, N.C.S.U.; Floyd Bridgwater, Ph.D, Oklahoma State Univ.; Jerry Sprague, B.S., N.C.S.U.; Judy Stallings, Sceretary.

FACULTY HONORS

EXTENSION

R.B. Hazel, Outstanding Achievement Award, North Carolina Chapter of the Wildlife Society



FORESTRY



S. Khorram, Who's Who in the South & Southwest; H.V. Amerson, Panel member for USDA Competitive Grants in Forest Biology; R.R. Braham, Academy of Outstanding Teachers; D.H.J. Steensen, SAF Certificate of Appreciation; Dean Eric L. Ellwood, Friends of Extension plaque for outstanding contributions to extension forest resources; elected Fellow in the Society of American Foresters.

Not Pictured: S. Anderson, SAF Continuing Forestry Education Certificate; F.E. Bridgwater, Promoted to GS-14 Scientist by the U.S. Forest Service: H-m Chang, 1985 Alumni Outstanding Research Award and associated \$1,000 prize; J.E. DeSteiguer, U.S. Department of Agriculture Certificate of Merit Award, Southeatern Forest Experiment Station Annual Research Award; R.G. Hitchings, 1985 TAPPI pulp Manufacture Division Award and John Richter prize of \$1,000; R. Lea, Most Valuable Daddy (1700 Dixie Society); B.J. Zobel, Bernard Edward Fernow Award - American Forestry Association.

WOOD AND PAPER SCIENCE







Professor Robert G. Hitchings 1985 TAPPI Pulp Manufacturers Division Award and Johan Richter Prize of \$1,000 TAPPI Pulp Manufacturers Division

Dr. Josef S. Gratzl TAPPI Research Development Division Award and William H. Aiken Prize of \$1,000 TAPPI Research Development Division Dr. Hou-min Chang 1985 Alumni Outstanding Research Award and Associated \$1,000 Prize NCSU Alumni Association

RECREATION



Dr. Roger Warren.

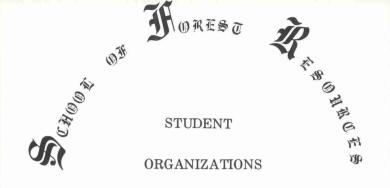
The Garrett Epply Award (a distinguished alumnus award) from Indiana University Department of Recreation and Park Administration. Dr. Beth Wilson,

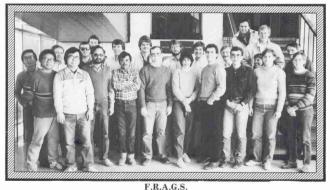
Dr. Beth Wilson, N.C. Recreation and Park Society's Special Citation Award for developing N.C. Senior Games; Governor's Excellence in Education Award for developing an environmental education program at Durant Nature Park.



Sondra Kirsch, Chairman of Faculty Senate

Tryin' on Clothes	
I tried on the farmer's hat, Didn't fit. A little too small-just a bit Too floppy. Couldn't get used to it, Took it off. I tried on the dancer's shoes, A little too loose. Not the kind you could use For walkin'. Didn't feel right in 'em, Kicked 'em off. I tried on the summer sun, Felt good. Nice and warm-knew it would. Tried the grass beneath bare feet, Felt neat. Finally, finally felt well dressed, Nature's clothes just fit me best.	
-Shel Silverstein	





F.R.A.G.S. Voice of the Graduate Students

The Forest Resources Association of Graduate Students (FRAGS) consists of graduate students from three departments in the School of Forest Resources. The chairperson of FRAGS presented the concerns and suggestions of graduate students to the school administration. Representatives from each department were chosen to represent the students at the Graduate Student Association (GSA).

Social activities included picnics at Schenck Forest at the beginning and end of the school year. Graduate students, faculty, staff and families met for great food and volleyball at Schenck Forest.

Charile Bolton served as chariperson of FRAGS. Scott Torreano balanced the books and performed other duties as treasurer. Steve Moore was the GSA representative for the Forestry Department. Daphne Beek and Sherl Rudd were GSA representatives for the Recreation Resources Administration Department.

Council Discusses Issues



by Audrey Hockaday

The Forest Resources Council is made up of student representatives from clubs and departments in the School of Forest Resources. The 16-member council discusses pertinent student problems in the School of Forest Resources and seeks answers to these problem. The Council also tries to find possible problem areas of student life before problems occur and seek solutions for these. The Council receives funds from the University and allocates these funds to student offer various uses. Pinetum staffing and productions are directed by the Council. also.

This year the Council had three main goals for the 1985-1986 school year. The first and most important was getting more exterior lights for Biltmore Hall and a blue light emergency phone. The Council petitioned the faculty and students in

Biltmore Hall for support of the request. The second goal was to bring all the students in the School together with some event and gain better School unity.

The third goal was to develop some means of an advisor evaluation in an attempt to help give students better advising.

The council members are making steps in the direction of realizing these goals, but all their efforts are useless without input from the rest of the student body.

Forestry Club/S.A.F.



by Clare Dellwo

Once again the Forestry Club/S.A.F. had a year packed with activities ranging from the purely social to the community service oriented. Club members kicked off the school year by helping with orientation for incoming Forestry students. The club also held its fall picnic for those interested in joining.

In October some members traveled to West Point, Virginia, in what is becoming a growing tradition: to compete in the annual Crabfest Logging Competition. When the State Fair rolled around, members held an exhibit and manned a booth for the Forest Service.

Rolleo, a long-standing fall tradition, gave the classes a chance to compete against one another in logging and other forestry related events. In November, the club was again involved in the 'Wood for Warmth' project, which provides wood for the needy of Wake County. The 29th annual Conclave, held in early April, gave members a chance to travel to College Station, Texas. Competing against other top colleges and universities, our skills were tested in field and technical events.

The club was also involved in Ag. Week and the winter S.A.F. meeting. Ag. Week gives other majors at N.C.S.U. an idea of what we do. The 1986 winter S.A.F. meeting was held in Raleigh, and several members were involved in setting it up.

The Logger's Brawl, held the weekend before finals, gave club members a chance to kick up their heels to good blue grass music and enjoy a final fling before exams started.

Throughout the fall and spring semesters, the club earned money doing tree work for area residents.



The former Rho Phi Alpha Honorary Fraternity joined Sigma Landbad Sigma Honorary Fraternity to become the National Recreation Honorary Fraternity, Rho Phi Lambda. Rho Phi Lambda stands for Recreation, Parks and Leisure. Since North Carolina State University was the first Honorary Fraternity established in 1958, we are the alpha charter. Rho Phi Lambda is a great opportunity for the young recreation professionals to learn and experience new challenges as a National Fraternity.

Rho Phi Lambda welcomed seven new members this fall. We began the year with the NCSU Open House which introduces the different curricula to high school students and other potential undergraduates. Rho Phi Lambda and advisors explained the Recreation curriculum to interested individuals.

At the Recreation Banquet set up by the

Recreation Club and Rho Phi Lambda, we awarded the Thomas I. Hines Award to the most outstanding senoir. Thomas I. Hines founded the first Rho Phi Alpha Fraternity in 1958. Students were asked to select a senior student who contributes to the recreation field and shows a sincere interest for fellow students and their professional accomplishments.

Rho Phi Lambda closed the 1985-86 year with our annual picnic. Everyone had a great time eating, playing, and practicing what we teach-recreation!!

Ôfficers for Rho Phi Lambda in Spring 1986 are: President - Dean Starling Vice-President - George McClure Secretary - Elissa Gulley Treasurer - Marty Miller Sergeant-at-Arms - Cathy Freeman Forestry Council Representatives -Dean Starling, Cathy Freeman.





Rec'ers Successful Again

by Joe Nesbitt

The NCSU Recreation Majors Club began the year under the direction of President - Joe Nesbitt, Vice President George McClure, Secretary - Marty Miller, and Treasurer - Steve White. Wendy Parker served as the Forestry Council Representative.

During the course of the year, the club brought together students with diverse interests within the recreation field. We got together and worked towards raising money by sponsoring a car wash. We participated in various intramural sports and were quite successful. The highlights of our year were in sponsoring the R.I.S.E. (Recreation Internship Summer Employment) Conference, co-chaired by Wendy Parker and Susan Saunders and advised by Dr. Beth Wilson, and in co-sponsoring the departmental banquet with Rho Phi Alpha. This year, the R.I.S.E. Conference attracted more than 100 students, many from curricula other than Recreation.

We feel the Recreation Club is a tool for the students' use to perform service projects, sponsor fund raisers, and have lots of fun. The Recreation Club is a means for the Recreation student to leave his or her mark on NCSU's Recreation Resources Administration program.

Dallas Highlights Rec'ers Year

by Beth Gessner

Three students and four faculty members represented NCSU at the National Park and Recreation Association 1985 Congress in Dallas, Texas. Susan Saunders, Lori Zuerscher, Beth Gessner, Drs. Warren, Perdue, and Rea, and Mrs. Kirsch attended the October meetings, workshops, trade show, and parties. The beautiful Dallas setting added to the general excitement at the Convention Center, and everyone enjoyed the break from academia.

The purpose of the trip was to meet with other recreation professionals to discuss trends in the field, trade ideas, and enhance enthusiasm for work at home. The students were also interested in meeting prospective employers, learning about job opportunities, and getting a new perspective on what's happening in their fields of study. In addition, Lori Zuerscher represented the NCSU chapter of Rho Phi Alpha in its merger with students from Rho Phi Lambda to form one national recreation, parks, and leisure honor fraternity, Rho Phi Lambda.

Everyone who attended gathered a great deal of useful information and came home excited about next year's convention. Missing some classes and spending maybe more money than they intended, the students still felt that the knowledge gained and the contacts made far outweighed the costs of the trip. If you were to ask anyone who attended if they would recommend the convention, they would likely answer, "See you in '86!"

By: Mark Winter

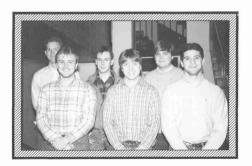
Entering its 34th year, the North Carolina Student Chapter of the Forest Products Research Society is the oldest chapter in the history of the society.

The chapter provides 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 the graduates. Speakers from all areas of the industry provide a wide selection of topics including curved laminates in furniture, investments, and utilizing fuel wood in engines.

One of the first activities of the year was an Open House under the direction of Dr. Wheeler. Members informed other students about careers in the industry. The fall and spring picnics were each a huge success. Many members and faculty came to the day-long events.

Intramural sports experienced an up and down season. The flag football team made the playoffs, but the volleyball team had many tough defeats. Co-rec volleyball and softball teams were featured in the spring semester.

This year's officers are President, Craig Ferry; Vice President, Mark Winter; Secretary, Glen Swink; Treasurer, Tracy Speas; Program Chairman, George Vann; Public Relations, Robert Fitzgerald; Athletic Chairman, Neil O'Quinn; Advisor, Dr. Wheeler.



Rolleo was relocated to the "infamous" Hill Forest. Competitors, friends, and several alumni converged for an excellent day of competition, pig, and bluegrass music. The foundation was laid to encourage the alumni to return and find fellowship with their comrades, those who lived at "the Hill."

Competition began Friday afternoon at Schenck Forest with three events inserted into the competition this year. We hope they will aid us in preparing for Conclave '86, at Texas A&M. The defending champion, junior class, won two of these three events. Mark Pearson won dendrology, and David Cole won dbh estimation. Sophomore Paul Eriksson won the compass and pacing event.

Saturday dawned cool, clear, and crisp. A perfect autumn day. The knife throw opened the competition, and Rod Krutulis began as runaway victor for the senior class. The seniors also won the next two events: Greg Franklin, the axe throw: and Audrey Hockaday, the chain throw, Junior Larry Ridenhour finally snapped the senior string with a top performance in the pole climb. The seniors then recaptured the string with wins by Tim McCracken in the bow saw, Brad McConnell and McCracken in the log rolling event, Amy Klutz and Hockaday in the women's crosscut, and Hockaday and McCracken in the jack and jill crosscut. Scott McGhee temporarily snapped the string again with a win in the pole felling event. Seniors Dave Markowski and Brad McConnell won the men's crosscut, McCracken won the speed chop, and the senior team won the pulpwood toss to close the Sophomore Alex Smith won the point events. tobacco spit, and Scott McGhee huffed and puffed to an entertaining win in the firefight.

Watch out Texas, N.C. State is west-bound and aiming for a first place finish at Conclave '86.

For the second year in a row, the Forestry Club received an invitation to the annual Crabfest sponsored by the Chesapeake Corporation. Competing against two other clubs in an old time logging competition, the club finished a strong third again.

Crablest 1985

bν

The weekend started with the team meeting at Hodges Wood Products Lab at 5 p.m. to leave for West Point, Virginia, the site of Crabfest. The seniors occupied the carryall and the underclassman rode in the van. All the passengers were happy until they reached Petersburg where they were irate, no food yet! After being lost in the city, they were appeased by McDonald's. The night was very social after becoming acquainted with West Virgini's team, several games of Hacky Sack and cards. Afterwards, team members retired for the evening. The next day promised to be exciting! The day of reckoning had come; it was competition time. A parade through town kicked the festival off and the competition started soon after. The Wolfpack stayed close in the running until the very end and did much better this year than last. They decided to use the money donated to the club by The Chesapeake Corporation to purchase new equipment.

Audrey Hockaday

At Crabfest the team competed in jack and jill crosseut, two jill crosseut, axe throwing, speed chopping, pole climbing, pole felling, and bow sawing. The abbreviated Woodsmen team was composed of Clare Dellwo, Audrey Hockaday, Amy Klutta, Michele Spersrud, Todd Carswell, Paul Eriksson, Greg 'Rabbit' Franklin, Eddie Garcia, Tim McCracken, Charles McRae, and Larry Nidenhour. The team was chaperoned by Mr. Bill Smith.



"PAPERMAKERS DO IT BETWEEN THE SHEETS"



by Dana Wintzer

TAPPI is the world's largest professional association and serves the pulp, paper, converting and allied industries. The student chapter of TAPPI at N.C. State Univ. provides students in the Pulp and Paper Science Technology curriculum with a connection to the Pulp and Paper Industry. Any student majoring in Pulp and Paper Technology can become a member. The N.C. State Student Chapter of TAPPI strives to:

1. Increase students' interest in the paper industry and the pulp and paper curriculum;

2. Acquire technical knowledge;

3. Broaden industry experience and establish professional contacts; and

4. Provide social functions outside of class.

Regular meetings were held every two to three weeks featuring guest speakers from the industry. During the Fall Semester, representatives from Accuray, Inc.; Poyry-Bek; Sun Chemical; and Calgon visited the student chapter. The Spring Semester started out with a pizza party and guest speakers visiting from Corn Products.

Plans were made to attend the National TAPPI Convention held in Atlanta, GA, March 1-5. The N.C. State Student Chapter actively attends the annual National Conventions in addition to quarterly Local Sectional Meetings. The chapter also sold T-shirts this year with the logo "Papermakers Do It Between The Sheets" as a means of raising funds.

A special thanks to the faculty and the people in the paper industry who have all helped to make TAPPI a successful organization. The members have a great time during the year and have learned a great deal about the Pulp and Paper Industry. The 1985-86 officers were as follows: President - M. Clark Rhodes; Vice-President - Laurie Schilling; Secretary - Dana Wintzer; Treasurer - Jan Black; Programs Director - Roger Nussman; and Publicity Manager - Jim Caudil. Mu Chapter of Xi Sigma Pi, a national forestry honor fraternity, was established at North Carolina State University on April 17, 1940.

The Chapter's intentions are to honor and encourage those individuals who excel scholastically and have an active interest in the forestry profession. The objectives of the fraternity are to secure and maintain a high standard of scholarship in forestry education, to work for the upbuilding of forestry, and to promote fraternal relations among earnest workers engaged in forestry activities.

During the year, Xi Sigma Pi provided the following services: awarding the "Freshman Axe" to the freshman in the School of Forest Resources maintaining the highest academic excellence, sponsoring a picnic for seniors in the school, recognizing the senior (not in Xi) who has contributed the most to our school during his student career, and maintaining a tutorial service for students in the School of Forest Resources. Behind all of these activities were the 1985-86 officers:

Forester: David Holt Assistant Forester: Roy Cloninger Fiscal-Sec. Agent: Jennifer Scott Ranger: Bill Stayton

Xi Sigma Pi would like to extend a special thanks to "Doc" Steensen, Charlotte Swart, Dr. Rich Braham, and the rest of the faculty for their time and service at all functions.



R.I.S.E. by Wendy Parker

The sixth annual R.I.S.E. (Recreation Internship Summer Employment) Conference was held February 5, 1986 in the Student Center Ballroom. Co-chairpersons were Wendy Parker and Susan Saunders. Dr. Beth Wilson was Faculty Advisor.

Forty-seven agencies throughout North Carolina and the east coast were represented at the conference, interviewing students for full-time and part-time employment, internships, and summer employment. Over 100 students attended the conference. This year, more students from various disciplines other than Recreation Resources Administration attended. This is exactly what we were hoping for!

Students and agencies alike agree that this was a very successful event. Agencies received a very special token representative of the School of Forest Resources, their very own pine seedling. Dr. Beth Wilson received special recognition for her tireless efforts and patience in dealing with the conference and its co-chairs. This special recognition included a pine seedling bouquet.

We were fortunate to have Dean Eric Ellwood present at the conference luncheon. He commented on the uniqueness of the recreation students. He stated that you could always spot a recreation student by the jovial atmosphere that he/she carries. In closing, he stated that only recreation students would make marriage proposals at a formal luncheon.



Thanks to all those who attended and to those who volunteered their time and effort to make this conference a success. To those who did not attend, you missed it, but we hope to see you there next year.

Lumberjack Day By: Tim McCracken

On Saturday, October 19 three Forestry Club members and faculty advisor, Moreland Gueth, participated in the Eighth Annual Western N.C. Championship Lumberjack Day at Burnsville, N.C.

Greg Franklin started the day by keeping a steady hand in the cool mountain air to win the axe throwing contest. In the second event, bowsawing, Tim McCracken sawed through the log just fast enough to beat three State Alumni; Gueth took second. Using a technique learned in Montana, McCracken grabbed another trophy in pole climbing. Pole felling defending champ, Scott Fortner ('85 graduate), was right on target again, hitting the stroke a second straight year, but was beaten by his dad who took less time. McCracken and Gueth teamed up in the next event, log rolling. Despite having never rolled together, they squeeked by two alumni, Marvin Bagwell and Jim Sitts, for the win. The loggers got to show their stuff in the log stacking contest. They proved it takes a few years to be able to operate a loader fast.

The crosscut sawing events started with the women's competition which Audrey Hockaday and Leslie Doss ('85 graduate) easily won. The Jack-D-Jill competition was much closer as Doss and Gueth, the only defending champs to retain their title, beat Hockaday and McCracken by only one half a second. Granville Cox, from Kentucky, teamed up with Gueth to win the men's competition with Franklin and McCracken taking third. With an M-tooth equipped saw, Gueth and Cox had an even more impressive cut to win the open class, with Gueth and McCracken taking third close on the heels of another M-tooth equipped saw.

With only one event remaining, McCracken and Gueth were tied for overall points. Gueth deservingly won the Grand Champion Trophy by winning the log chopping contest. McCracken placed third in the event.

There were also chainsawing competitions and fun events. The weekend had to be considered a big success because everyone had fun, gained valuable experience, and was richly rewarded.

It was good to have Mike Cusimano and his wife and Bob Serino and his wife join the N.C. State alumni and students who compete at Burnsville on a regular basis. We hope to see all these students and alumni next year, plus new faces in the competition. by Larry Ridenhour

As the spring semester came to an end, it brought with it mixed emotions. Everyone was glad to see the semester end, but this also meant that summer camp was not far away. Stories from those who had experienced it before ranged from a summer with Mr. Rogers to Nazi Germany. But I was determined not to let any of these stories influence my attitude toward camp before it had started. The fun all began the morning of May 28.

Many things happened that first day of camp. Everyone showed up at breakfast. Everyone did chores that morning. Everyone was awake during class. Everyone showed up for work crew that night. From that night on, all these things would change. Each week was a new adventure in the world of forestry and its people.

In our initial encounter with Dr. Farrier, he said that we were "stupid", "got in our faces", and called us "dumbasses". He did everything but dance the cucarracha (saved for a later date). We were introduced to Farrier's Famous Fortv-three.

We were set loose into the woods to explore the wonders of surveying, mapping, and cruising (No Deems! You don't hit the chain with the sandvic).

Long nights spent writing papers for Rich (one due every day) were easily compensated by sleeping during class the next morning. Jervis showed us the secrets of the self-grading quiz..."Hell, I don't know - minus 20.."

Fire school. Did we have fire school? Oh yeah, the day it rained.

Roy showed us the proper way to fell a tree, the wrong way, and make it land on your chainsaw. We saw Freddie actually work one day.

But eamp was not just all work and no play. Doe enlightened us on group sing-alongs in the middle of the night. The wildlifers entertained us by letting us beat them in volleyball every day. I even learned that volleyball was a contact sport (Sorry about your shoulder, Stan). We played sneak-up on Tracy while he was asleepin the bus).

Living out in the woods all summer did seem to lower some standards followed in the city. My pet beaver did not go over well with my cabin-mates (so what if it had been dead a week or sol. Taking a shower every day was extended to every week or so. There was no need to change clothes every day or wear certain articles of underwear, right Jill? We were kept up-to-date with world events through John's "library" material.

As the last bug was being pinned (kill them first, Petruncio), everyone looked forward to the last week in the mountains; that is, until it rained every day. The rain did add a little excitement to the hike down Harper's Creek and Roy's waterslide down the rocks, the pickup truck ride to the cable logging is the "breath-taking" bus ride down the logging road, and the simply "Mahvelous" view from the top of Mt. Mitchell.

By the end of this nine-week adventure, I think we had actually learned a little about forestry. But even more important, we had made new friends, gotten to know each other better, and learned to deal with other people. Yes, summer camp obviously falls into the category of one of those things you like-after if sover.





"The wisest mind hath something yet to learn."

-George Santayana





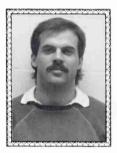




FOREST RESOURCES SENIORS

"Reality is something everyone is faced with sometime during their life."

Recreation Resources Administration





DARRYL CREGGER Hometown - Winston Salem, N.C.

CATHY (ADKINS) FREEMAN Hometown - Concord, N.C.

Recreation Club National Recreation and Parks Association Rho Phi Alpha



and the start of the first of t



BETH GESSNER Hometown - Raleigh, N.C.

Recreation Club

PAULETTE IRVIN Hometown - Frederick, M.D.

Recreation Club - Secretary R.I.S.E. Co-chairperson



Source of the second se



LAURA KENNAUGH Hometown - Huntington, N.Y.

GEORGE McCLURE Hometown - Mooresville, N.C.

Vice President - Recreation Club Vice President - Rho Phi Alpha



WENDY PARKER Hometown - Pfafftown, N.C.

Recreation Club Forestry Council R.I.S.E. Co-chair PI-NE-TUM Business Manager Union Activities Board

BRADLEY M. PIERCE Hometown - North Canton, CT

Recreation Club Sailboard Club





SARAH POMERANZ Hometown - Sanford, N.C.

Recreation Club Farmhouse Little Sister

JOHN STYRON Hometown - Marion, VA

Recreation Club





CINDY SUMMER Hometown - Cherryville, N.C.

Rho Phi Alpha Recreation Club

JENNIE WADE Hometown - Thomasville, N.C.

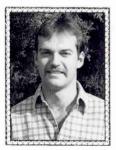
STEVE WHITE Hometown - Forest City, N.C.

Treasurer - Recreation Club

Forestry

IVAN BRASWELL (YEO) Hometown - Raleigh, N.C.

President, Program Chairman, Sergeant-at-Arms -Forestry Club Wildlife Club Xi Sigma Pi S.A.F.





ROY CLONINGER Hometown - Bessemer City, N.C.

FPRS Forestry Council Goodwin Work Scholarship President - Forestry Club Vice Chairman - S.A.F. Xi Sigma Pi

JAY CROWDER Hometown - South Hill, VA

Co-op Brunswick Ski Club











GREG FRANKLIN Hometown - Sylva, N.C.

Forestry Club

NASH HARDY Hometown - Winston Salem, N.C.

Tree Job Chairman, Equipment Chairman, Woodsmen's Team -Forestry Club



AUDREY HOCKADAY Hometown - Roanoke Rapids

Vice President, Secretary, Treasurer, Programs Director - Forestry Club S.A.F. President - Forest Resources Council Alpha Gamma Rho Rhomate President - Executive Round Table WoodSmen's Team Work Crew

MICHAEL HUSTER Hometown - Cincinnati, Ohio

AMY KLUTZ Hometown - Mount Pleasant, N.C.

Forestry Club S.A.F. Xi Sigma Pi Co-op Student

ROD KRUTULIS

Forestry Club SAF









LOUIS C. LAWRENCE, JR. Hometown - Sanford, N.C.

Sergeant-at-Arms - Forestry Club

TIM McCRACKEN Hometown - Siler City, N.C.

S.A.F. Forestry Club Conclave Chair-1984 National Student Exchange -University of Montana



Hometown - Cali, Columbia Forestry Club

JOSE L. ROMERO

TODD SMITH Hometown - Burlington, N.C.

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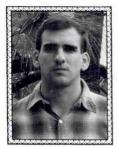


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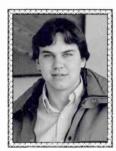
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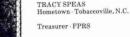


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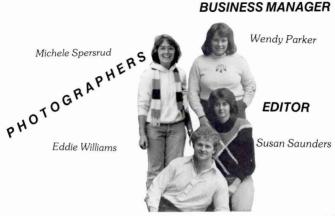
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"As soon as the rush is over, I'm going to have a nervous breakdown...

I worked for it, I owe it to myself, and NOBODY is going to deprive me of it."

-Anonymous Would you join me in a little breakdown

PI-NE-TUM STAFF



"The reward of a thing well done is to have done it."

-Ralph Waldo Emerson

Editor's Note

I would like to thank all of you for your cooperation and help this year. Putting this journal together is not an easy task, but, because of your help, it was a lot easier than expected.

There are a few special people that deserve a lot of credit for the production of this journal. They are the members of the PLAE-TUM staff. To you, Wendy, Eddie, and Michelle, I give special thanks. Without you, I would have been a lot loonier than I already amilf you can believe that).

Thanks, guys, for making my last adventure and year at State the most eventful and the most memorable!!

Love, Susan

The PI-NE-TUM staff would like to extend their gratitude to the following people for their support, patience, and helping hands.

> Dr. L.C. Saylor Charlotte Swart Gary Blank The Forestry Council Scott Bertness & University Graphics The Technician Editors Larry Jervis Nancy Roberts Cathy Freeman Ellis Ledford Alan Emmons Larry Ridenhour Dr. Charles Davey Dr. Douglas Frederick Penny Handlin Tony Mebane Jeff Thornton Cindy Lee Geri Klisiewecz

Without the help of these individuals, the publication of this journal would have been much more difficult.



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-John Cougar Mellencamp.1985

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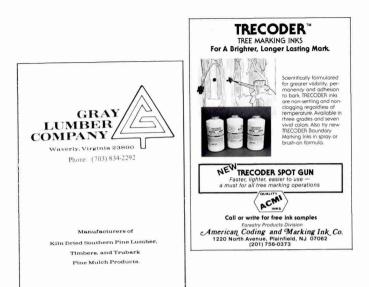
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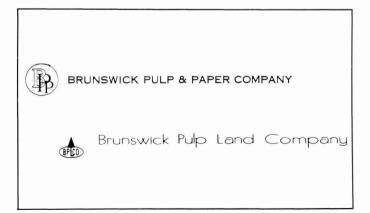
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