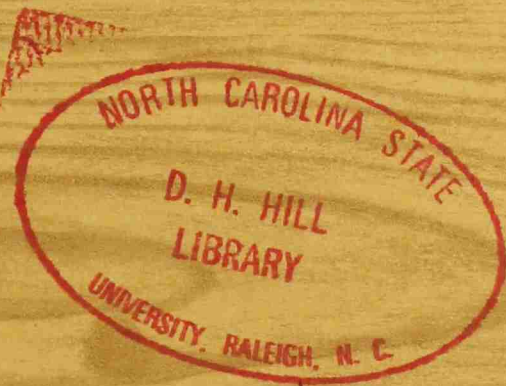


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John Eller and Mark Leblanc, two of our co-op students, measure a tree in a progeny study.

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Brunswick Pulp Land Company thinks so, or it wouldn't have hired several of its graduates.

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1980**

Journal of the School of Forest Resources
Forest Management • Recreation Resources Administration
Wood Science and Technology • Pulp and Paper Technology

N. C. STATE UNIVERSITY
RALEIGH, NORTH CAROLINA
Volume XLVI
1980

FOREST RESOURCES



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Well, Denise, where's that picture go? I need more pictures! Who was supposed to do that article! Have they paid for that ad yet?

Who cares, it's finished! Thanks to all those who helped, especially Mrs. Liles and Darnell.

Thanks also to:

Contributing photographers

Gary Barefoot

Beth Hains

Lynn Branburg

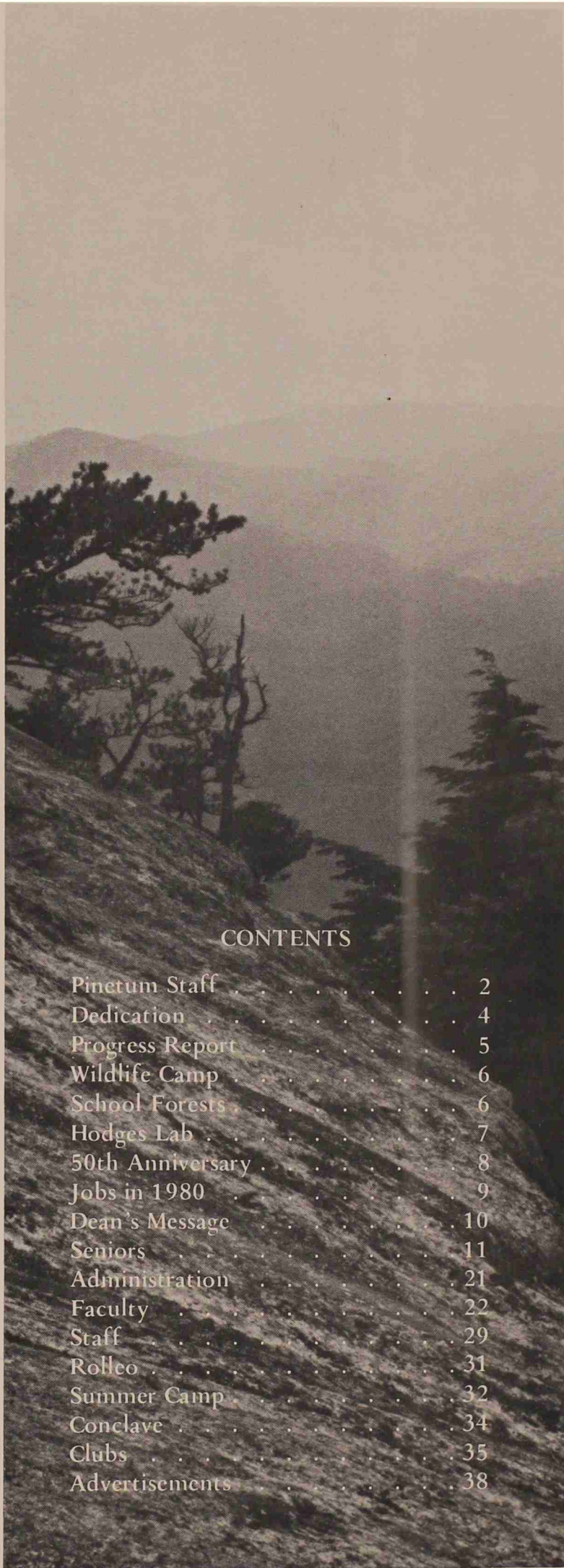
Mark Smith

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Lesley Harvey

Brewster Carroll

Good luck next year, Ruth and Brewster.



CONTENTS

Pinetum Staff	2
Dedication	4
Progress Report	5
Wildlife Camp	6
School Forests	6
Hodges Lab	7
50th Anniversary	8
Jobs in 1980	9
Dean's Message	10
Seniors	11
Administration	21
Faculty	22
Staff	29
Rolleo	31
Summer Camp	32
Conclave	34
Clubs	35
Advertisements	38



*To a forester is like a humpback to a
giver him support, but the life it
wants to use.*
-Rigel & Clapton
with a nod to a forester

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DEDICATION

J. W. JOHNSON
1925-1979

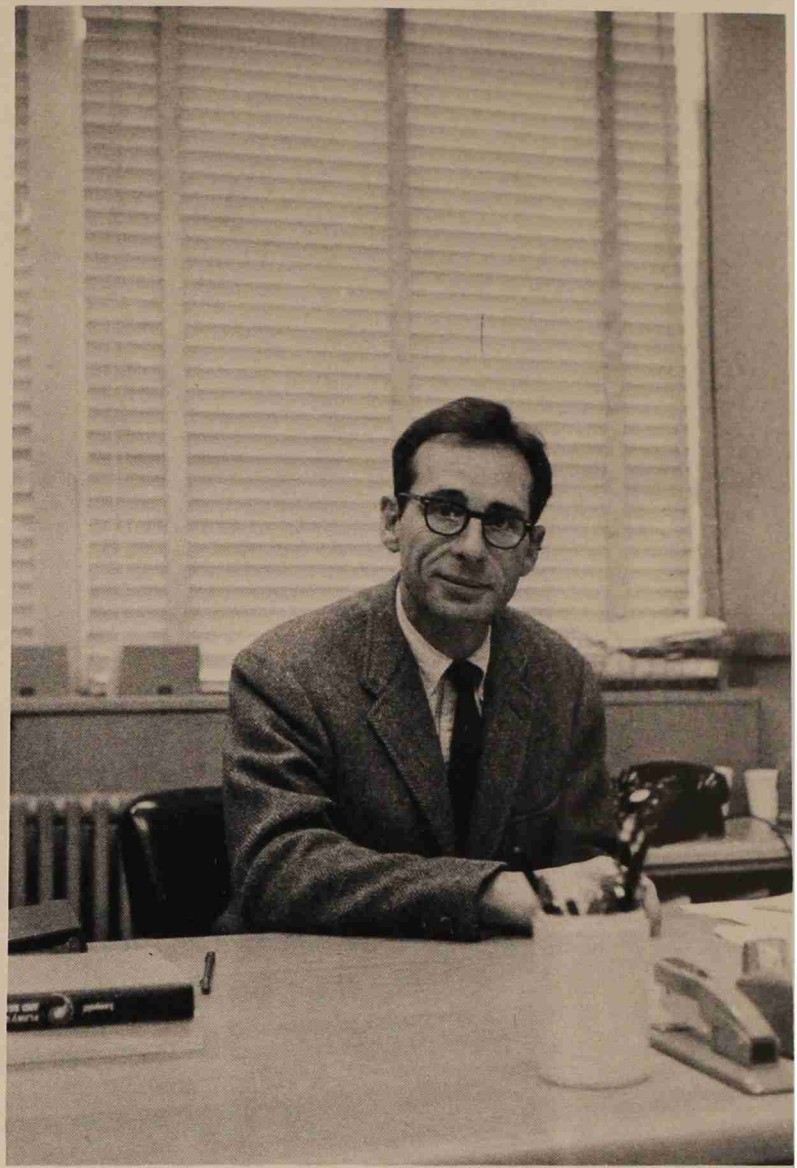
By R. C. Bryant

The tragic death of "Bill" Johnson during his participation in the grand master's division of the East Coast Cross Country Classic at Carter-Finley stadium was a major loss to the School of Forest Resources and the forestry profession. His outstanding performance as administrator, professional forester, scholar, and teacher have won him wide acclaim among his colleagues and students. Dean Larson of Syracuse University has expressed so well Bill's attributes:

"Dr. Johnson's superior capabilities as a teacher may be attributed in part to his breadth of experience in applied forestry and research, and to his deep sense of professional commitment and service. These serve to lend a degree of practicality and relevance to his instructional efforts that appeals particularly to students.

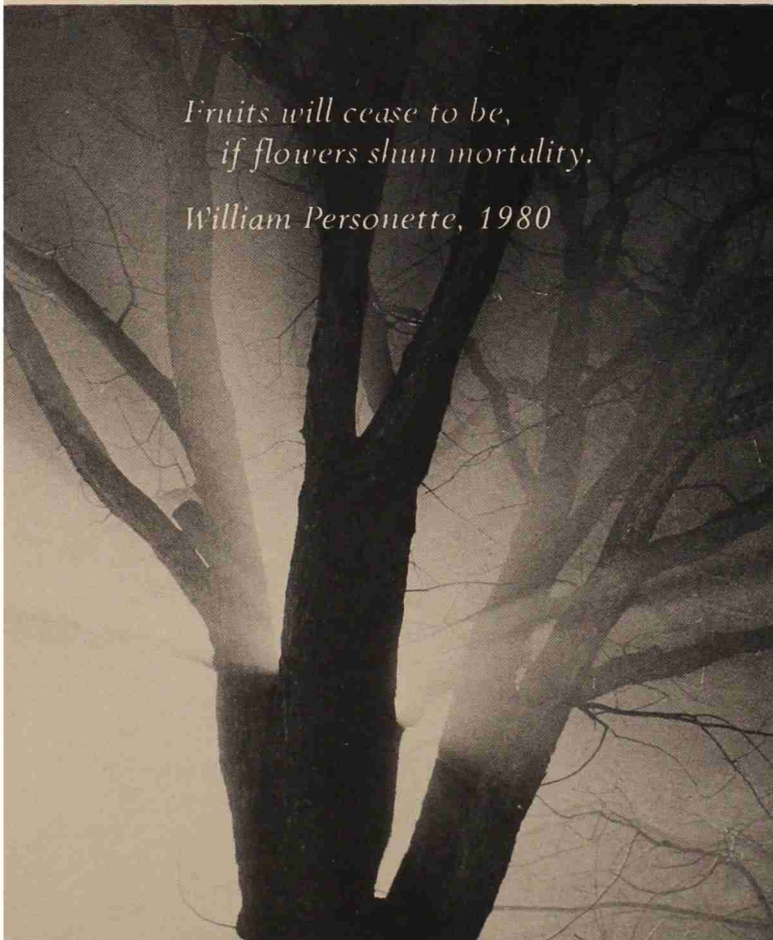
To a large extent, however, Dr. Johnson's success as a teacher stems from his personal attributes. His warm and friendly personality, his fine sense of humour, his courteous and gentlemanly behaviour both within and outside the classroom, his fairness, his sensitivity to the feelings and needs of others, his abounding enthusiasm, and his articulate command of the language—these qualities all serve to facilitate communication with his students and to engender their affection, admiration, and respect."

No matter what the size of his classes, Bill made a point of quickly learning each student's name. Shortly after a semester began he could greet each by his first name, and one could see the pleasure and warmth students radiated by this recognition. Let me quote Bill himself.



*Fruits will cease to be,
if flowers shun mortality.*

William Personette, 1980



"... I make heavy use of anecdotes that, hopefully, tie together my background with the learning objectives of the students. These two things—getting to know the students in my classes and presenting material as much as possible from a personal standpoint—are only devices, of course. They seem to work positively for me, and I consider them a key part of my working philosophy."

He had an abiding interest in the welfare and education of students, and they sought his advice and help not only as undergraduates but as professionals long after they had left the university.

He was never too busy to stop and listen.

Bill served the forestry profession throughout his career. His contributions to the Society of American Foresters, Tappi, the forest industries, and individuals are a matter of record and need not be repeated here. Suffice it to say that he was admired and respected for his administrative capabilities, his research ability, and his professional accomplishments.

And then there was the man. A devoted family man, a staunch supporter of his church, a singer who graced many choirs and oratorios, a raconteur without peer, a fine wing shot in the field, a defender and expert of southern cooking, a reaper of wild berries and fruits from which came mouth-watering jams and jellies, and most of all, and especially, a warm and dear friend who never hesitated to help when asked. He was a scholar and a fine gentleman who will be sorely missed.

REPORT OF PROGRESS

By Eric L. Ellwood

The year 1979-80 has been one of progress but also one tinged with tragedy—the untimely death of highly respected J. W. (Bill) Johnson only a few months after he was appointed department head of forestry. A gentleman and scholar with especial sensitivity towards students and their needs, he will be missed by many. As a tribute to him a fund has been initiated with contributions from students, friends and colleagues. The J. W. Johnson Memorial Fund will be used to further the professional development of selected undergraduate forestry students. Dr. Arthur Cooper, former associate department head, was appointed department head to succeed Dr. Johnson.

Highlights of the year included celebration of the 50th Anniversary of the School and the 25th Anniversary of the Pulp and Paper Science and Technology program. The School anniversary program, which attracted some 250 participants, started with a forum on forest resources education, and an awards banquet to recognize distinguished alumni; Robert B. Jordan, III, Barry Sanford Tindall, and R. Scott Wallinger, and concluded with departmental alumni meetings followed by rooting for the N. C. State football team at Carter Stadium.

A feature of the Pulp and Paper Anniversary meeting was the announcement of the first 9 endowments contributed by companies and supporters for scholarships to support outstanding pulp and paper students. A well-kept secret until the announcement was the naming of one of the endowments in honor of Robert G. Hitchings, in-charge of the undergraduate curriculum. This outstanding distinction was organized by and contributed to by his many admiring past students and colleagues.

Another highlight was the organization and operation by Dr. Richard Lancia of the first summer camp (held at the Slocum Camp) for students in the wildlife biology program now jointly conducted by the Schools of Forest Resources and Agriculture and Life Sciences.

In the category of retirements, three more forestry faculty stalwarts made their entrance to the ranks of professor emeritus. These were Professor Fred Barkalow and Professor Ralph Bryant, and on a half-time retirement basis, Dr. Bruce Zobel. The contributions made to the School's programs and to their respective professions by each of these faculty extend far beyond what could be chronicled in this brief report. But without them the School and the students would have been much the poorer—we will miss them.

Also, Visiting Professor Robert Vokes retired from his responsibility for teaching the course on Management Development which he initiated 5 years ago and which has become one of the outstanding courses of its category. Mr. Robert Demartini (ex-Huyck Corporation) generously agreed to conduct the course starting this spring.

In research a new program is being initiated on woodlot management with new funding from the state. Dr. Carlyle Franklin joined the faculty in January to head up this new program. He will be joined by Dr. Lester Holley when he returns from his one-year assignment with the N. C. Division of Forestry to work on the economics of woodlot forestry.

The newly established Southern Forest Research Center entered its second year of operation with an expanded research program and with enthusiastic support of six forest

products industries and twice that number supporting the special project on pine tissue culture.

The Environmental Protection Agency has established a cooperative agreement with NCSU for coordination and integration of acid precipitation research in various institutions in the U. S. and Canada. Ellis Cowling, our Associate Dean for Research, is serving as Director for this important program.

Although diminished in manpower from losses of extension specialists, the extension program further extended its outreach program by adding to the number of area specialists and its is intended to add more when funds become available.

Enrollment and graduation statistics for 1978-79 are as follows:

	Under-graduate	M.S.	Ph.D.
Conservation	42		
Forestry	281	31	21
Natural Resource Recreation Mgt.	6		
Recreation Resources Administration	219	25	
Pulp and Paper Science & Technology	173		
Wood Science & Technology	63	17	15
Unclassified	1	—	—
TOTAL	785	73	36

Degrees awarded in 1978-79 were:

Bachelor	190
Masters	28
Doctorate	5
TOTAL	223

Faculty and staff changes and recognitions are as follows: New additions to the Wood and Paper Science faculty were Associate Professors Richard H. Cornell (pulp and paper-making processes), and Thomas W. Joyce (environmental engineering); Ms. Miranda Chua and James Barefoot were appointed research assistants, and Hiroshi Araki, David Eaton and Shuji Hosoya were appointed research associates.

In the Department of Forestry, Robert I. Bruck was appointed Assistant Professor of Forestry and Plant Pathology; Roger Powell, Assistant Professor of Forestry and Zoology; W. H. Haddock and Steven P. Kalisz as research associates; and Robert Towe, research assistant.

David Culkin was appointed an Instructor in the Department of Recreation Resources Administration, and Candace Goode and Henry Hammond as Visiting Instructors.

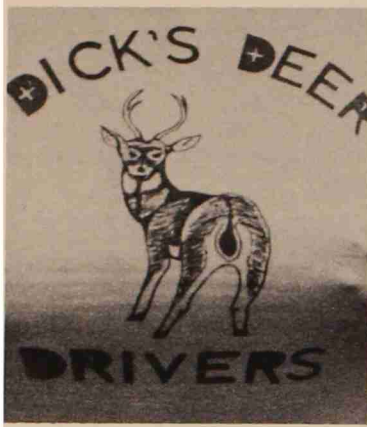
Dr. Arthur W. Cooper was named President of the N. C. Academy of Science and is President-elect of Ecological Society of America.

Dr. Ellis Cowling received the Distinguished Science Award by the southern Forest Disease Workshop.

Professor Robert G. Hitchings was selected as a TAPPI Fellow.

Dr. Michael P. Levi received the Outstanding Extension Service Award.

Dr. Eric Ellwood received the Governor's Forestry Conservation Award at the Wildlife Federation's Awards Banquet.



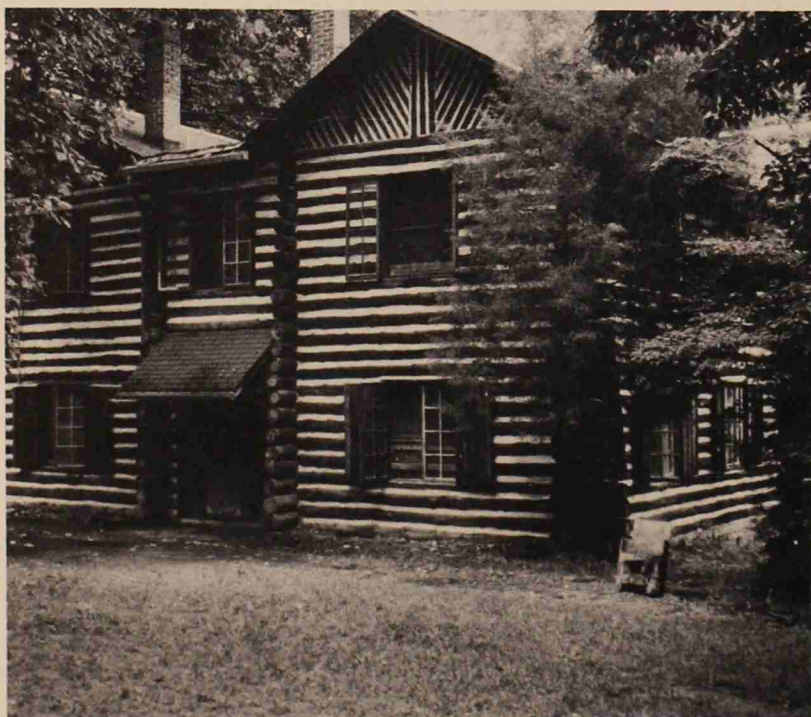
WILDLIFE AT CAMP SLOCUM!

By Dr. R. A. Lancia

For five weeks, the woods around Camp George K. Slocum on the Hill Forest were alive with cries like: "How many deer did ya see?" or "Is this wildlife habitat?"—wildlifers had invaded the woods! Twelve students were enrolled this summer in the fledgling Fisheries and Wildlife Summer Training Program that is a new requirement in the recently revised wildlife curriculum at State. The revised program is now jointly administered by the Forestry and Zoology Departments.

Participants in the summer program were involved with hands-on application of wildlife management skills and habitat evaluation techniques. Some of these activities included vegetation and habitat analysis, small and large mammal population estimation, surveying and mapping, dendrology and herbaceous plant identification, forest mensuration and silviculture, and aquatic studies. At the end of the session, students also spent one week in the mountains of western North Carolina and visited the Great Smokey Mountains National Park, Coweeta Hydrologic Laboratory, the Pisgah National Forest and other areas. All in all, the students and faculty felt the summer was an experience that would be long remembered.

The wildlife summer camp is directed by Dr. Richard A. Lancia. Student aides included: Milo Crawford, Gary Grubbs, and Scott Smearman. Dr. Don "Doc" Steensen, and Larry Jervis were active participants.



THE SCHOOL FORESTS

By Larry Jervis

The School's four Piedmont forest properties continue to be managed for their contribution to the teaching and research programs. The Hill Forest camp was used for the first class of wildlife biology students this summer, following the usual 10-week forestry camp session. While their deer drives were fruitless, they reported no scarcity of snakes, chiggers, and other such "wildlife". Some 50 acres were planted on the forest this spring, including a test of European Alder clones for possible use in energy plantations. Over 40 forestry alumni toured the Hill Forest in September as part of the School's 50th Anniversary celebration, and saw the fruits of some of their own labor there.

The Schenck Forest, which has always been heavily used for afternoon laboratory exercises because of its proximity to campus, is feeling increasing pressure as Raleigh grows westward. In the last few years some 5 acres of the periphery of the forest have been lost to road building and sewer line projects and a flood control reservoir. There is increasing recreational use of the property by the university community and the general public for hiking and picnicking. Approximately two miles of foot trails now traverse the forest including a 1¼ mile segment of the Raleigh Greenway Trail opened last year. We continue to view the Schenck as a working forest where we can demonstrate both to our students and the public the multiple benefits which can be derived from properly managed forest lands. The job of developing an integrated management system for the timber, recreation, wildlife, and scenic resources on this 245 acre property is truly a challenge.

The forestry seniors are again working on the Goodwin Forest this spring as part of their FOR 406 course. This year they are involved in a detailed quantitative analysis of the growing stock, and management planning exercise, using last year's inventory as a base. Thirty acres were planted on the Goodwin this spring, and it continues to be a self-supporting "small forest". We hope that some of the less capital intensive silvicultural measures being used there serve as useful examples of low-cost alternatives to small private landowners in the county.

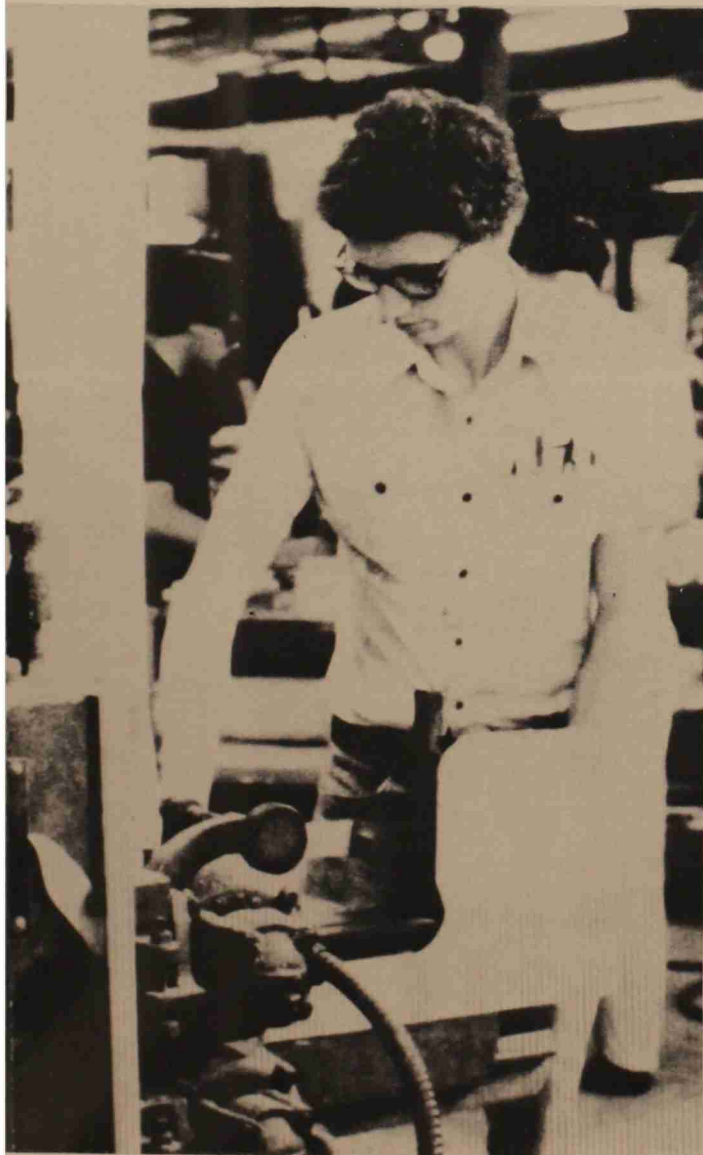
THE HODGES WOOD PRODUCTS LABORATORY

By Robert C. Gilmore, Superintendent
Wood Products Laboratory and Associate Professor

The Wood Science and Technology program is fortunate in having one of the finest facilities of its kind in the United States. The Brandon P. Hodges Laboratory was completed in 1959 to provide the necessary facilities for undergraduate and graduate training in wood technology and to provide a facility which was capable of serving the wood-using industries of North Carolina through research and development activities and problem solving.

The work of the Laboratory has broadened so such an extent in recent years that our activities extend to international efforts. For example, we have produced veneer and plywood from 22 species shipped in from Brazil. Strength tests and drying studies were performed on several species from Surinam, and machining tests were conducted on six species from several other South American countries. Finnish plywood was tested to compare its performance with our own Douglas fir plywood. Imported products from Liberia (plywood and lumber) and Hong Kong (furniture parts) have been tested.

On the home front we have been called upon repeatedly to examine the properties and performance of home building products such as lumber, construction plywood, decorative plywood, particleboard, fiberboards and siding materials. The strength properties of the fast-growth pines developed



by our forest management colleagues are currently being studied to see how they differ from the slower growth material that we have worked with for years. In the processing of virtually every wood product, moisture content control is very important and for that reason a considerable portion of the work by the Laboratory staff is devoted to the drying of wood.

The busiest time for Laboratory activities is May and June, when the five-week summer practicum is underway. The wood technology and furniture students come together for an intensive practical course which centers around the manufacture of a simple piece of furniture. This past summer we had an enrollment of 64 students (please note—that's 640 fingers) involved in processing rough lumber through all of the drying, machining, gluing and finishing operations.

A measure of the value of our graduates to the wood industry is the acknowledgement we receive through contributions to our Laboratory facilities. In the past year, we have received some outstanding equipment donations which are listed below.

1. A new two-head wide belt sander/abrasive planer from Timesavers valued at \$35,000.
2. A new surfacer equipped with a helical cutterhead for reduced noise levels from Newman Machines and valued at \$32,000.
3. A new edge sander from Crouch Machinery valued at \$2,000.
4. A new cut-off saw from C. O. Porter Company valued at \$8,000.
5. A new cutterhead and knife grinder from United Tool Company valued at \$8,000.
6. A used facer from Burlington Furniture valued at \$8,000.
7. A used double miter saw from Burlington Furniture valued at \$2,000.

With these welcome additions to our facilities and with additional technical assistants to our staff, we hope to provide even greater assistance to our educational program and to the wood industry.

FIFTY YEARS OF GROWTH AND SERVICE MARKED BY THE SCHOOL OF FOREST RESOURCES

By L. C. Saylor



In recognition of providing 50 years of educational programs and other services, The School of Forest Resources celebrated its Golden Anniversary on September 14-15, 1979. The school, which is the designated successor of the Biltmore Forest School—America's first, began humbly in 1929 with one curriculum (forestry), six faculty and 72 students, and grew to include six curricula, 72 faculty and nearly 900 students in 1979.

With some 250 of its alumni and guests on campus to participate in the celebration, the school sponsored a number of events. Festivities began with an afternoon symposium on Natural Resource Management and Education. The keynote speaker was Dr. Chester O. McCorkle, former vice president of the University of California, who was followed by respondents representing major departmental areas of the school. These included Dr. Bruce J. Zobel, former director of the North Carolina State University Industrial Tree Improvement Cooperative, Barry S. Tindall, Director of Public Affairs for the National Recreation and Park Association, and Arthur Nelson, Vice President for Industry Affairs of Champion International Timberlands.

The symposium was followed in the evening with an Anniversary Dinner which was highlighted by the presentation of awards to three distinguished alumni—Robert B. Jordan III (1954), President of Jordan Lumber and Supply, Inc.; Barry S. Tindall (1967), Director of Public Affairs for the National Recreation and Park Association; R. Scott Wallinger (1960), Manager of the Timberlands Division of Westvaco Corporation. Only two others have received the school's Distinguished Alumnus Award (Stephen G. Boyce and Walton R. Smith).

On the second day of celebration, departments provided separate programs for graduates of their respective programs. Festivities concluded that evening with the viewing of the NCSU-VPI football game.

Important events of the first half century were recorded as a part of the anniversary celebration in a document entitled, "A History of the School of Forest Resources 1929-1979." Chapters were written for the four major departments of the school by the following individuals who had long and distinguished careers at North Carolina State University; Forestry—William D. Miller; Recreation Resources Administration—Thomas I. Hines; Wood and Paper Science—Roy M. Carter and Robert G. Hitchings; Extension Forest Resources—Walter M. Keller. Highlights of the major events recorded in the publication are listed below.

Highlights of Major Events

- 1929 Dr. J. V. Hofmann hired as Director of the newly established Department of Forestry in the School of Agriculture. Forestry program begins in Ricks Hall with 72 students. North Carolina Forestry Foundation organized.
- 1930 George Watts Hill donates 378 acres of land in Durham County, a nucleus for the Hill Forest which reached 2,250 acres by 1979.
- 1931 Department of Forestry becomes Division of Forestry, School of Agriculture and Forestry.
- 1934 Forestry Foundation through the leadership of Dr. Hofmann purchased 83,000 acres of land in Jones and Onslow Counties. Area later named Hofmann Forest.
- 1937 Richlands Creek Forest (250 acres) acquired.
- 1944 Hope Valley Forest (1,750 acres) acquired.
- 1947 Creation of the Department of Industrial and Rural Recreation to be administered by the Division of Teacher Education.
- 1948 Dr. Hofmann retires as Director of Division of Forestry and is succeeded by Dr. R. J. Preston.
- 1949 Wood Technology curriculum initiated. Wood Products Laboratory set up in NYA building on Western Boulevard.
- 1950 Division of Forestry becomes School of Forestry.
- 1953 School moves to Kilgore Hall. Wood Products Laboratory established in basement.
- 1955 Pulp and Paper curriculum initiated. Pulp and Paper Foundation organized. Richlands Creek Forest renamed the Carl Alwin Schenck Memorial Forest; Dr. Schenck dies and ashes scattered in forest.
- 1957 Reuben B. Robertson Pulp and Paper Laboratory dedicated.
- 1959 Faculty and curricula reorganized into three departments:
 - Forest Management
 - Wood Products
 - Extension Forestry
- 1960 Brandon P. Hodges Wood Science and Technology Laboratory dedicated.
- 1967 Department of Industrial and Rural Recreation transferred from School of Education to School of Forestry. The 1,120 acre Goodwin Forest in Moore County bequeathed to the School by James L. Goodwin.
- 1968 School and Departments renamed to: School of Forest Resources, Department of Forestry, Department of Recreation Resources Administration, Department of Wood and Paper Science, and Department of Extension Forest Resources. New curriculum in Conservation is established to be jointly administered by the School of Agriculture and Life Sciences and School of Forest Resources.
- 1970 Biltmore Hall dedicated, bringing School together in three adjacent buildings.
- 1971 Dean R. J. Preston retires and is succeeded by Dr. E. L. Ellwood.
- 1973 First women graduated from Department of Forestry.
- 1977 Department of Recreation Resources Administration is first university department in the United States to be accredited by National Recreation and Park Association. School of Forest Resources is given responsibility for administering jointly all phases of the Wildlife Program with the School of Agriculture and Life Sciences.
- 1978 A new industry—university research venture, The Southern Forest Research Center, is established to conduct multidisciplinary research on southern forest productivity.
- 1979 50th Anniversary of School of Forest Resources is celebrated. Total undergraduate and graduate student enrollment which peaked in 1975 at 1,044 is now 890.

JOB OPPORTUNITIES FOR GRADUATES OF SFR IN 1980

By Dr. Tom V. Gemmer

The School of Forest Resources provides educational opportunities in five areas: Conservation (CON), Forestry (FOR), Recreation Resources Administration (RRA), Pulp and Paper Science and Technology (PPT), and Wood Science and Technology (WST). The job opportunities and average starting salaries vary widely among graduates of these five curricula.



Even though it is illegal to discriminate on the basis of sex, race, age, and other classification systems, many employers are concentrating their recruiting efforts on minorities and women in an effort to further diversify their employee force. This is especially true in areas which have traditionally been dominated by males. It is perfectly all right to consider potential employees based on grades, type of degree, amount of experience, etc., and many employers do so. As always, graduates with excellent grade point averages will usually get job offers before those who just got by.

The current economic slow-down (recession?) is not the best climate for job seekers. Many companies and agencies have declared a freeze on hiring in an effort to reduce expenses. Housing starts, a common bellwether of the nation's economy, were down 13% at the time of this writing.

However, competent, well educated people will always be in demand. If you do not receive the type of offer you had hoped for, do not despair. Persistence almost always pays off. Stay in close touch with your department placement person. Many employers find themselves in need of entry level personnel several months after they originally thought they had filled their quota.

Conservation students may have difficulty because of their more general program of study. Usually about 50% of these people find work with the Soil Conservation Service or with municipal health or pollution oriented agencies.

Of the approximately 70 forestry students who will graduate this May, 50 to 55 will probably find forestry related jobs by August. Others will go on for other undergraduate or for advanced degrees. Some will have to be satisfied with jobs in areas not related to forestry, or with temporary jobs.

It appears that the U. S. Forest Service registers for hiring permanent foresters will not be open in the near future. A possibility is to accept a temporary assignment with the intent of applying for permanent positions as they occur. The N. C. Division of Forestry is currently bound by the hiring freeze imposed by the governor on all state agencies. Whether that situation will thaw in time for you May graduates is anybody's guess right now. The average starting salary for foresters is between \$12,000 and \$13,000.

RRA graduates may face a slightly improved situation over last year's job market. However, jobs still will not be plentiful and competition for openings will be great. Most jobs are in the local public sector such as city and county park and recreation agencies. Some people will find employment with organizations like the YMCA or Girl Scouts. We estimate that slightly over 50% of the RRA graduates will find work in recreation by the end of 1980.

The WST and PPT graduates will, as in the past, be in demand and will have little difficulty finding suitable employment. Average starting salaries are higher for people in these curricula. Wood tech graduates average approximately \$14,000 to start, and pulp and paper scientists and technicians average a whopping \$20,000+ to start. You people in RRA, FOR and CON did not expect to get rich in your chosen occupations anyway, did you?

All of the departments of the School of Forest Resources have excellent reputations on a national and even international level. Because of this, our graduates are sought after more vigorously than those of other schools. While your job opportunities may be more limited than you would prefer, you can congratulate yourself for choosing the school which will provide you with the best possible situation for finding employment.

DEAN'S MESSAGE TO THE STUDENTS

Of increasing concern are the disturbing facts that many of the major indicators of the USA's economic vitality and quality of life have been sliding, compared to other developed nations of the world. Whereas twenty years ago the USA ranked first in most criteria of productivity and wealth, U. S. growth in productivity now ranks last amongst the industrialized nations. U. S. currency has slipped in relation to other currencies (we pay more dollars for imported goods than we used to), and with some notable exceptions we are being "out engineered" across a broad front of industrial and consumer goods by other countries, both with regard to conceptual design and quality control (USA spends 2½ times as much on imported hardware and goods than on imported oil).

On the home front inflation is jeopardizing the opportunity for many young American families to own their own homes, and is threatening the soundness of the social security system.

As a society we seem to have difficulty in reordering our priorities to adjust to the substantially higher costs of energy and its limited future sources of energy (i.e., getting our act together).

And overall, many individuals increasingly feel that we are, as a nation, losing our flexibility and opportunity to get things done because of over development of regulatory approaches by government and some loss in the will to work.

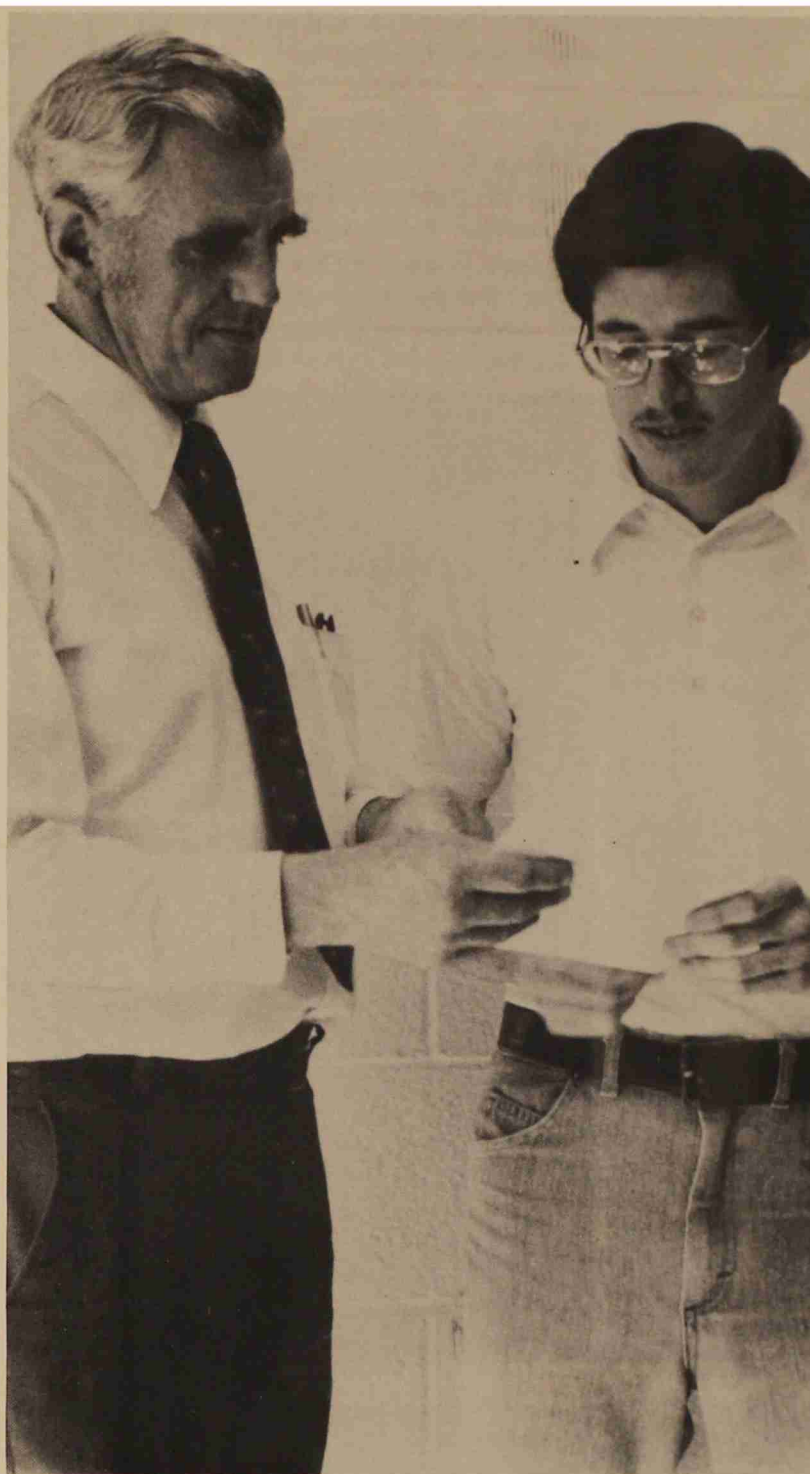
These trends depict a rather grim and unpalatable scenario for the future. We as a nation must display the wisdom to ascertain the underlying causes and strengthen our will to arrest the downward trends.

The reasons for the relative decline of the USA's position have been variously ascribed to inflation due to government overspending, the disappearance of abundant low cost energy sources, redirection of capital and research spending from production technology and innovation towards environmental and safety matters; impersonalization of production, inefficiencies and constraints resulting from overemphasis on regulatory policies.

There is little question about the need to ensure that we do not seriously and irreversibly damage our living environment in the process of life for our citizens and for others outside of the USA. And undoubtedly we don't need to flood our homes with a great array of material goods to live the good life.

There are as many suggested cures as there are ills, such as: reduction of government spending, in particularly programs which are non- or anti-productive, provision of greater incentives for industry to modernize and undertake new ventures, re-emphasis of basic research (which has suffered in favor of shorter term problem solving or applied research), de-emphasis of the regulatory approach in favor of incentive approaches, and development of greater self-sufficiency in energy production, etc.

Unquestionably, there is no one solution to maintaining and even enhancing the quality of life for Americans. But it is apparent that one of the essential keystones to the preservation of the nation's welfare is how well we manage our natural resources—the soil, the flora and fauna on it, the minerals under it, the water in it and the air surrounding it. A terribly important and elementary fact which is frequently lost sight of amid the sophistication of modern society is that these resources are the ultimate wellspring of all of the



wealth and welfare enjoyed by society. The history of nations is replete with examples of the downfall of nations that are coincident with the disappearance or abuse of their natural resources.

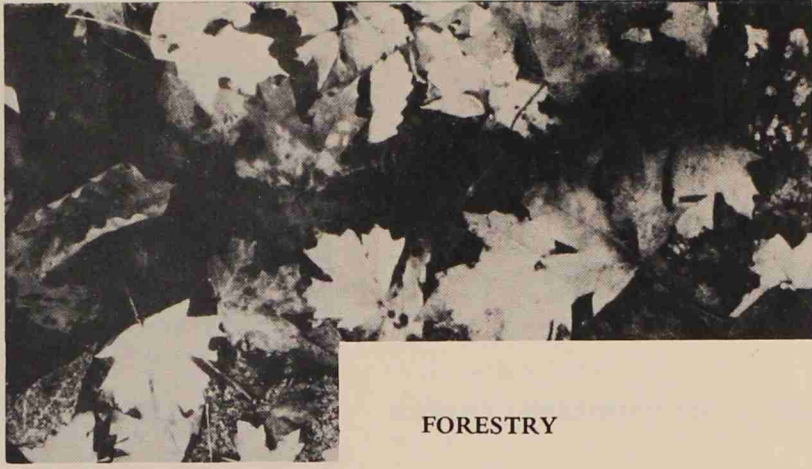
In the USA although we are in short supply of several critical minerals, we do rank high amongst nations in the amount and variety of natural resources, particularly in arable soils, forests and abundant water. It is my belief that how wisely we utilize those resources over the long term to provide not only our needs, but also those for many other countries, will determine the quality of life in the USA for the decades ahead.

Those of you who are graduating from the School of Forest Resources have special knowledge about natural resources and concurrently a special responsibility to ensure the wisest use of these resources.

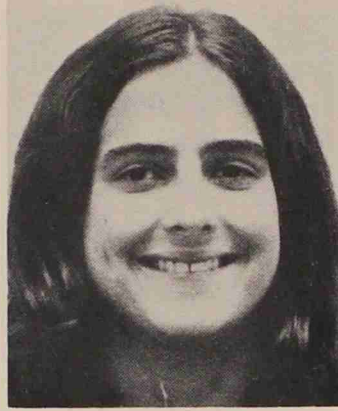
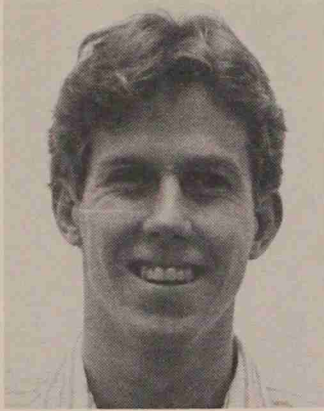
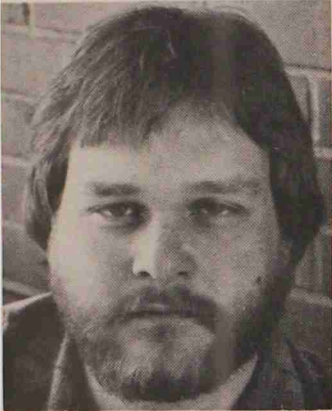
Go forth and contribute your effort to stabilizing the quality of life—you have what it takes to do it.

Eric L. Ellwood

SENIORS



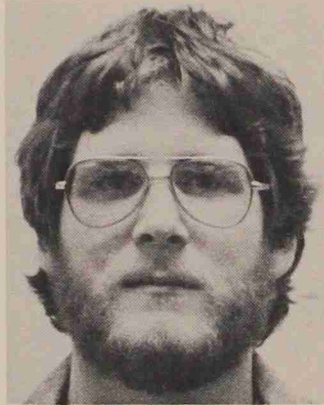
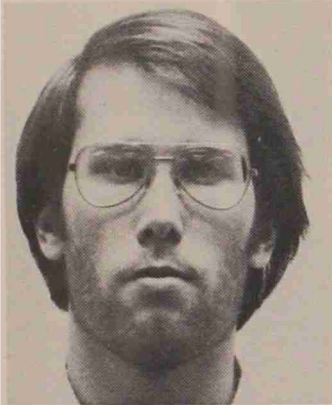
FORESTRY



MARVIN HOWARD BAGWELL

GARY FELTON BAREFOOT

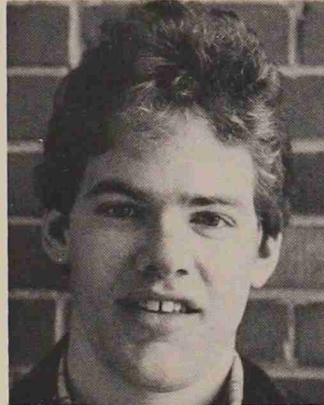
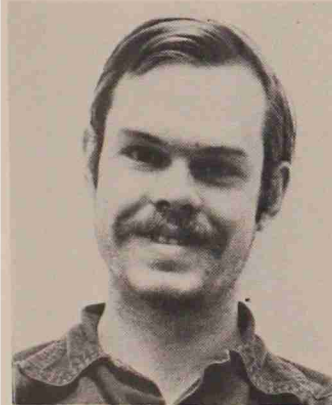
LYNN ANN BRANBERG



WILLIAM DANNELL BROOKS

STEPHEN CARLYLE BROWNE

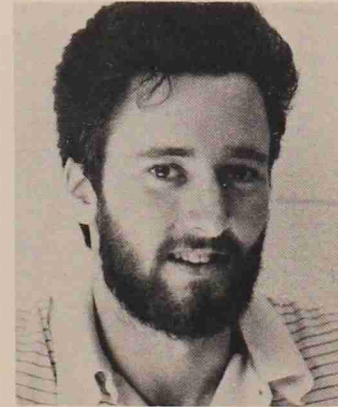
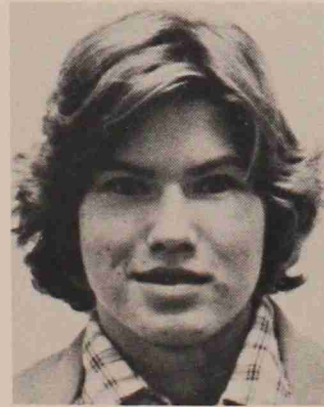
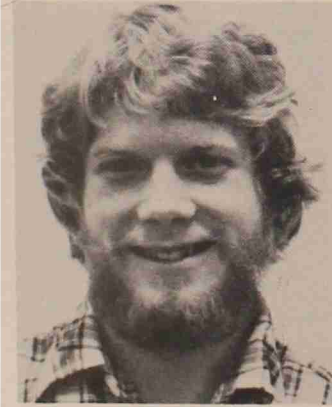
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PAUL CAMBELL

BOB CARROL

JOEL LEE CATHEY



STEPHEN MICHAEL COLLINS

JENNIFER LYNN CRAVEN

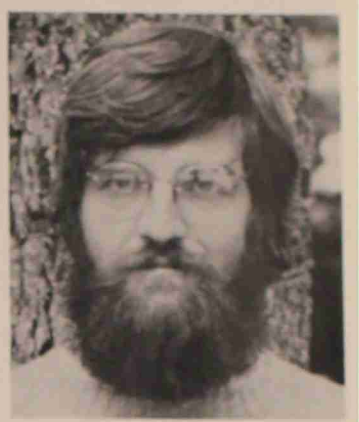
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SENIORS

ROBERT MARC DAVISON

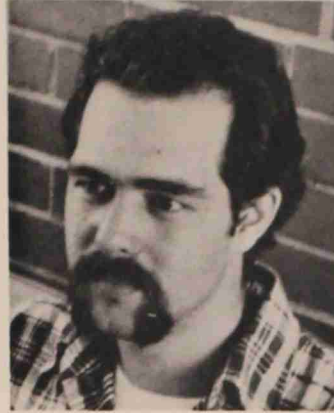


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WADE RICHARD DORSEY

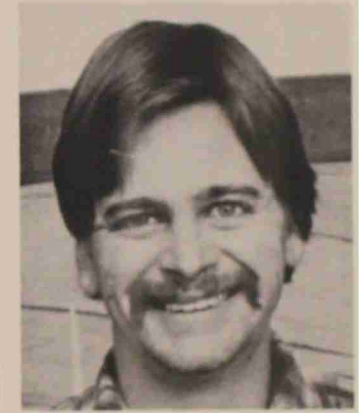
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KATHERINE HELEN EBERLE

BRENDA LEE ETHERIDGE

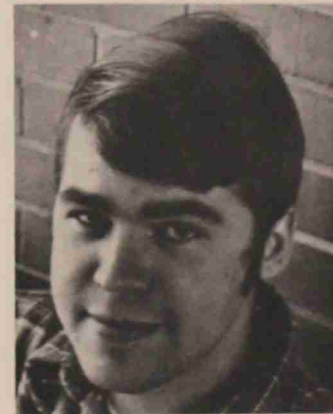
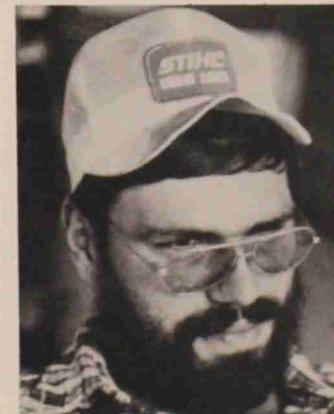
KENNETH BEAL FARMER, JR.



MICHAEL DEAN FERNANDEZ

HERBERT MICHAEL FINCHER

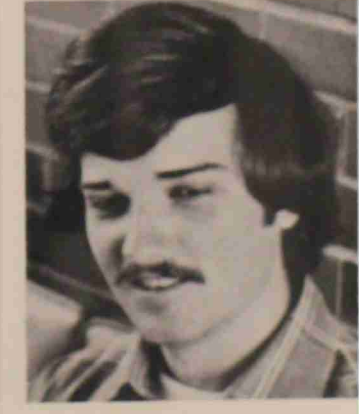
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GERY ALLAN GLOVER

MARY BETH HAINES

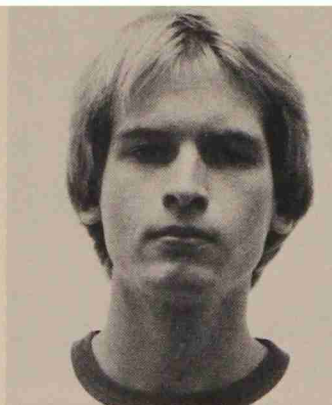
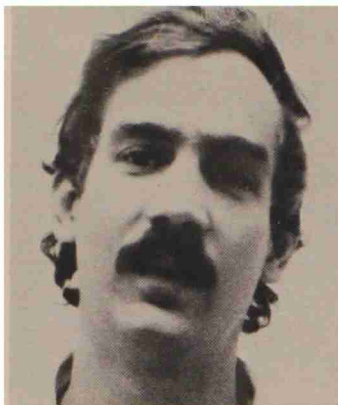
WILLIAM PRESTON HARGETT



ASA BAKER HOLLOWELL, III

KENT TARLTON HOLMES

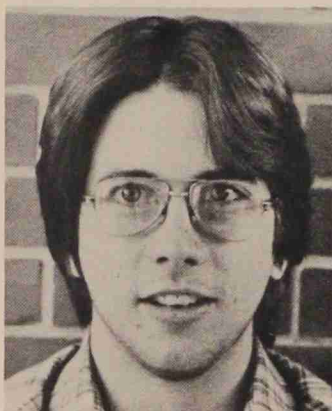
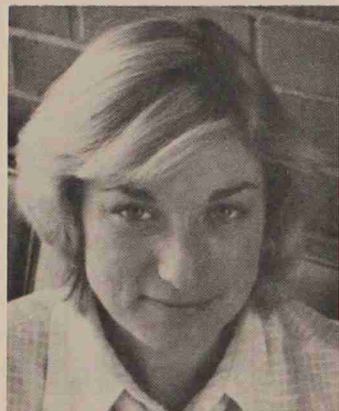
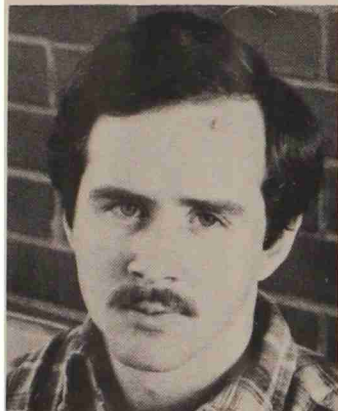
SENIORS



CHARLES DAVID HULBERT

CARRIE DENISE INGRAM

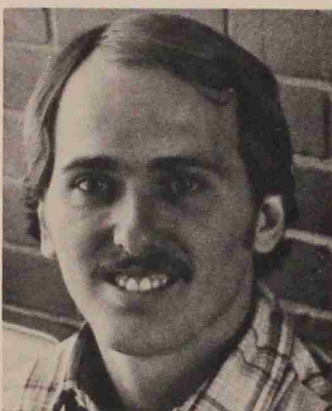
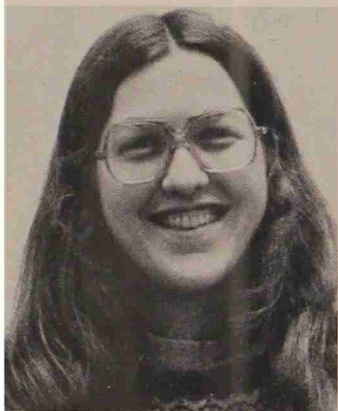
ROBERT JAMES LUK



JOSEPH L. MALLORY

KATHRYN ROSE MARKLE

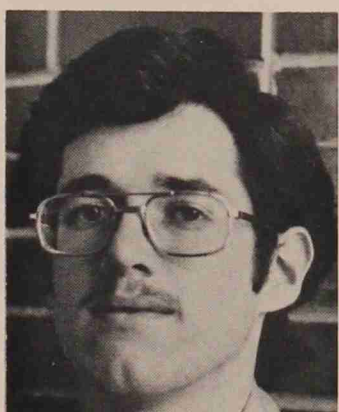
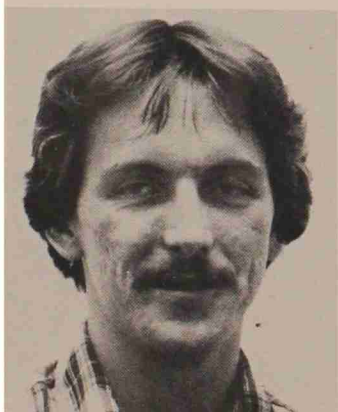
BRUCE ASHLEY MARSH



DEBRA ELIZABETH MAUNEY

VICTOR LORING McINTYRE

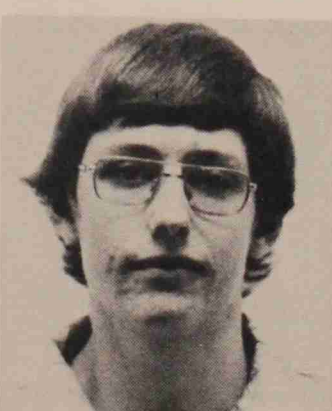
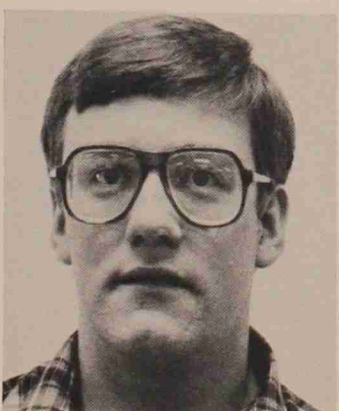
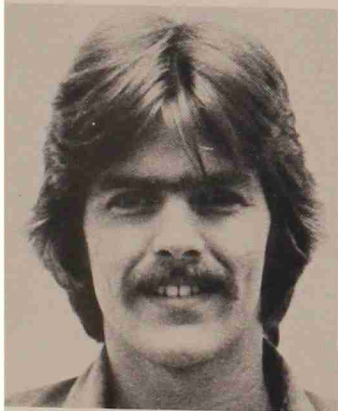
STEPHAN MICHAEL MILLS



GREGORY THOMAS MORRIS

THOMAS WALTON PATTON, JR.

JAMES RALPH PEELER, III



DONALD STEVEN PETERSEN

CARSON ARTHUR PHIPPS

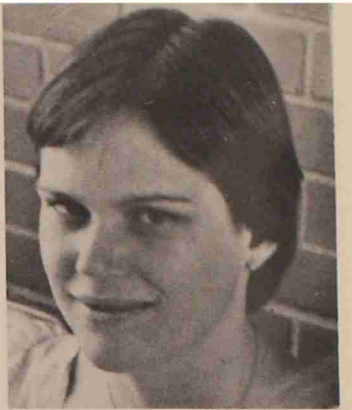
LARRY PHIPPS

SENIORS

JAMES HARRY PREVETTE, JR.

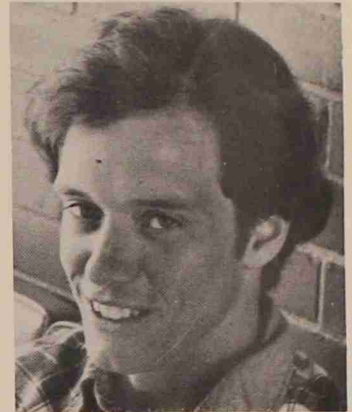
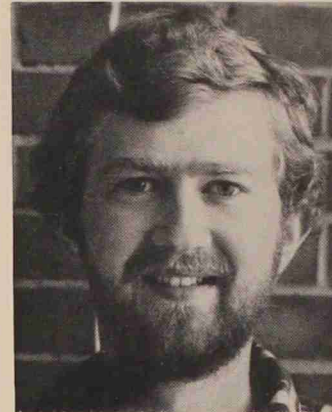
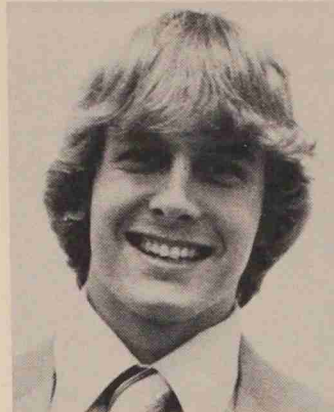


EUGENE JOSEPH ROSE



JOYCE LOUISE RUCHE

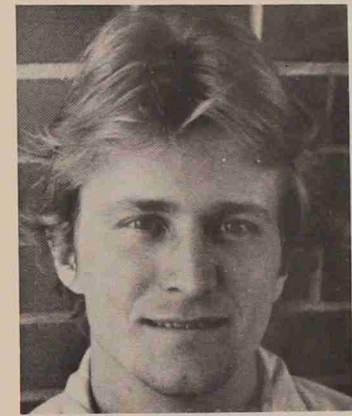
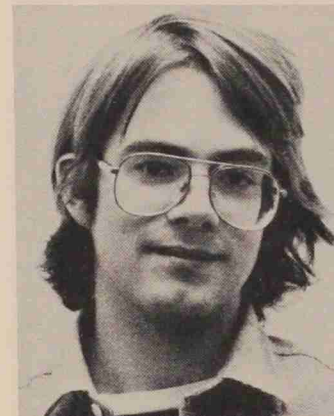
BRETT RUNION



SCOTT SMEARMAN

MARK DOUGLAS SMITH

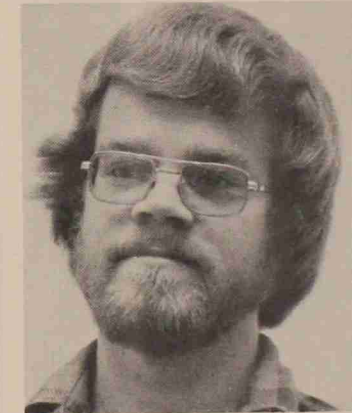
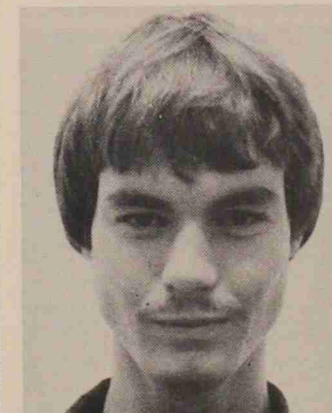
DONALD FRANK STALLINGS



SCOTT STANLEY

EDWARD GERALD TUGWELL

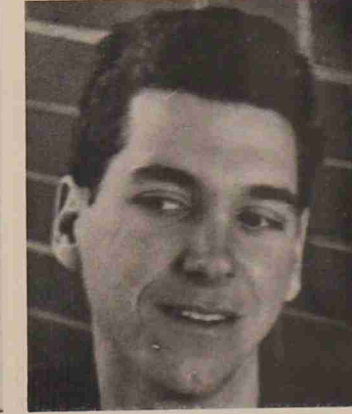
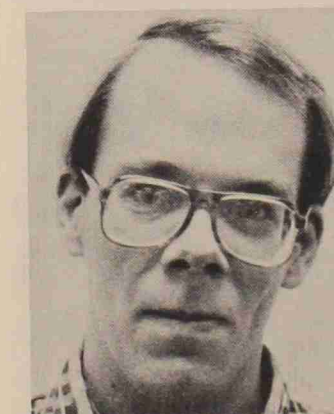
MARK BARRY VERCOE



DANIEL KEVIN VOGEL

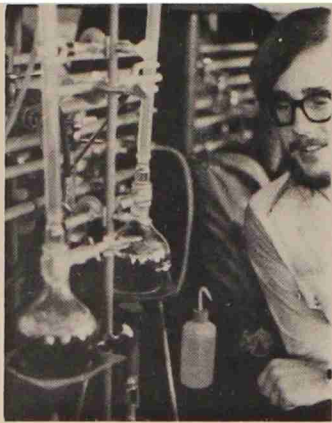
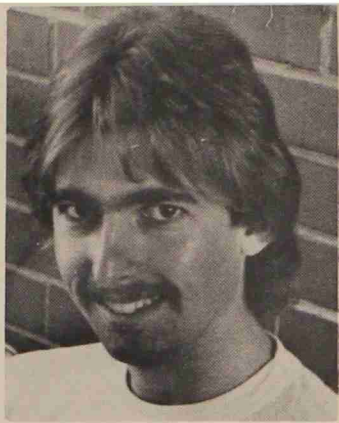
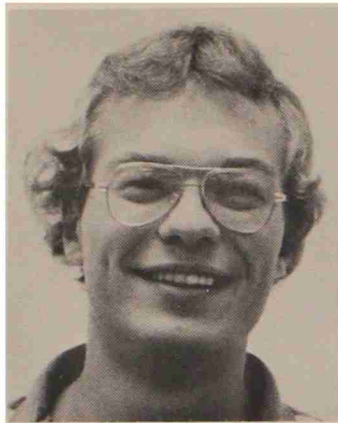
DAN WALL

DOUGLAS CHAFFEE WHITMAN



WILLIAM TURNER WILLINGHAM

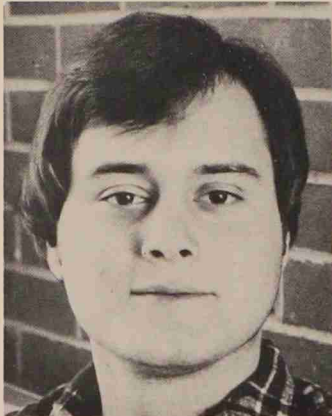
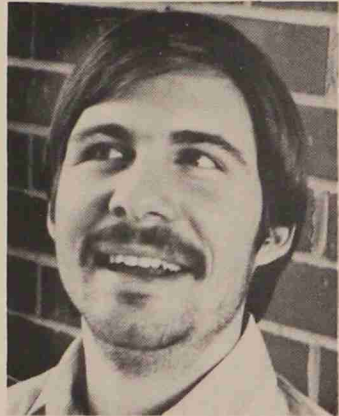
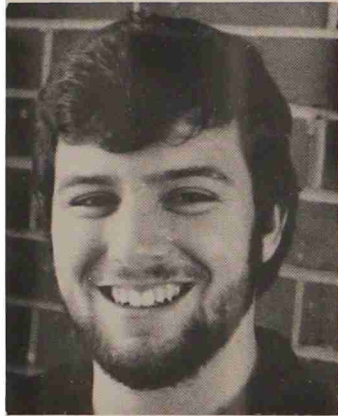
ROBERT ALAN WILSON



MICHAEL EDWARD WISNIEWSKI

THOMAS WILLIAM WRIGHT

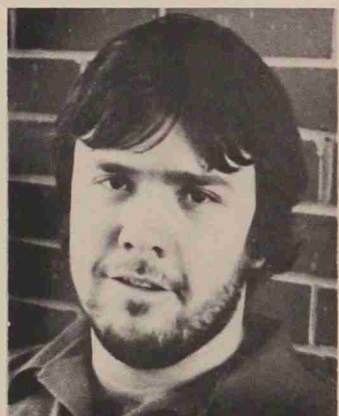
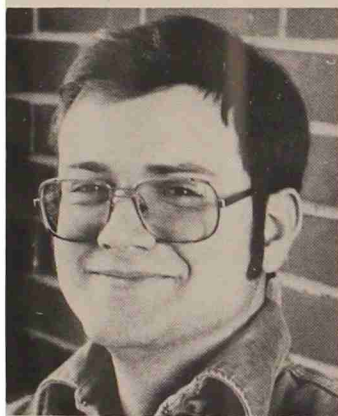
PULP AND PAPER
TECHNOLOGY



WALLACE EUGENE BELGARD

DAVID EUGENE BUCHER

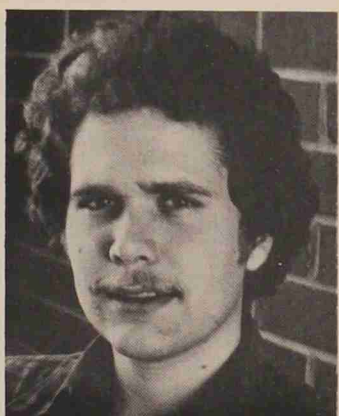
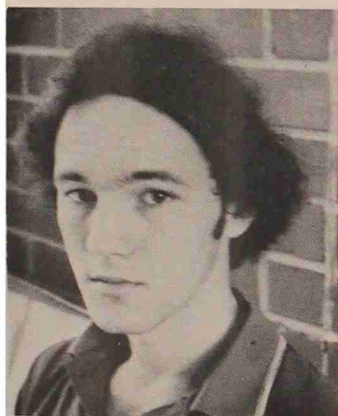
JOHN CAMPBELL



STAN CARPENTER

WAYNE CARTER

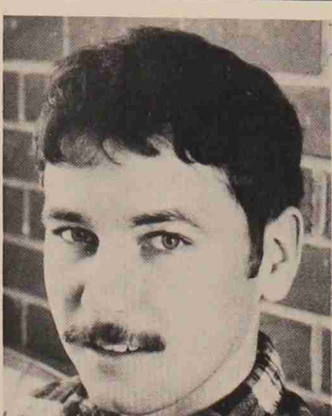
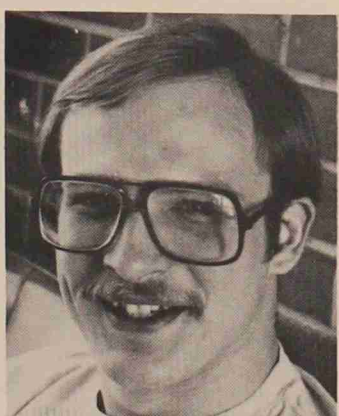
ERIC MARTIN CROUSE



JAMES KENTON CRUMPLER

DAVID LESLIE DEGROOT

COLBERT LEE DILDAY, JR.



EMMA NANCY HAZEN

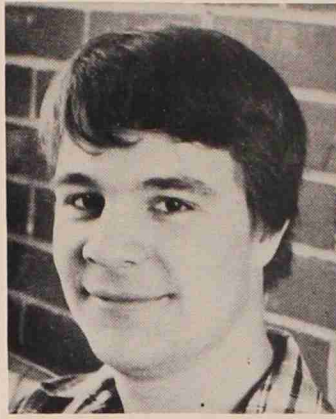
TERRY ANDERSON HUSKEY

JOHN KNOX

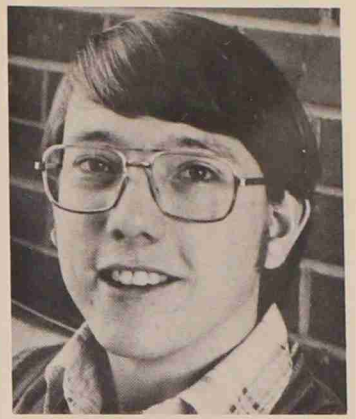
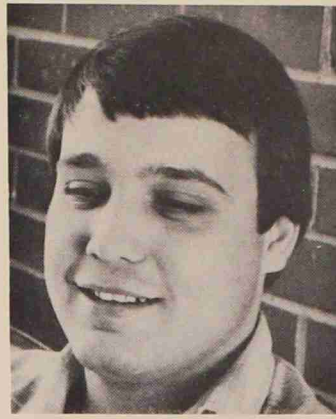
SENIORS

SENIORS

LEE MASHBURN

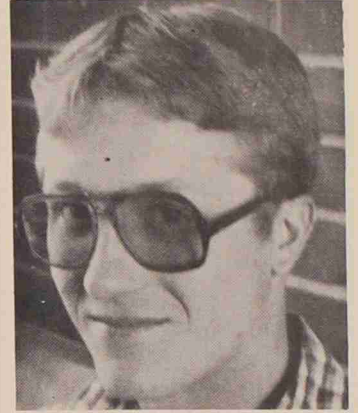


FRITZ EDWARD MOREHEAD



STEPHEN JAMES NIELSEN

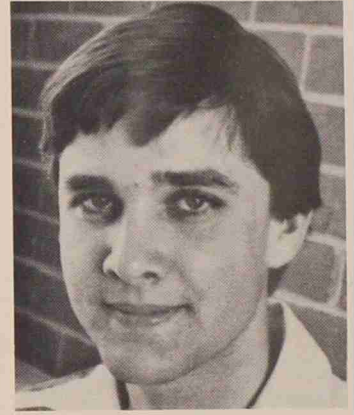
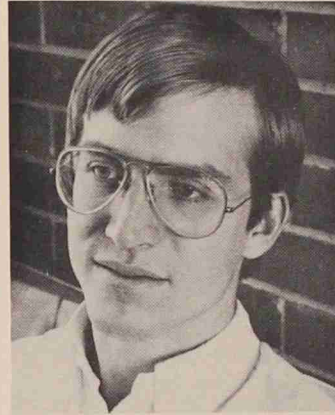
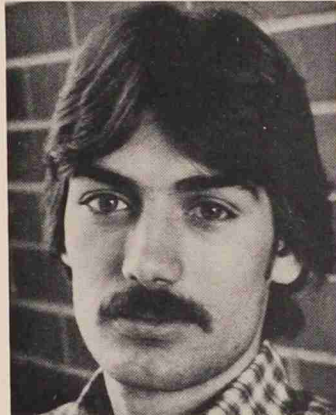
REX TAYLOR RAIFORD



CYNTHIA LOU RAY

SCOTT SHORT

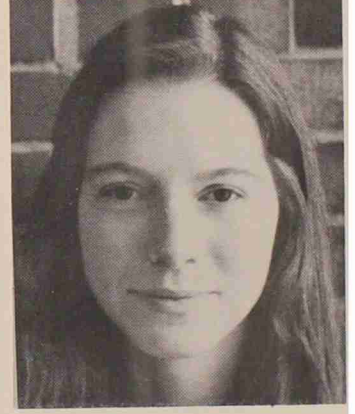
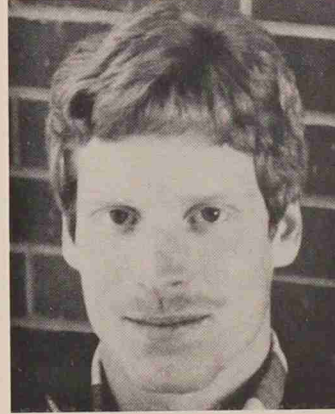
DAVID SHEARIN



HOWARD ELLWAY SPROULL, III

BILL WICKS

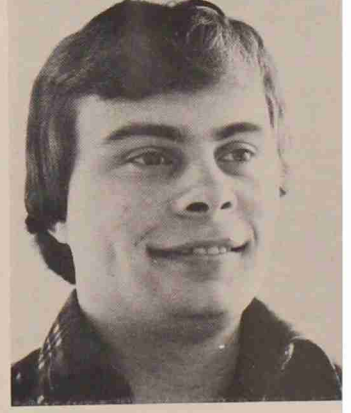
RECREATION RESOURCES
ADMINISTRATION



BRAIMON RICHARDSON BEAL

JENNIFER BELLE BELTZ

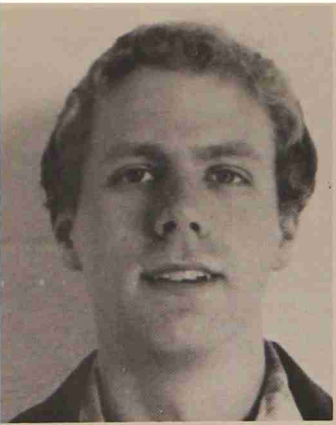
LYNN BRITT



DEANA CANTRELL

D. CHRIS CRANE

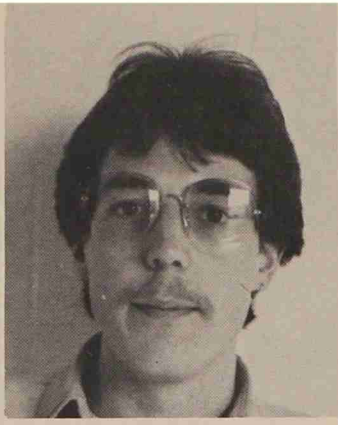
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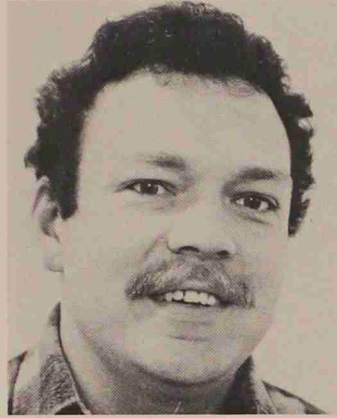
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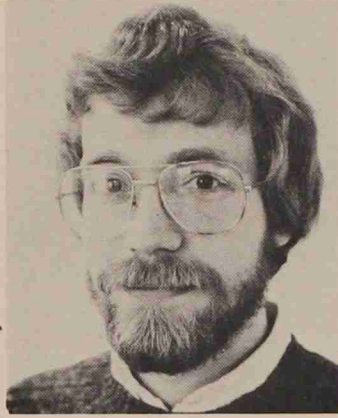
TODD ELLIS



LAURA FITZPATRIK



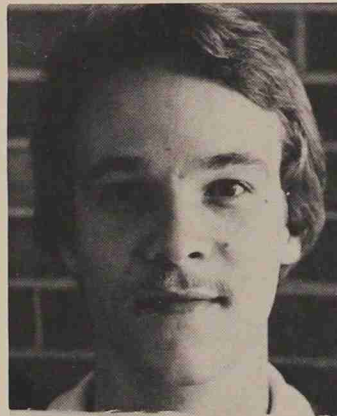
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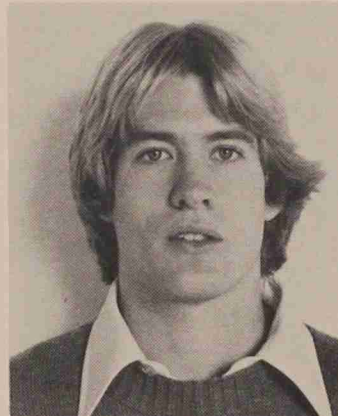
DONALD FEAGAN



ALISON ELAINE KNOWLTON



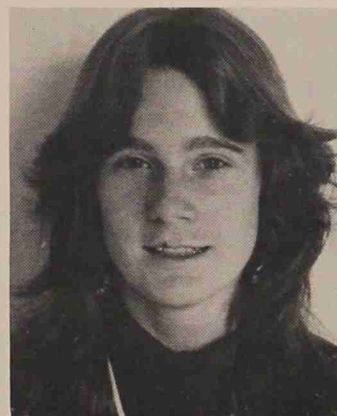
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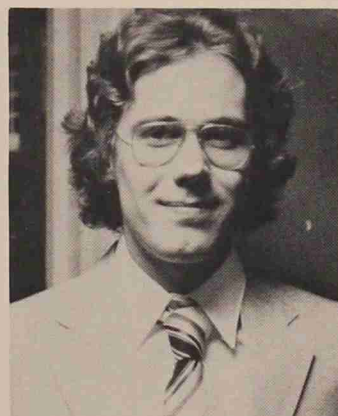
JIM MILLS



HOLLI MOORE



JEANIE NORTH



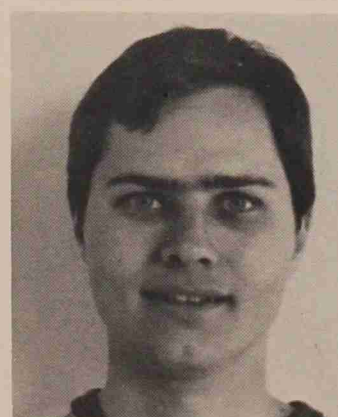
JEFFREY HAMILTON PARSONS



JESSICA DARE RIGOUARD



REBECCA ELAINE ROBINSON



WAYNE DAVID SIGMON

SENIORS

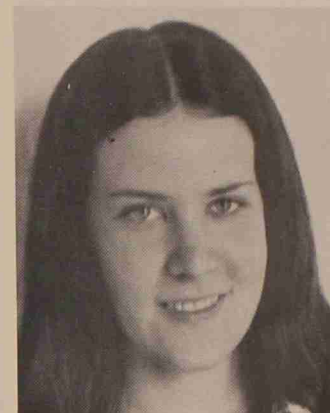
VERONICA DALE SMITH



OLGA CAMISAO de SOUZA

GINA INGRID SPINELLA

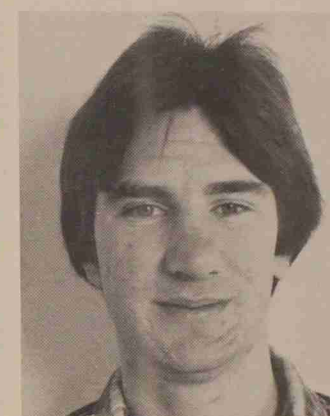
WADE E. STUBBS



LAURA ELLEN VEASEY

JAN LEIGH WARREN

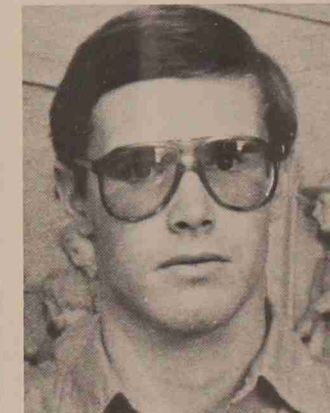
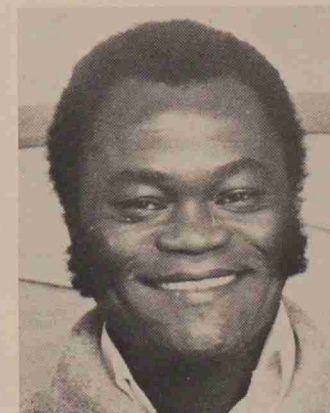
ANDY WHITAKER



JAN LORRAINE WILLIS

ROYAL WINDLEY

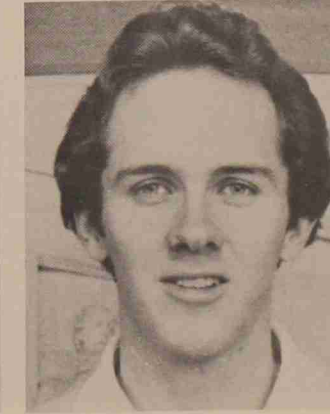
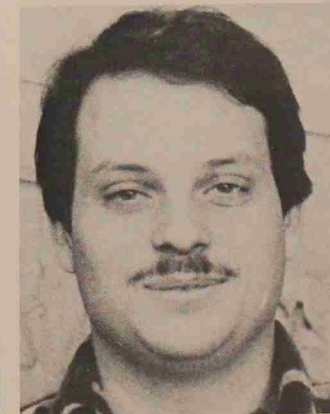
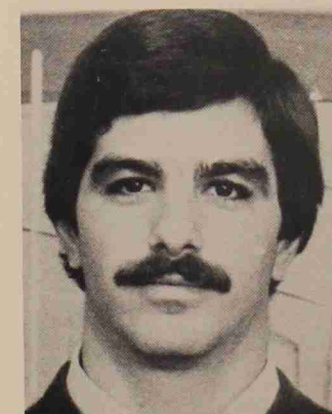
WOOD SCIENCE AND
TECHNOLOGY



OLUKOREDE ARUWAJOYE

RICKY DARYL AUSTIN

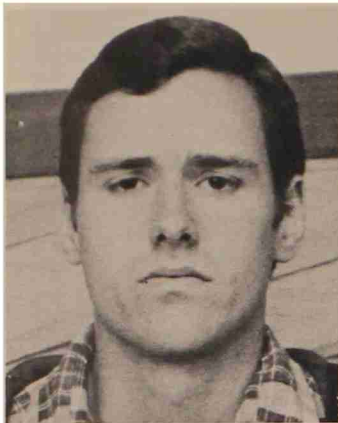
ROBERT BRUNCATH



HOWARD DANIELS FLEMING

ALAN WAYNE GIBSON

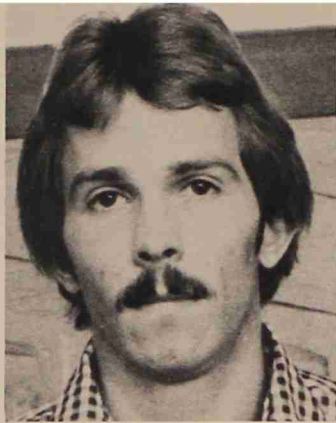
SENIORS



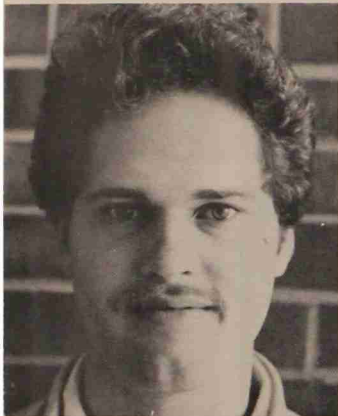
DONALD CHARLES HOEFIG



MILTON ONIEL JESSUP



THOMAS MICHAEL JOSAM



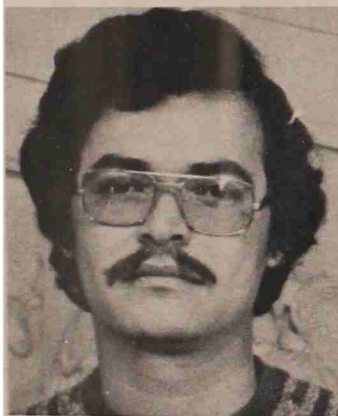
ALEC LAING



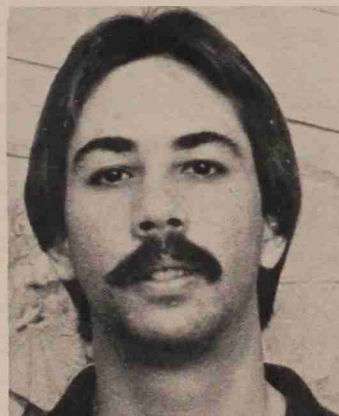
MICHAEL REED LANGSTON



LEONARDO LARDIZABAL



ROBERTO MEDINA



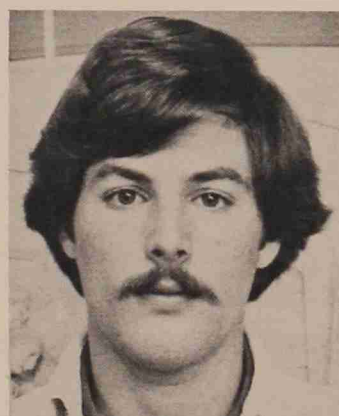
CHARLES RAY PARNELL



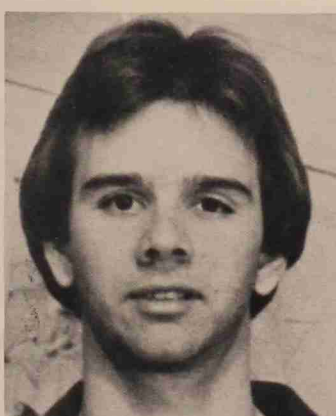
LEWIS DANIEL PINER



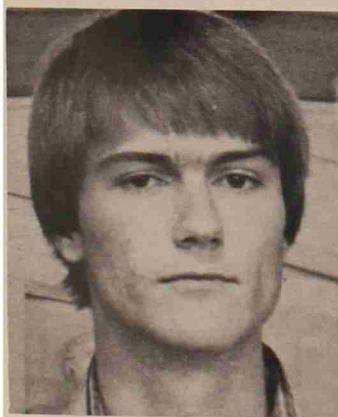
RANDAL FRANK RICHARD



MICHAEL ANTHONY TINDLE



DEAN VAUGHN



JEFFREY BRUCE WILLIAMS

SENIORS NOT PICTURED

FORESTRY

- Jennifer McCall Adams
- Kenneth Clayton Bosch
- Aurelia Bowman Eller
- Thomas Neaton Hobgood, III
- Richard John Lemere
- Susan Renee Paul
- William Keith Personette
- Beadely John Rawlings
- Michael Anthony Ray
- John Alexander Simpson, III

RECREATION RESOURCES
ADMINISTRATION

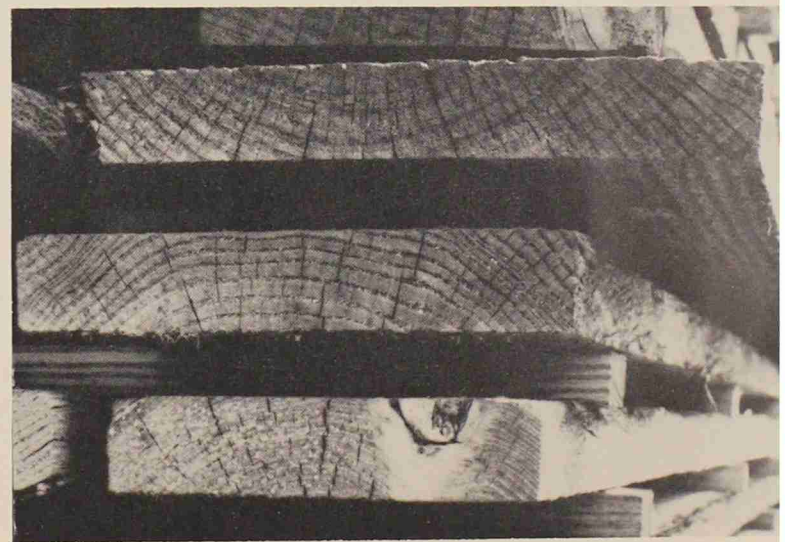
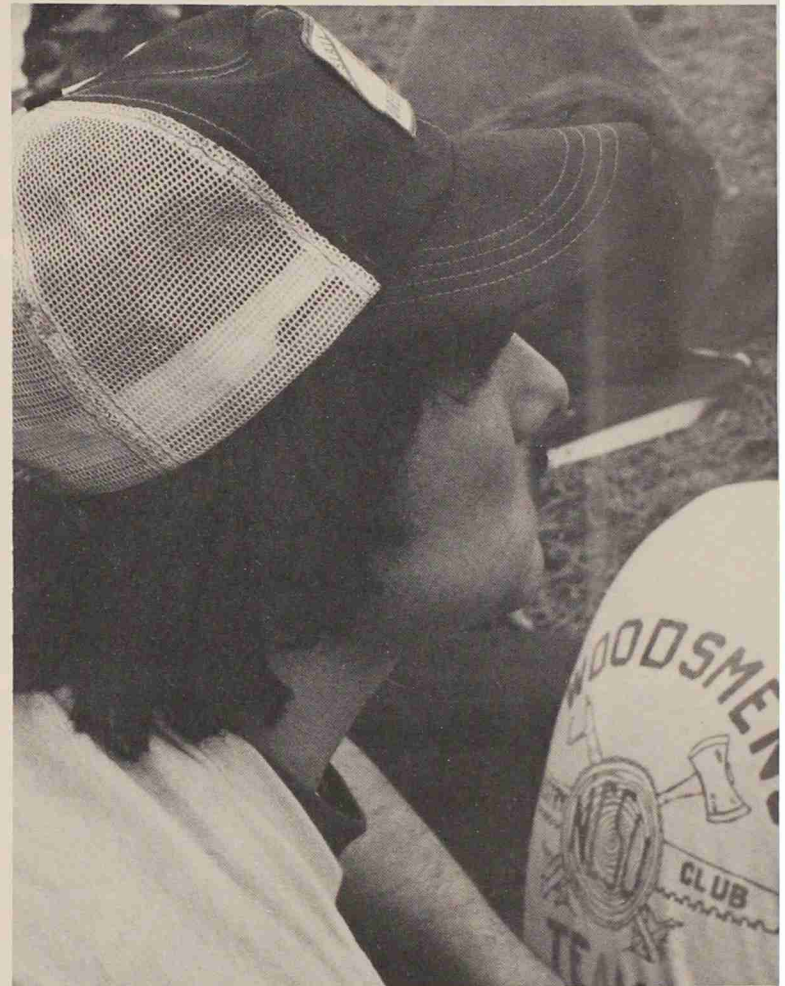
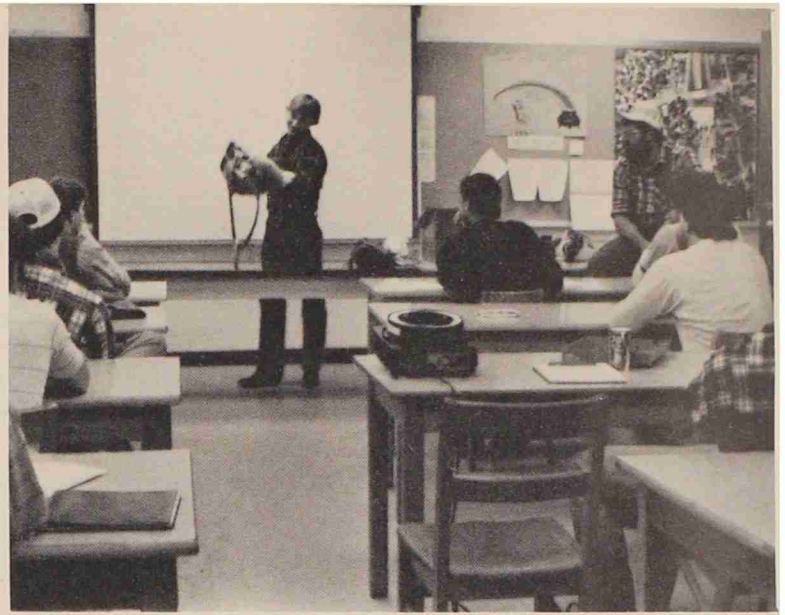
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- Howard Wendell Buckholz
- Dee Chris Craver
- Kevin Michael Fitzgerald
- Hector McNeill Lytch
- Elizabeth Anne Melvin
- Elizabeth Beadbury Mowat
- Patrick Purley Mulkey
- Thomas Blanchard Nelson
- Jan Carol Pass
- Mary Beth Quinn
- Pamela Byrd Smith
- Donald Ray Tanner
- Deborah Lynne Van Covern
- Mary Elizabeth Wolhar

PULP AND PAPER
TECHNOLOGY

- Mitchell Reagan Baxter
- Richard Norman Mead
- Clarence Eduard Rose
- Beain Roger Waite

CONSERVATION

- Richard Anthony Friebe
- Robert Steve Nedrick
- Edgar Thomas Hennings

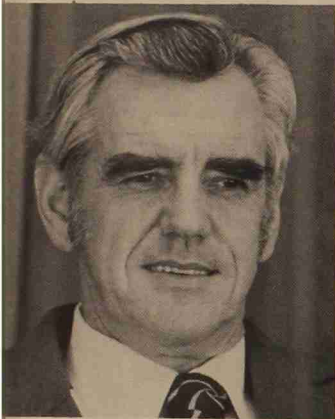




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3274
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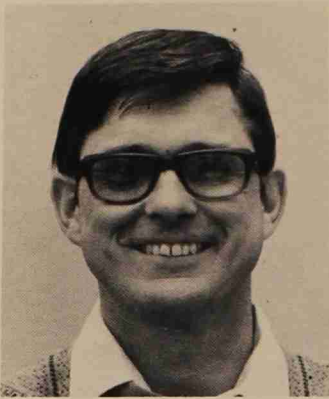
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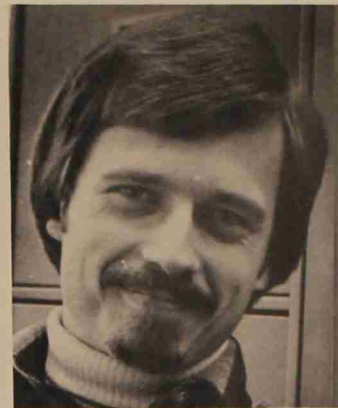
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RICHARD J. THOMAS
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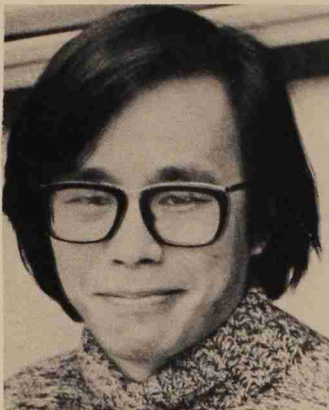
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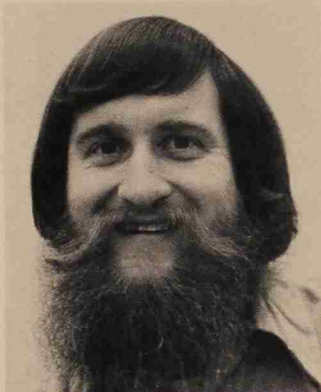
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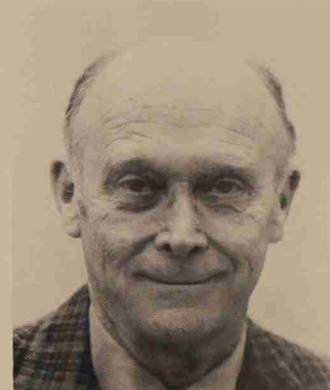
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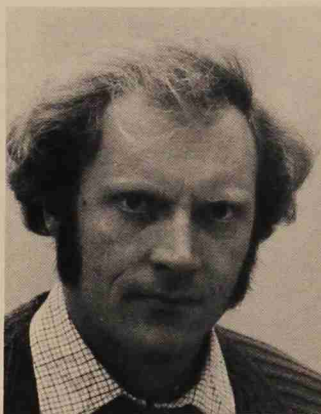
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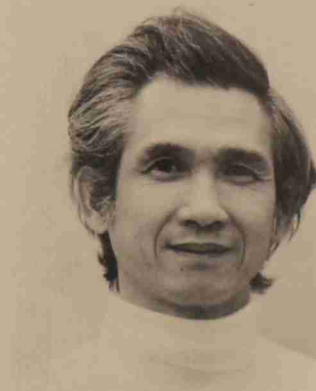
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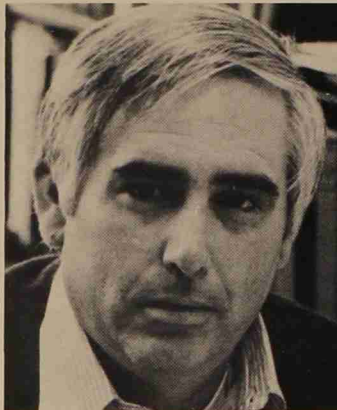


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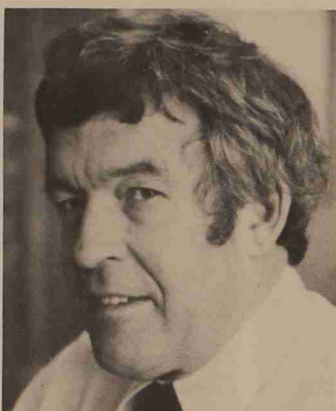




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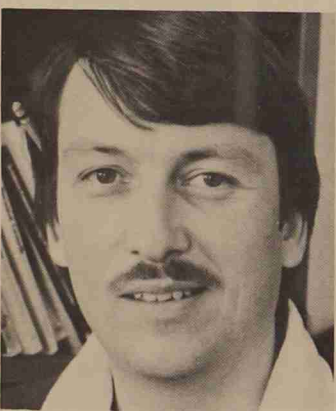
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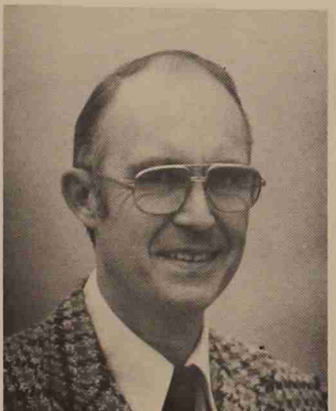
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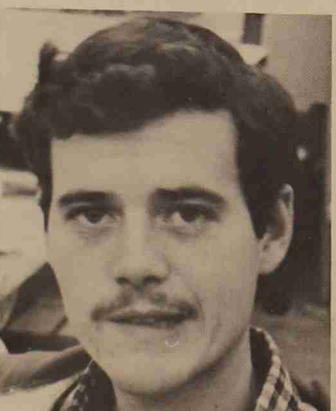
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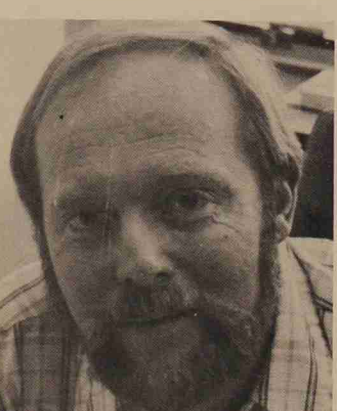
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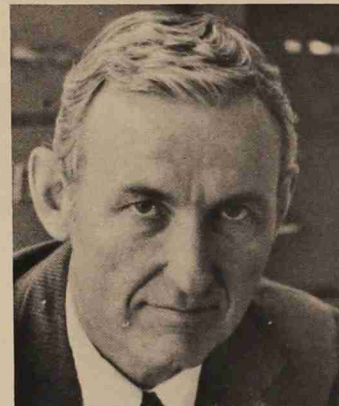
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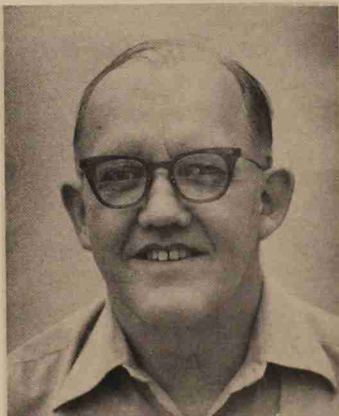
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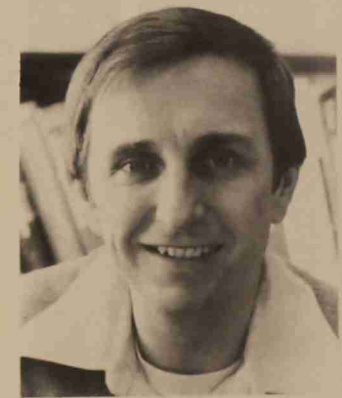
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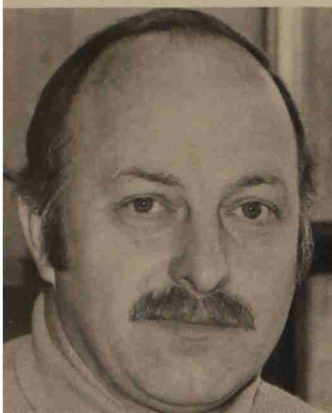


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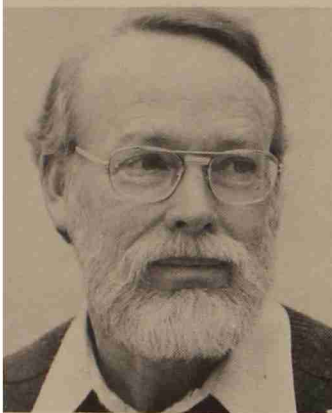




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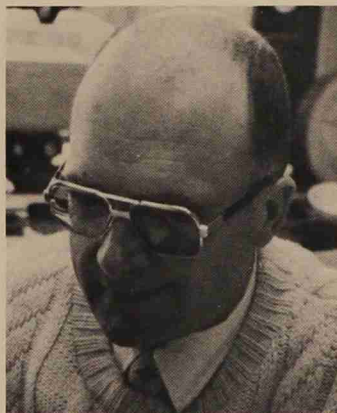


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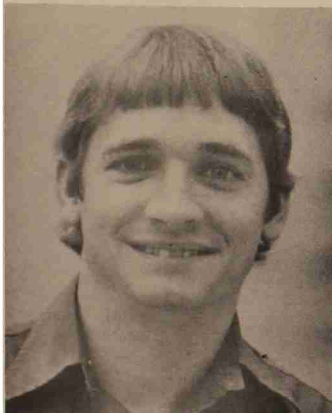
WILLIAM T. HUXTER, JR.
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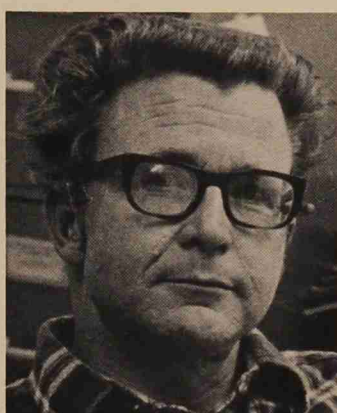
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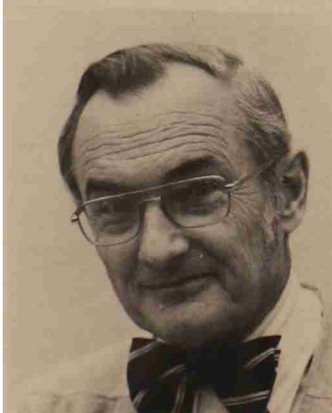
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FACULTY

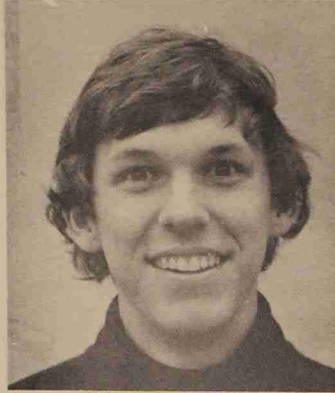
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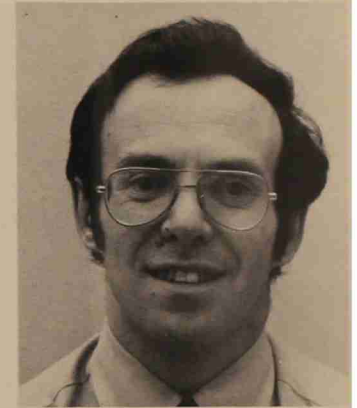
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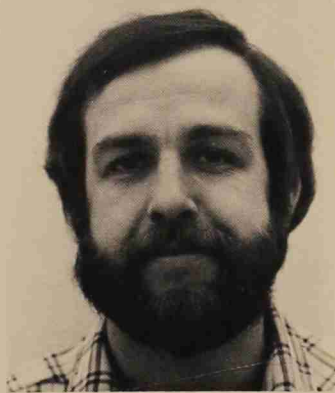
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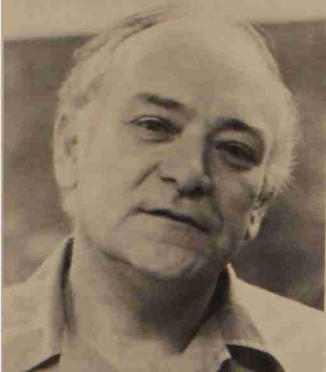


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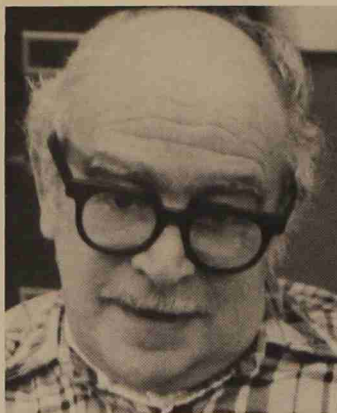


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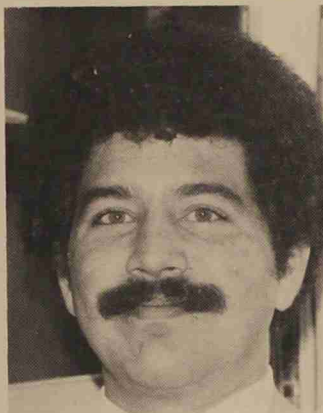
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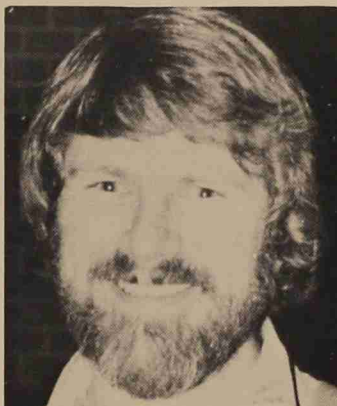
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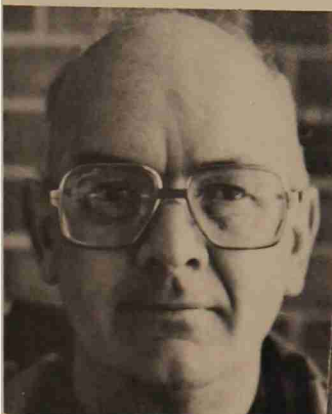
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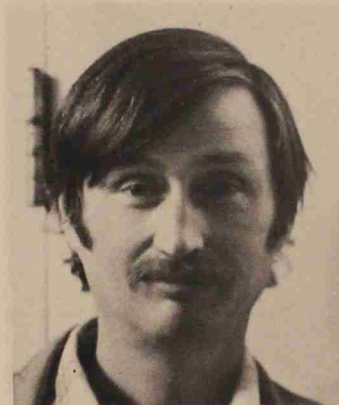
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E. F. Conger Distinguished Professor of
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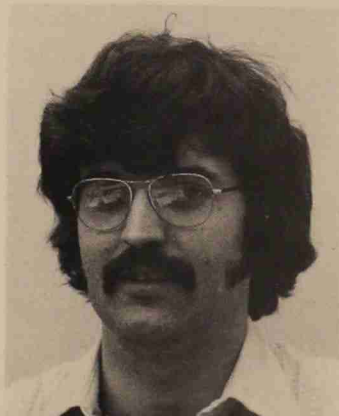
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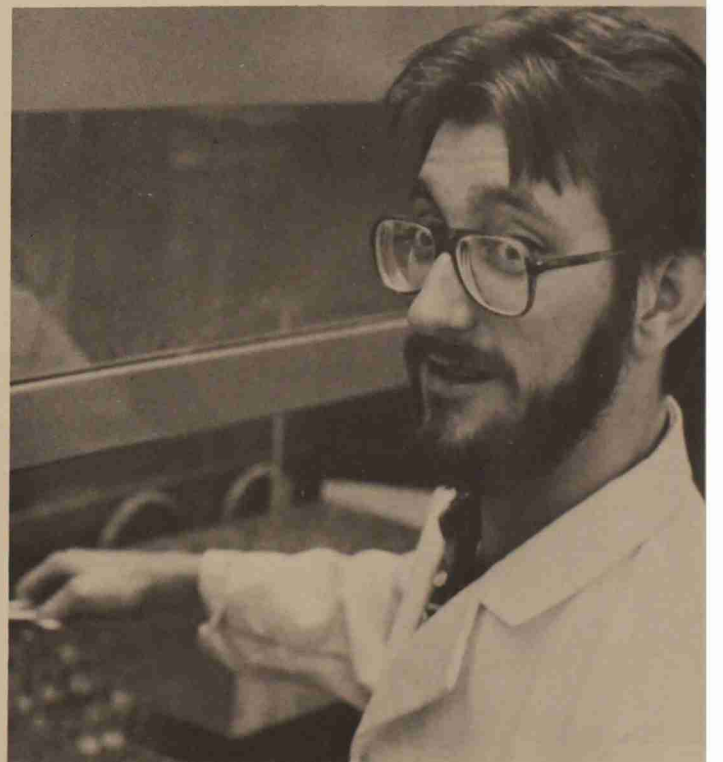
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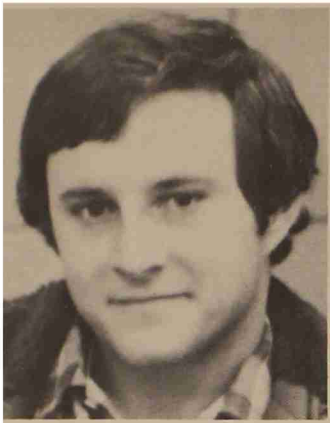
- David A. Adams
- James E. Barefoot
- Robert I. Bruck
- Candace Goode
- William Haddock
- Henry C. Hammong
- Shuta Hosoya
- Thomas W. Joyce
- Stephen R. Kalisz
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JACKIE BURRELL
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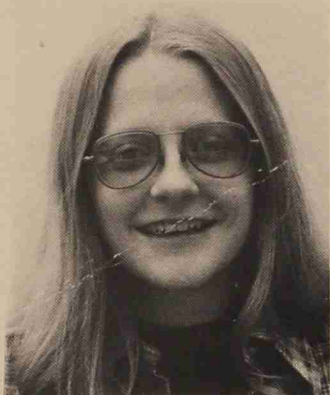
ADDIE BYRD
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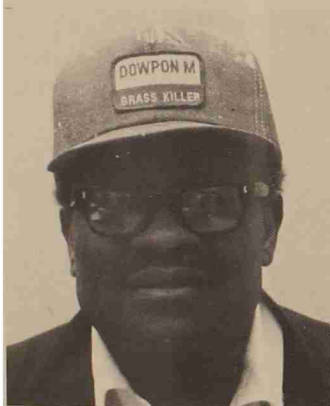
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SAMUEL CLARK
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ELIZABETH CORDES
Stock Clerk



TYSON DUBLIN
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MARGARET FUNDERBURG
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DARNELL JOHNSON
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CYNTHIA HAMMOND
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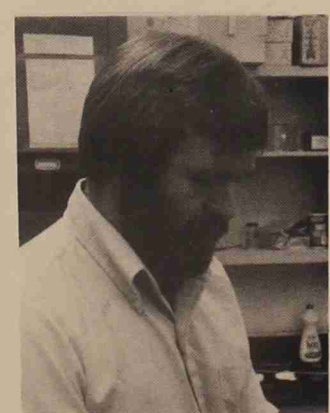
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DEBBIE JOHNSON
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JOAN JOHNSON
Head Secretary, Wood Technology



VERNON JOHNSON
Agriculture Research Technician

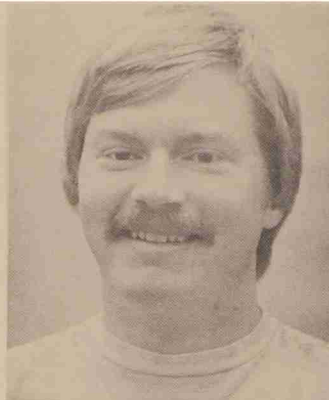
S
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STAFF

FRANCES LILES
Assistant Director of Student Affairs

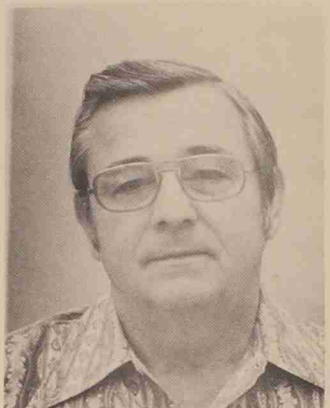


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CLAUDIA WILSON
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STAFF NOT PICTURED

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- Pat Collins
- Howard D. Duzan
- Julie Eldridge
- Alice Hatcher
- Thelma King
- Willie Myatt
- Valda Schmitt
- Steven Russell
- Robin Rust
- Susan Teeter
- Nancy Wills

NCSU ROLLEO		CLASSES										
		COLLEGE	COLLEGE	COLLEGE	COLLEGE	COLLEGE	COLLEGE	COLLEGE	COLLEGE	COLLEGE	COLLEGE	COLLEGE
SR.	4	4	2	4	4	3	3	3	4	4	4	4
JR.	3	3	3	2	3	4	4	4	3	3	2	
SOPH.	2	4	3	2	2	2	2	2	2	3		
FR.												

ROLLEO '79

Rolleo '79, sponsored by the NCSU Forestry Club, was held on a sunny Sunday afternoon in October at the Forest Resources Center at the State Fairgrounds. Practice was intense for this year's rolleo and the hard work paid off for most of the contestants.

Marvin Bagwell, this year's Conclave Chairman, was in charge of organizing the rolleo. After some last minute preparation, Rolleo '79 started on schedule Sunday afternoon.

A small group was gathered as the rolleo began. The seniors were tough from the beginning, winning log rolling, chain throwing, and pole climbing. By the end of the third event, the crowd had grown quite large. The teams continued to increase their effort. A great winning effort and a sensational time was turned in by the two senior women's crosscutters, Kitty Eberle and Joyce Ruchte. After winning a runoff that morning, the senior men's crosscutting team also pulled their saw to victory.

By now the seniors had developed a solid point lead. The underclassmen realized that the time had come to "dig in" if they were to have a chance at victory. They began to do so when a sophomore won bow sawing. The juniors began to pick up their effort as they won three consecutive events, birling, ax throwing, and knife throwing. But these losses did not deflate the spirit of the senior team as they came on strong at the end. Team Captain Marvin Bagwell won speed chopping and Jimmy Prevet and Moreland Gueth nailed the stake to win pole felling. The senior pulp toss team finished off the evening with a decisive win to give the seniors a well deserved overall victory.

All in all it was a great day of fun for the crowds as well as the competitors. The day ended with all the Forestry Club members looking forward to Conclave '80.

NEED A BOOST?

SUMMER CAMP



When the bus arrived in Camp Slocum, it was carrying two people and lots of baggage. As the day drizzled on, the participants dribbled in, and by supper time there were a few who preferred to get up before the roosters to make the daily drive from Durham and Raleigh; they missed Vivian's cuisine (among other things).

A large new classroom building, three new cabins, a spacious new bath house, and a new tool shed got their break-in at the hands of this eager bunch of foresters-to-be. The bugs soon surfaced (both kinds). The windows in cabins would not stay up, not the bottom one or the top one, and the new classroom became synonymous with The Sweat Box. Larry instructed a couple of the aides in Window Installation 201 to help reduce the classroom's temperature. A fan was also put up under the skylight to give additional ventilation; it made a great strobe-light when the sun was just right!

Mensuration, silviculture, dendrology, protection, and utilization ("stay awake and remember your hard hat") became the areas of scholastic interest (there were other interests, of course). These subjects were intermeshed with the previous classroom studies to provide actual field experience and application. Sometimes the suggested application was a little unusual, such as one student's recommendation of managing for fringe trees and making the area a tick sanctuary.

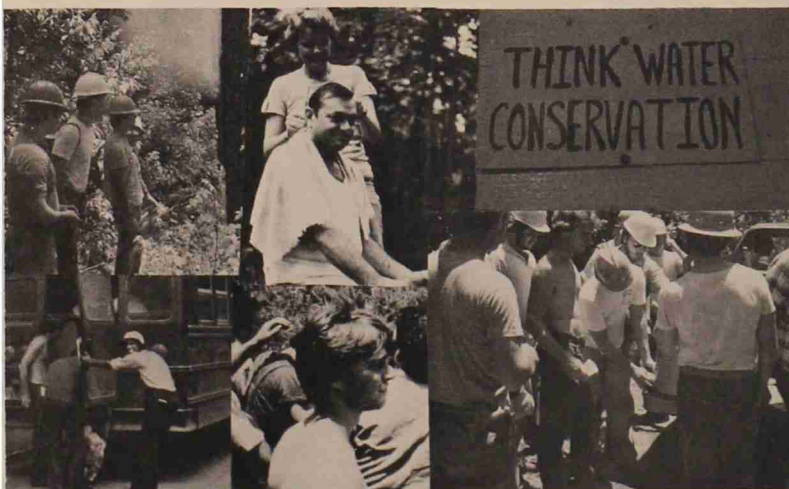
Relaxation from the academic rigors was supplied by volleyball games, sometimes played with an invisible ball; dips in the pond for the brave; daily challenges in the horse-shoe pits where the Jervis-Grubbs team emerged as the undisputed champs; and for those who needed a shearing, there was the Thacker House Barber Shop featuring shearing on the lawn for the "usual" price (Doc's head became the demonstration model).

The trip to Fire School in Kinston was a timely diversion from the usual camp routine. Long classroom hours were spent learning the basics of fire fighting organization, fire suppression, and that a Snow was something other than just white stuff on the ground; the occasional breaks were spent "on the beach." Dr. Gemmer came along leading the utilization trip and leading the relaxation instruction after classroom hours; Wimpily, Wambly, and Wombly provided individual instruction where needed. The strenuous hours of practice were of no help when the big volleyball show-down was over, but the "burn-your-own" that preceded the game helped to soften the shock.

Mickey's Bait and Tackle Shop came to the hallowed hollow of Camp Slocum to help commemorate the 4th of July. A demonstration on the durability of a Buck knife provided the entertainment as did the Old Forester and some of his associates. A fashion show featuring beach apparel was the highlight of the evening. While the celebration was somewhat belated, the participants' enthusiasm made up for the lateness of the event.

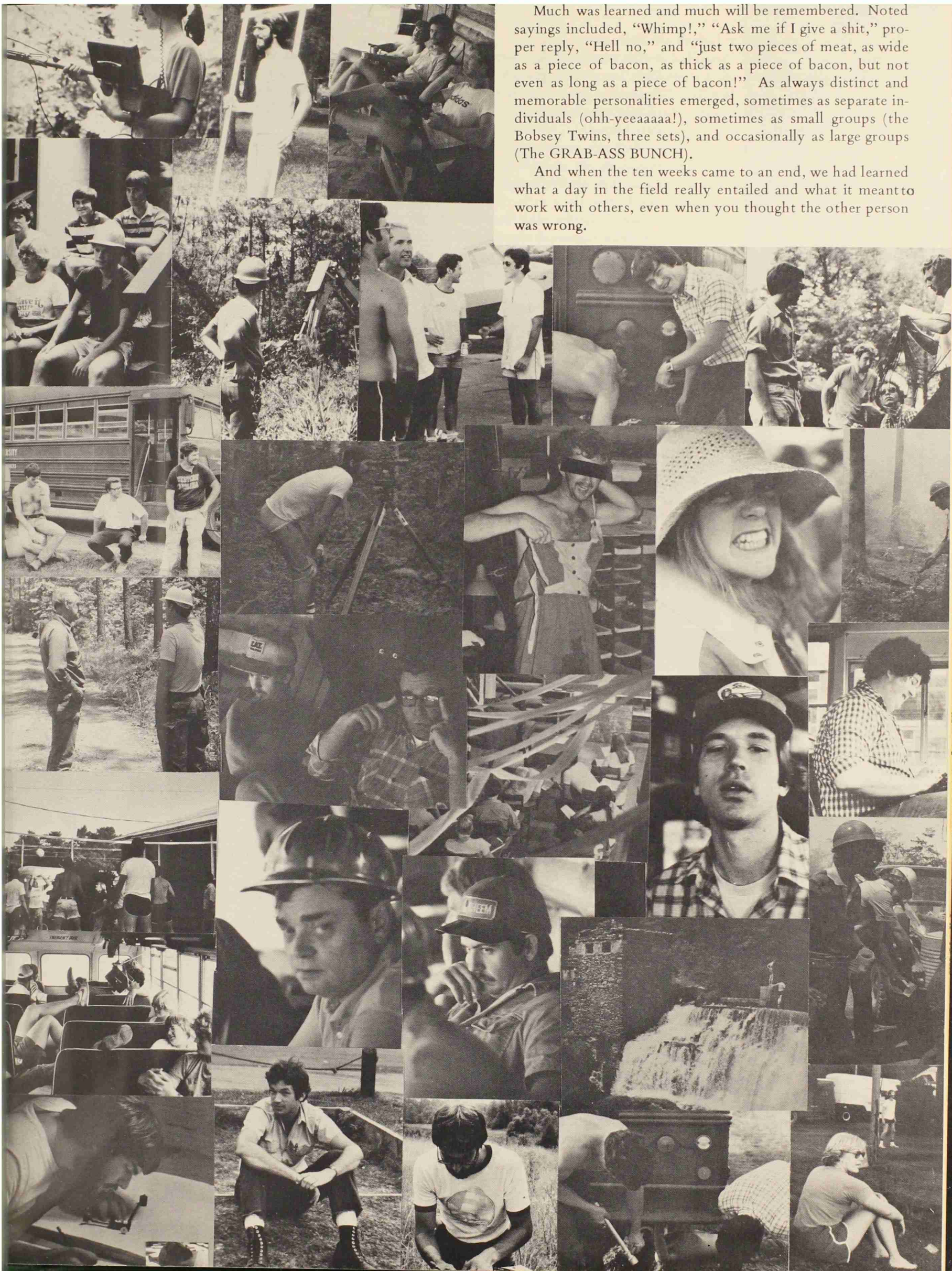
Group A took off to the mountains for a week of dendrology (complete with six days of liquid sunshine) while Group B struggled with the mens. project deadline. The Mt. Mitchell hike provided a good display of vegetation zonation, a stroll through a graveyard of chestnut trees, and an invigorating swimming hole at the end. The swimming hole at the Forest Service facility had its own special attributes. Linville Falls' beauty provided little relief for the last dendro quiz of Summer Camp '79. On the return to Camp Slocum additional southern driver damage occurred to the exhaust system of the bus; the gallant repair efforts were of no avail. Once back in camp, Group A discovered the treat Group B had left, a magnificent display of graffiti and caricatures of camp life done in vivid pastels on the new classroom's chalkboard.

This was the first year of Wildlife Camp; it overlapped us by one week. On their first day, the seemingly calm group was treated to elaborate paper decorations in the loft of the Lodge. While we applied ourselves diligently to mens, the wildlifers were enjoying such things as instruction from Gary Grubbs on the topic of "dendro made simple."



Much was learned and much will be remembered. Noted sayings included, "Whimp!", "Ask me if I give a shit," proper reply, "Hell no," and "just two pieces of meat, as wide as a piece of bacon, as thick as a piece of bacon, but not even as long as a piece of bacon!" As always distinct and memorable personalities emerged, sometimes as separate individuals (ohh-yeeaaaa!), sometimes as small groups (the Bobsey Twins, three sets), and occasionally as large groups (The GRAB-ASS BUNCH).

And when the ten weeks came to an end, we had learned what a day in the field really entailed and what it meant to work with others, even when you thought the other person was wrong.



1980 CONCLAVE

On March 27th, members and advisors of the Forestry Club set out for the 23rd Annual Association of Southern Forestry Clubs Conclave in Hillsville, Virginia. With many of last year's team members returning, a good finish was anticipated.

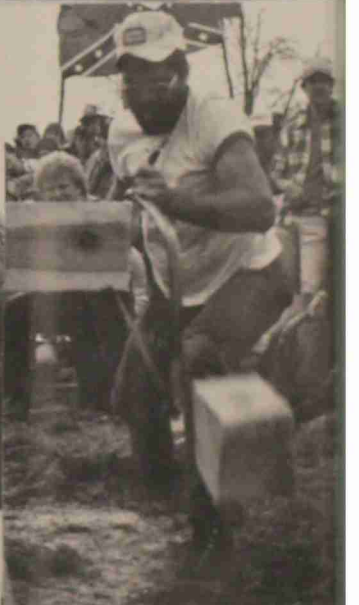
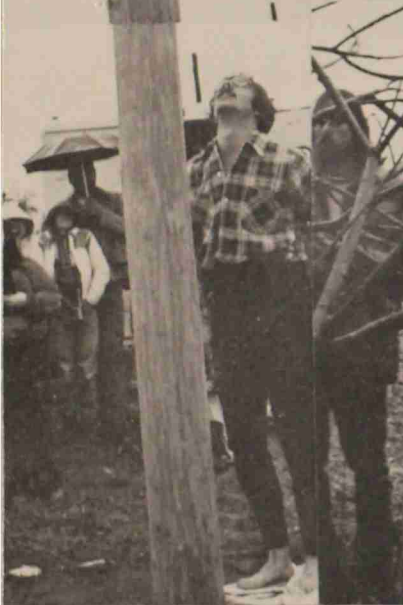
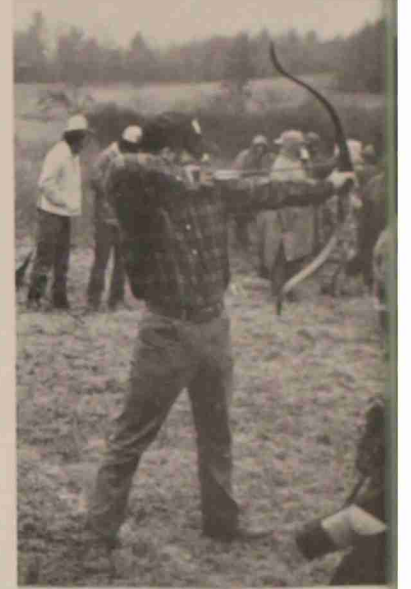
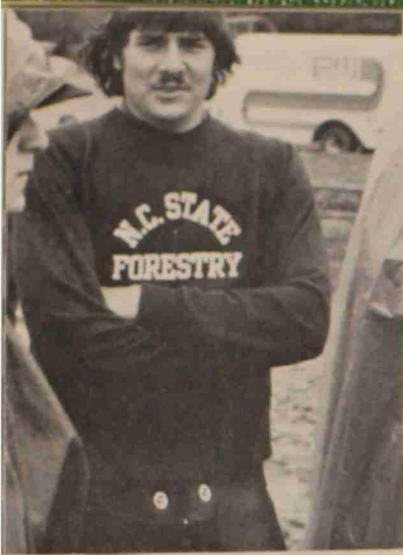
Friday's competition was hampered by cold rain, wind and sleet. In addition to these uncompromising conditions, a run of incredibly bad luck also dampened hopes for a good finish.

On Saturday the weather moderated and the team's fortunes began to change. Strong finishes in many of the skilled events bolstered sagging morale, but it was feared to be too little, too late. With the outcome of the technical events still unknown, it was hoped that at least a respectable finish would somehow be possible.

At the banquet following Saturday's competition, the final standings were announced. It was learned that N. C. State had come from nowhere to capture a very respectable third place. Arkansas was second for the first time in a few years and VPI took first place. Clearly, with slightly more favorable luck, a better finish was possible.

The University of Tennessee will host next year's Conclave in Knoxville and N. C. State will be faced with abundant inexperience in a majority of the events. However, with help from advisors and hard work by remaining club members, N. C. State should still be at the top in 1981.

S. A. Whitfield



FORESTRY COUNCIL



The Forest Resources Council is the representative and governing body of the undergraduate students of the School of Forest Resources. The Council is composed of the representatives of the seven recognized clubs and honor societies in the School of Forest Resources, the three department representatives, and the four student Senators of the School. The Council has the responsibility of dispensing funds received from student fees. This year's Council has undertaken the duties of rewriting the Constitution of the School of Forest Resources. With the new Constitution, the Council hopes to add continuity to the Council. The Council also sponsored and financed the 1980 PINETUM. This year's Forest Resources Council worked very well together, and did a good job at representing the students of the school.

NCSU FORESTRY CLUB



From September until May, the Forestry Club has stayed busy—working, practicing events, and having a good time. The poster that read, "It's not just a club, it's an adventure!" seemed to describe it all.

The Fall began with the Piggickin' in September, a good time for all out at Schenck Forest. Joyce Ruchte, Deana Cantrell, and Don Eaddy started the fire before dawn and organized a super feast. Although all the cooking was done in the rain, the sun came out just in time for the horseshoes and eatin'.

Next came the Rolleo, the Club's old-time loggers' competition at the Fairgrounds in October. Under Marvin Bagwell's leadership, the Seniors once again took first place, but with some stiff competition in some events. From log-rolling to pole-climbing to birling, it was a great afternoon for participants and spectators alike.

This Spring the Club was busy practicing for Conclave competition and putting on the Loggers' Brawl. The Conclave was hosted by VPI this year and held at Hillsville, Virginia, where the Club hoped to improve on last year's second place finish. As every year, the Loggers' Brawl was a night of square-dancing, plenty of beer, and fun for all.

Other Club events included helping out at Open House, a trip to the Homelite Tournament of Kings in Charlotte, and loggers' competitions in Burnsville and Asheville.

Tree jobs every Saturday, led by Joel Cathey and Ken Farmer, made all the Club's activities possible. As always, the Club would like to thank its advisors, T. V. Gemmer, Mike Williford, and Bill Smith, for their constant help and support.

FRAGS



The Forest Resources Association of Graduate Students, FRAGS, serves two main functions: we provide information to prospective graduate students, assisting them in their acclimation into the Raleigh environment, and we serve as the communication link between the graduate students of the three departments and the school administration. Participation in FRAGS offers the student an opportunity to shape his or her academic and research environment and it affords an insight into the inner workings of the school. In recent years, FRAGS leadership and student participation has strengthened the channels of communication which are now open and viable. FRAGS is the oldest and the strongest of all graduate student organizations on this campus and we intend to maintain that hard-earned distinction.

Mike Harmon

RHO PHI ALPHA



The Fall, 1979 semester was a busy one for Rho Phi Alpha. The fraternity had the responsibility of designing and assembling the Recreation Department's display at the annual University Open House during September. In October, 13 pledges and 3 faculty members were inducted into the fraternity during the fall pledge banquet. Mrs. Dottie Abrams from Dade County, Florida spoke to the fraternity about professionalism. The fraternity had a wine and cheese tasting party in December and Dr. Saylor spoke on the art of wine sensing.

In the Spring, the fraternity inducted additional members. At the Spring banquet, Ronald Secrist, Director of Parks and Recreation in Chapel Hill, spoke to the group about future trends in the field. The major project for the spring semester is organizing and sponsoring the annual spring picnic held at the Schenck Forest for the Recreation Department. The fraternity also holds elections for the Thomas I. Hines Award, an annual presentation to the outstanding senior.

XI SIGMA PI



This year, Xi Sigma Pi has continued to uphold its tradition of recognizing students of the School of Forest Resources for their outstanding scholastic achievements. Xi, the honorary forestry fraternity, gives students the opportunity to get to know the faculty and the students of the School of Forest Resources. Professionals from the fields of Recreation, Forestry, Wood Science, and Pulp and Paper Technology help to broaden the students' education beyond the classroom.

Each semester began with a smoker to introduce prospective members to Xi and its members. In the fall of 1979, nine students were inducted at the formal initiation ceremony in November. Xi extends a special thanks to Dr. Fariior for his words of wisdom to our initiates. Once again Doc Steensen wined and dined us with chili and wine at the Hill Forest. Xi sponsored Dr. Gregory in the Great State Professor Race for cerebral palsy. As a service to students in the School of Forest Resources, Xi maintained its free tutorial service. In keeping with tradition, Xi will sponsor the senior picnic and the steak dinner if our budget can hold up.

Many thanks to our officers and leaders for their contributions throughout the year: Bob Carroll, Forester; Debbie Mauney, Asst. Forester; Jim Peeler, Ranger; and Jan Willis, Secretary-Fiscal Agent. And very special thanks to our beloved advisor, Doc Steensen, for all of his help and support.

THE SOCIETY OF AMERICAN FORESTERS



The SAF is devoted to the advancement of science, technology, practice, and teaching of professional forestry. The student chapter is for students concerned with their futures and professional forestry.

The small number of students involved with SAF had a great year. We heard a number of outstanding speakers with topics ranging from the effects of acid rain, non-industrial private forests, employment opportunities with Carolina Power and Light, procurement forestry, and forest policy. Besides meeting twice a month, the student chapter again helped Wake County Opportunities keep Raleigh's poor citizens warm with volunteer firewood cuts.

Special thanks go to Dean Ellwood and the Triangle Chapter of the SAF for helping to send a student to the national convention in Boston. It was a great experience.

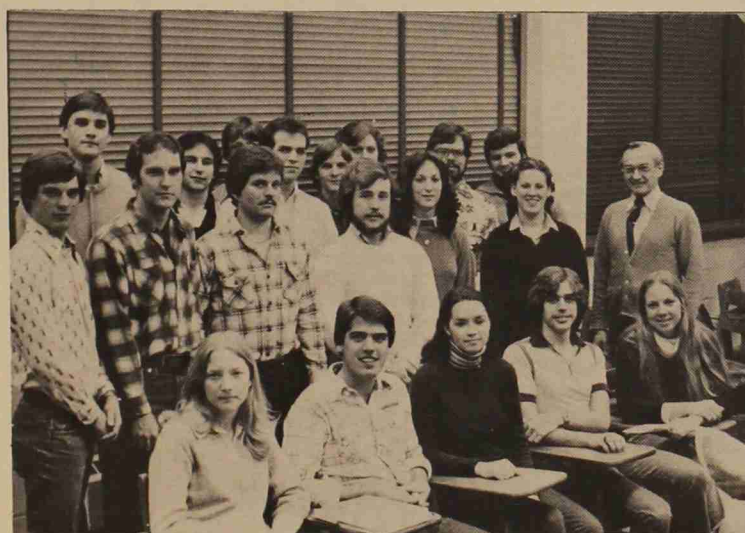
Lynn Bramberg,
Chairman

FPRS



The purpose of the Forest Products Research Society is to provide a technical exchange between research and industry. The North Carolina State Chapter of the FPRS attempts to carry out this purpose through its Chapter activities. The Chapter's monthly program meetings include lectures by guest speakers from the wood products industry. Each year the Chapter assembles and mans a Wood Science and Technology exhibit at the University Open House. Funds for the operation of the society are obtained from the Forest Resources Council and an annual fund-raising raffle. The Chapter also provides recreational activities to enhance fellowship between the Wood Science students and their faculty. These recreational activities include an active participation in the School's intramural program and bi-annual picnics held each fall and spring semester. The Chapter offers these programs to the Wood Science students at N. C. State in an effort to provide vital information concerning the opportunities which exist in today's wood products industry.

TAPPI



The student chapter of the Technical Association of the Pulp and Paper Industry (TAPPI) at N. C. State provides the students in the Pulp and Paper Science and Technology

curriculum with a connection to the pulp and paper industry. Any student majoring in Pulp and Paper Technology can become a member.

At each club meeting, a guest speaker from a paper mill, paper mill equipment supplier, or chemical supplier presents a short, informative program that may include a talk, slide show, or film. Refreshments are also served at the conclusion of each meeting. Some students also attend meetings of the Virginia-Carolina TAPPI section. These two-day meetings feature several presentations by mill engineers, a banquet, and a tour of a paper mill.

TAPPI also sponsors fall and spring picnics at Schenck Forest. Volleyball games, beer chugging contests, and a meal of delicious, charcoal-grilled, "Hitchings-burgers" are some of the highlights of the picnics.

Officers for 1979-1980 were: Dave Bucher, President; Kim Childs, Vice-President; Nancy Hazen, Treasurer; Karen Rutledge, Secretary; Bill Wicks, Program Chairman; and Wally Belgard, Forestry Council Representative.

RECREATION CLUB



The Recreation Club began an active year in the fall with a membership drive and an "Islands Party" which gave members a good opportunity to meet one another and relax before the start of the academic year. Throughout the semester the club got together for block seating at home football games. Members and friends enjoyed tailgating and Backing the Pack.

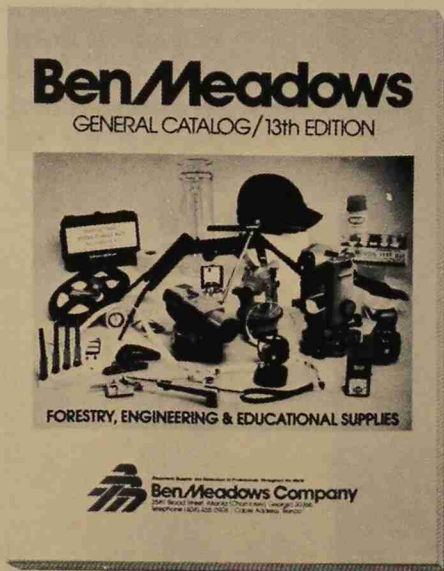
Additionally, the Recreation Club sponsored several speakers during the semester. Dr. Munn spoke on communications, and Del Bachert spoke on the use of books to be a "pseudo expert." The club had a particularly good opportunity to attend the N. C. Recreation and Park Society state meeting this year because it was held in Raleigh. This as well as the club's meetings gave members the chance to meet professionals in the field of parks and recreation.

The big event for the spring semester was an internship conference. At this meeting held at McKimmon Center, there were over thirty representatives of various agencies. Students had the opportunity to interview with these potential employers. The conference also included a banquet and a square dance. Much hard work went into the preparation of the event and all those who contributed are to be congratulated for its success. Also, many thanks go to our advisor, Dr. Rea for his encouragement and guidance during the year.

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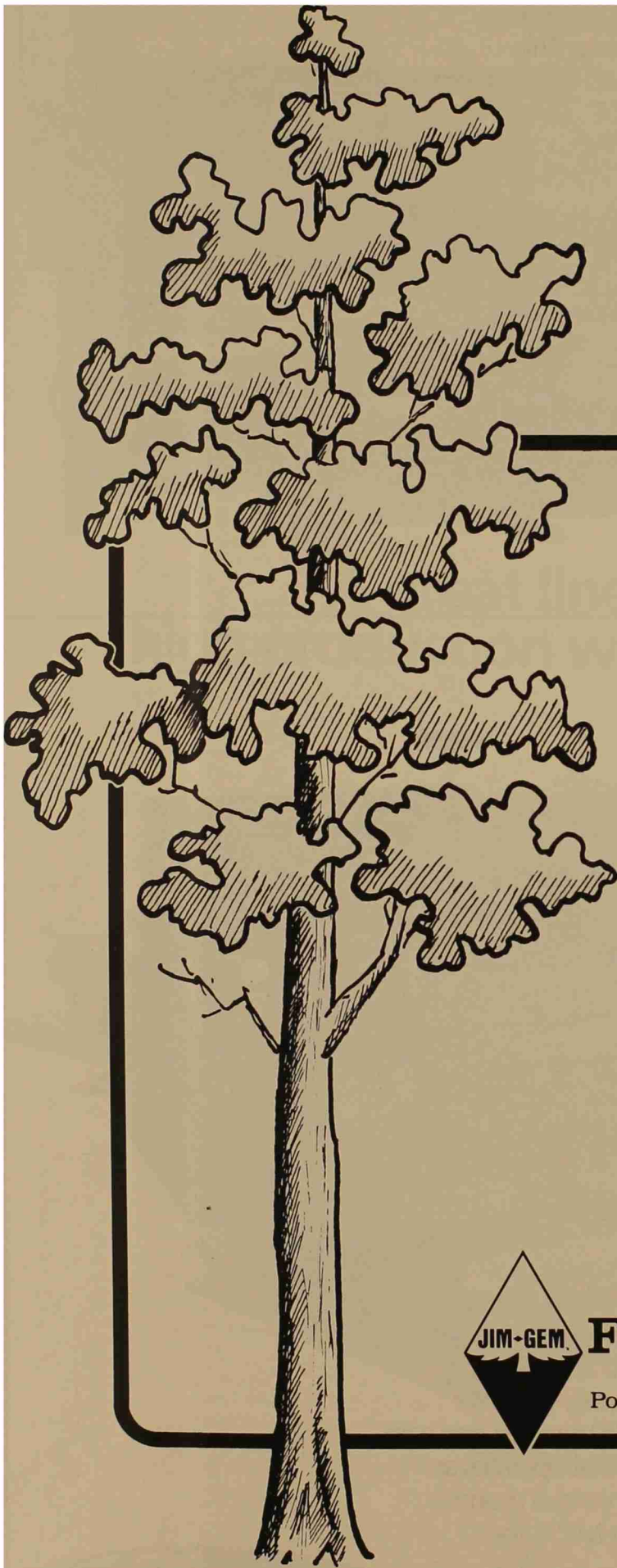
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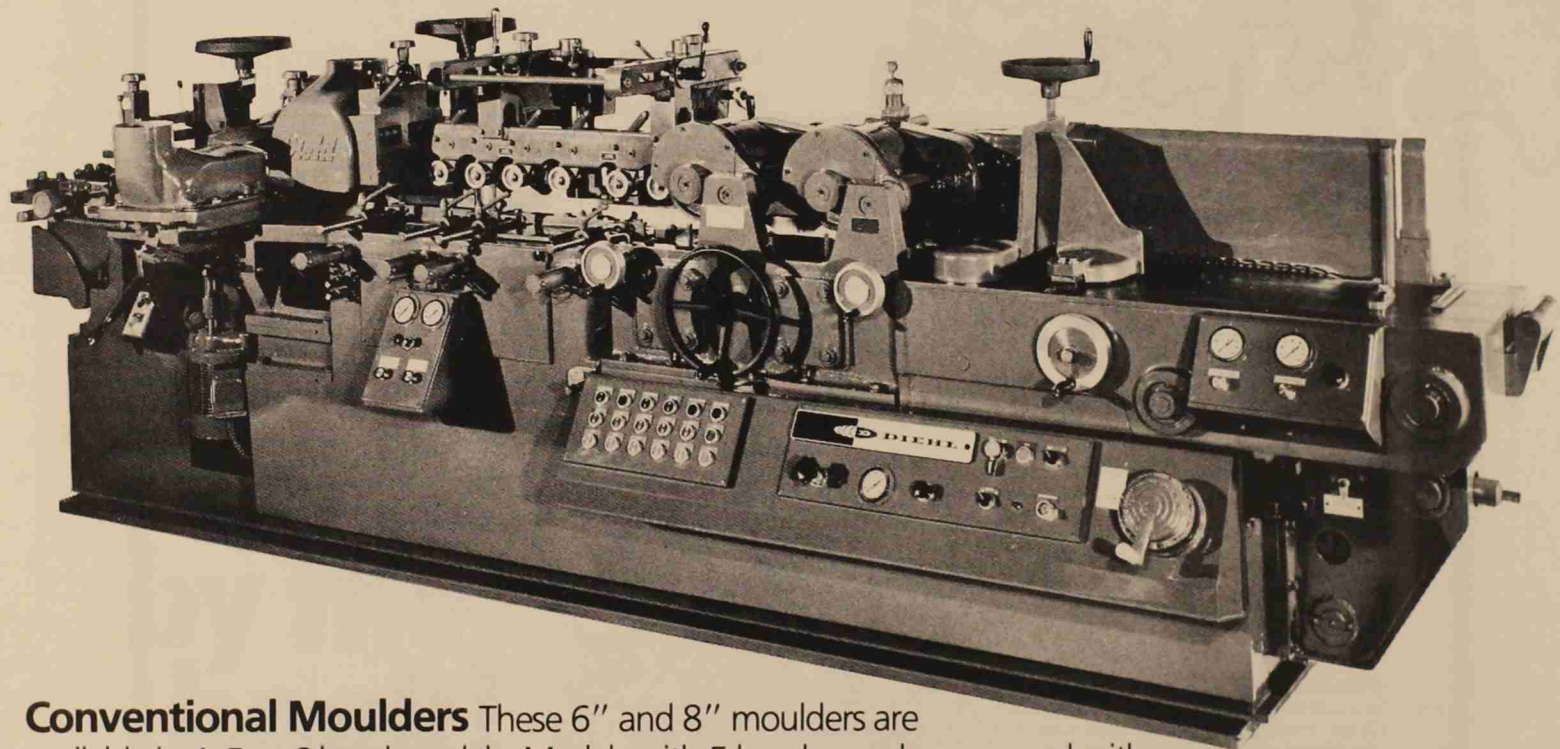
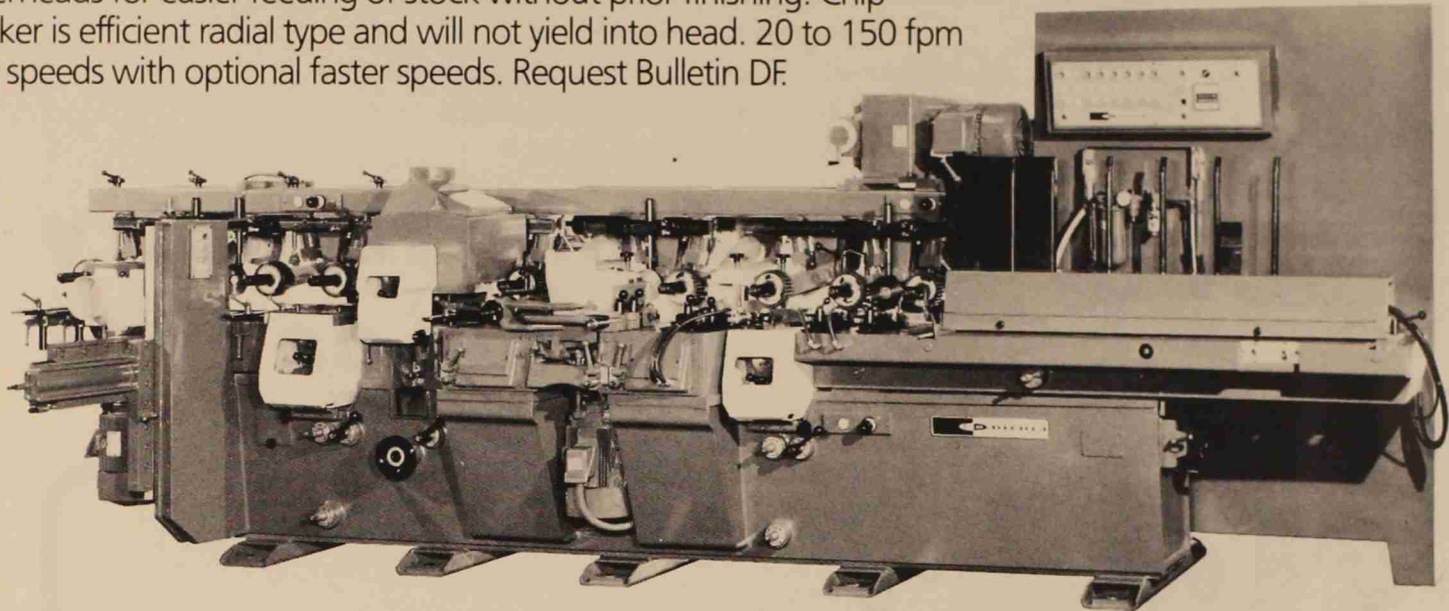


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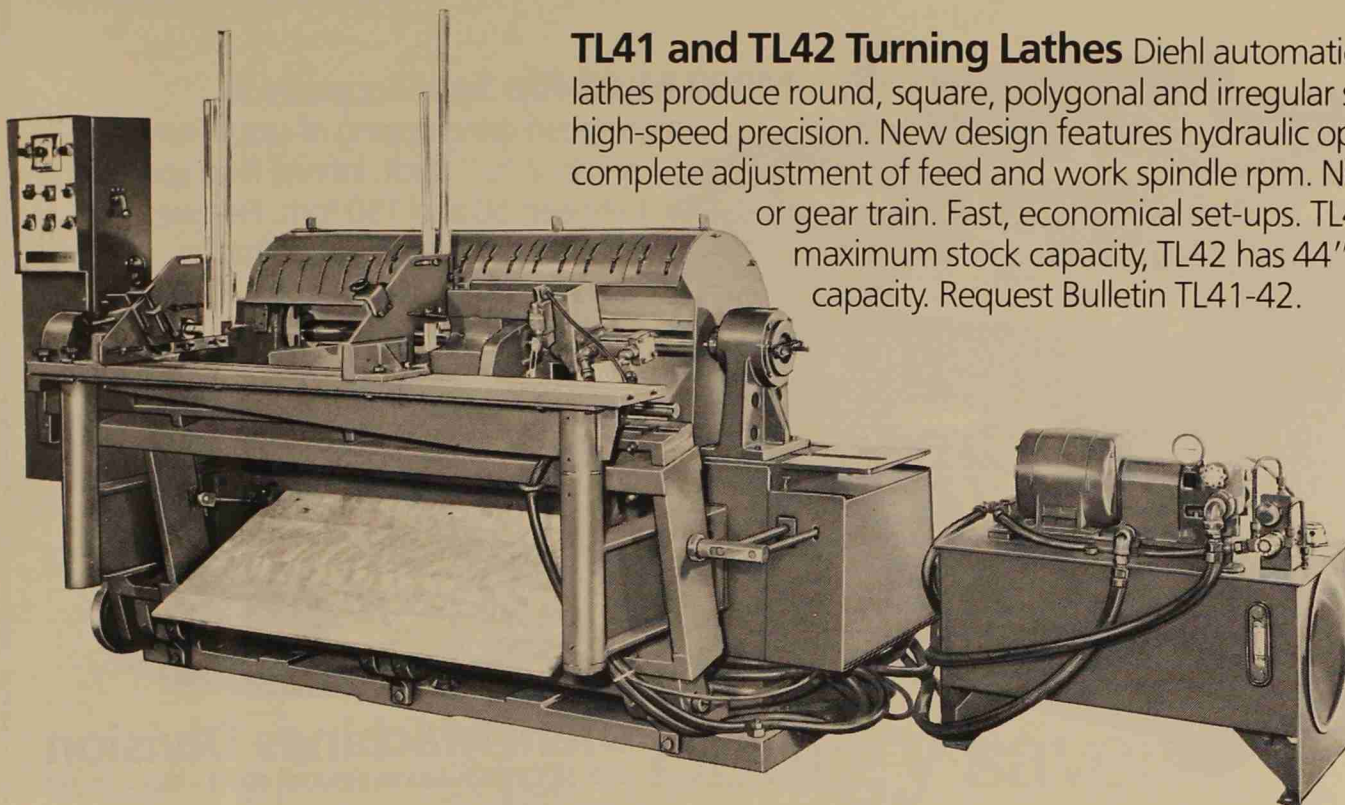


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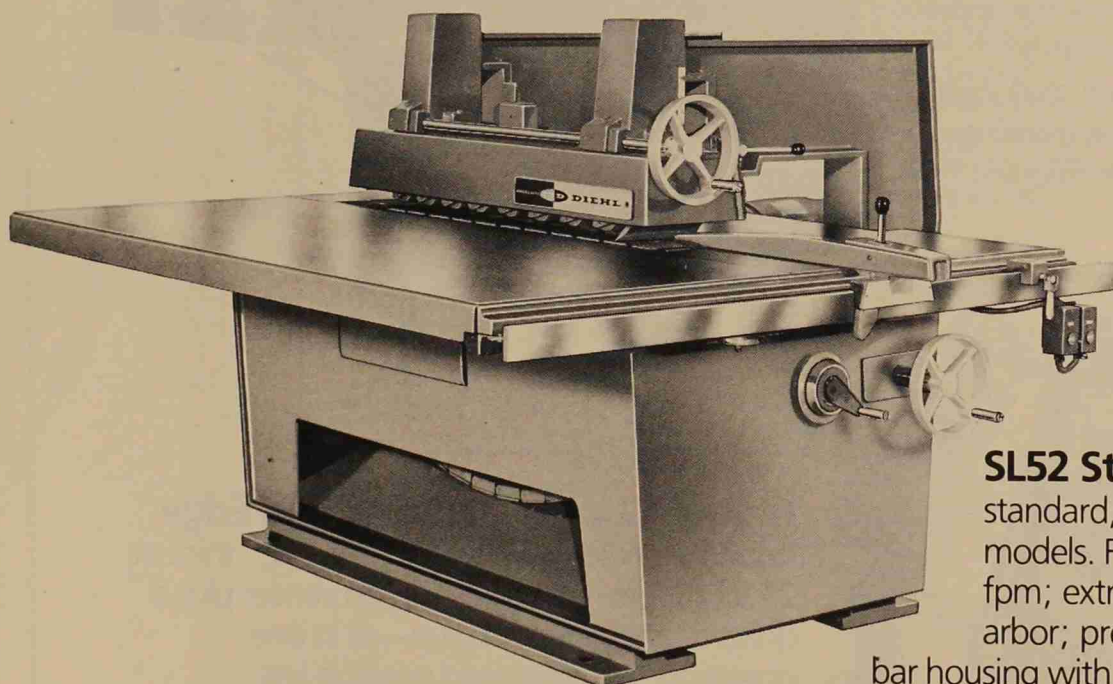
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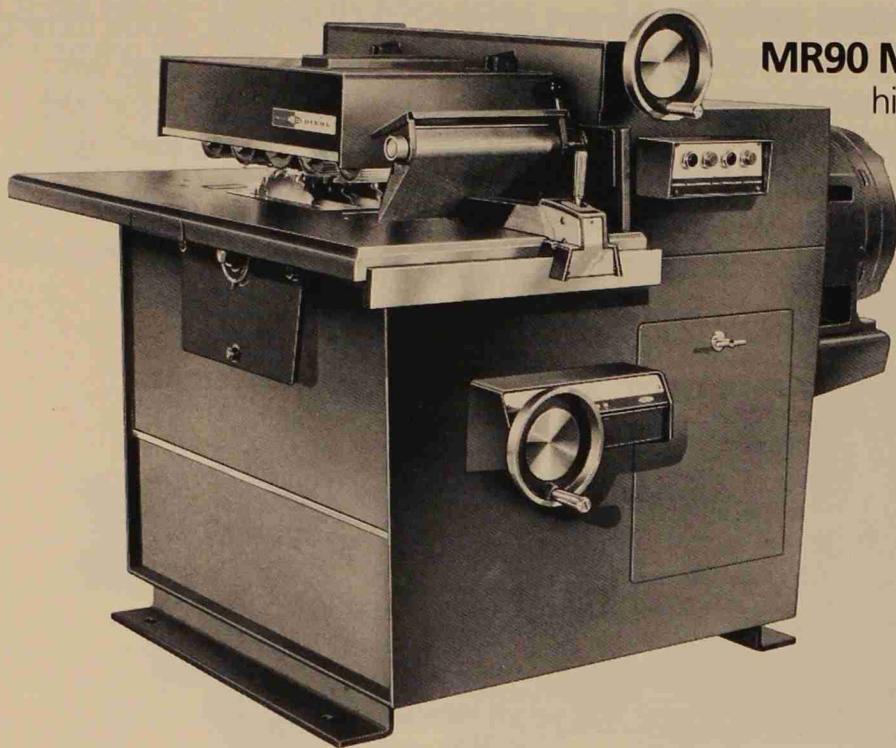


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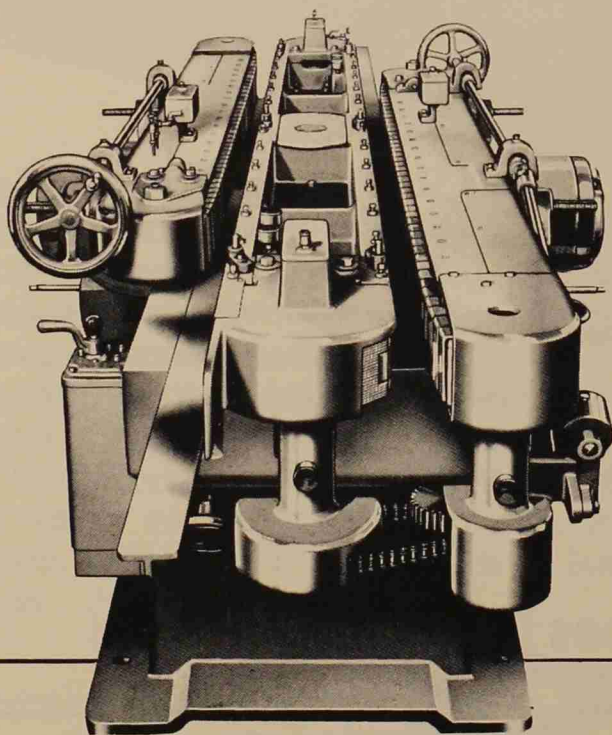
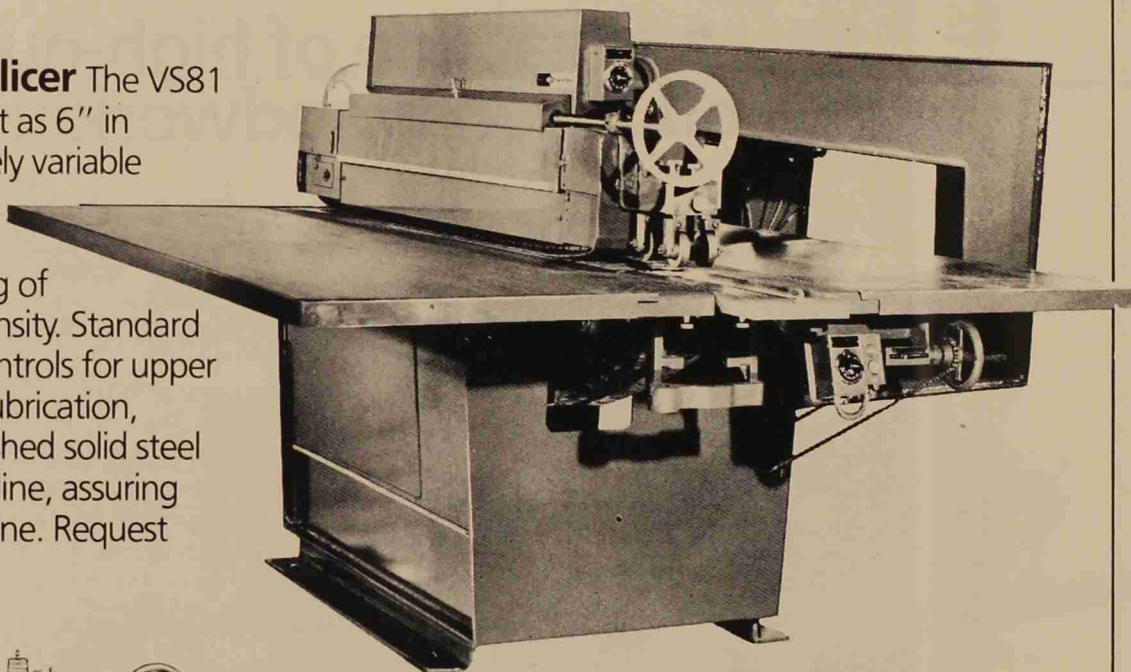
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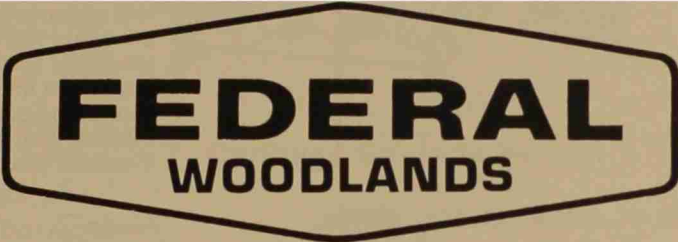
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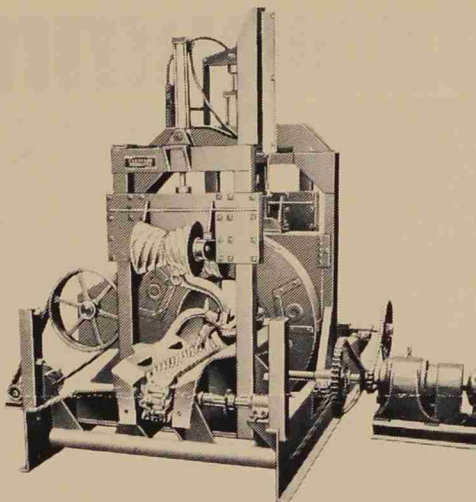
1. The Carthage-Brunette Barker is fully automated for lower cost and greater output for clean, high speed debarking with minimum fiber loss.

2. A heavy-duty, competitively priced chipper that delivers uniformly clean-cut chips. Available in 39", 48", 60", 66" and 84" sizes.

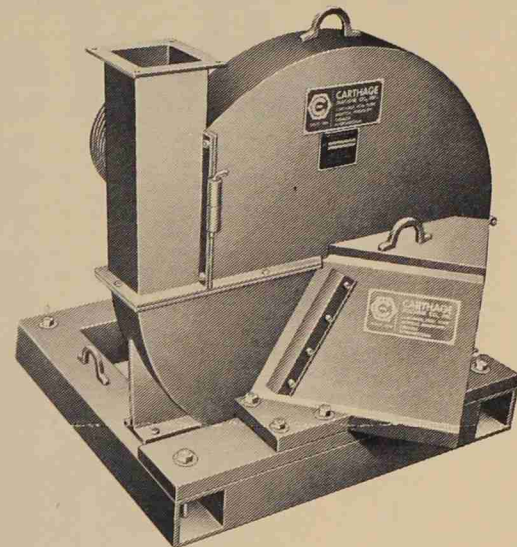
3. These heavy-duty chippers have the muscle and versatility for really tough service. Thanks to tungsten carbide-faced parts, these units are noted for low maintenance. Available in 96", 104", 112", 116" and 140" sizes.

4. A self-contained, push-button controlled unit for efficient, year-round operation. Available with four or six-way axe for nominal log diameters of 30", 38", 48" and log lengths of 4' to 10'.

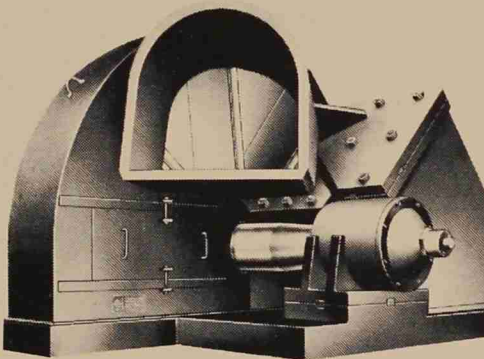
5. A self-contained, compact wastewood utilization system which chips, screens and loads in one continuous operation. Available with a wide range of options and special features.



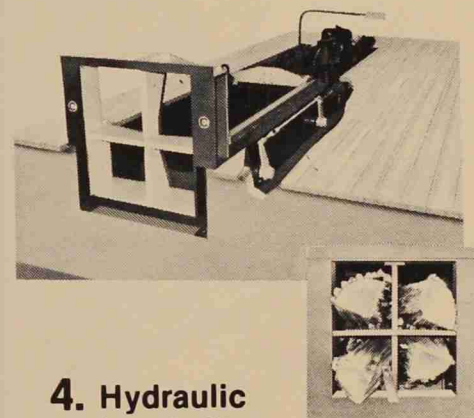
1. Carthage-Brunette Barker



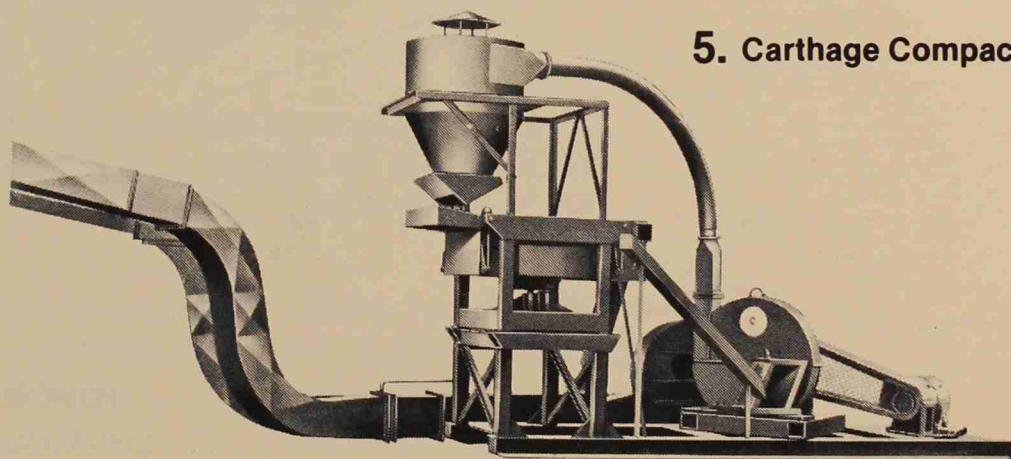
2. Sawmill/Utility Chipper



3. Carthage-Norman Heavy-Duty Chipper



4. Hydraulic Log Splitter



5. Carthage Compac



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THE STATE TOAST

*Here's to the land of the long leaf pine,
The summer land where the sun doth shine,
Where the weak grow strong and the strong grow great,
Here's to "Down Home," the Old North State!*

*Here's to the land of the cotton bloom white,
Where the scuppernong perfumes the breeze at night,
Where the soft southern moss and jassamine mate,
'Neath the murmuring pines of the Old North State!*

*Here's to the land where the galax grows,
Where the rhododendron's rosette glows,
Where soars Mount Mitchell's summit great,
In the "Land of the Sky," in the Old North State!*

*Here's to the land where maidens are fair,
Where friends are true and cold hearts rare,
The near land, the dear land whatever fate,
The blest land, the best land, the Old North State!*

1904—Lenora Martin, Mary Burke Kerr