

HISTORY OF THE DEPARTMENT OF FORESTRY AND ENVIRONMENTAL
RESOURCES AT NORTH CAROLINA STATE UNIVERSITY, 1979-2008

APPENDIX 4

MAJOR EVENTS

1978-79

--Dr. John W. Johnson becomes Head of the Department of Forestry on January 1, 1979. Dr. Charles B. Davey steps down as Department Head and is named Carl Alwin Schenck Professor of Forestry.

--Dr. J. O. Lammi retires July 1, 1978. His air photo interpretation course is taught by Dr. Arthur L. Sullivan, appointed jointly between Forestry and Landscape Architecture, and Mr. Harold Nelson, retired from Weyerhaeuser Company.

--Course offerings in watershed management and hydrology resume with hiring of Dr. James D. Gregory.

--Wildlife summer camp, taught by Dr. Richard A. Lancia, is offered at Hill Forest Slocum Camp for the first time in the summer of 1979.

--Southern Forest Research Center, organized under auspices of the School of Forest Resources but involving Department of Forestry faculty, begins research on biological fixation of nitrogen in forest stands (Dr. Davey) and on bioeconomic models of forest productivity (Dr. William L. Hafley). A special project being administered through the Center, dealing with tissue culture of loblolly pine, is headed by Drs. Ralph Mott and Henry Amerson of the Department of Botany.

--Efforts to improve writing skills in the undergraduate program are initiated under the direction of Mr. Gary B. Blank.

--Undergraduate forestry curriculum under revision.

--Governor's Task Force on Small Woodlot Management, chaired by Dean Eric L. Ellwood with participation of Drs. D. Lester Holley and Gene Namkoong of the departmental faculty, concludes its work. Among other things, the report calls for establishment of a small woodlot research program in the Department of Forestry.

1979-80

--Together with the School of Forest Resources the Department of Forestry celebrates its 50th anniversary.

--Department Head John W. Johnson dies suddenly on November 23, 1979, and is replaced as Department Head by Dr. Arthur W. Cooper.

--Dr. Carlyle Franklin is hired to direct the program in small woodlot forestry research authorized by the 1979 General Assembly.

--The Department's first course in environmental impact assessment is taught jointly with the University Studies Program by Dr. David A. Adams.

--The review of the undergraduate forestry curriculum is completed. Major changes involve: commitment to development of greater communications and mathematics skills, better integration of courses including summer camp throughout the 4 years of study, a new requirement for skills in computer science and remote sensing, a new junior-year sequence in forest ecology and silviculture, and smoother incorporation of transfer students into the junior year.

--The Central American Pine Cooperative (later to become CAMCORE--the Central America and Mexico Coniferous Resources Cooperative) is created. Dr. Bruce J. Zobel plays a major role in creating this program.

--Dr. Robert C. Kellison is named Coordinator of Cooperative Research Programs in addition to serving as Director of the Hardwood Research Cooperative.

--The Southern Forest Research Center becomes fully operational with Dr. Russell Ballard working on maintenance of site productivity and Mr. William D. Smith working with Dr. Hafley on bioeconomic modeling.

--With recent loss of six senior faculty to retirement or death, mean age of faculty declines by 15 years. Mix of faculty expertise begins to become more diversified.

--Dr. Arthur W. Cooper completes his chairmanship of the Committee of Scientists for the National Forest Management Act when the Committee's report is issued in the fall of 1979.

1980-81

--Dr. Ellis B. Cowling shared the University of North Carolina's prestigious O. Max Gardner Award for 1981.

--Dr. Siamak Khorram is hired as Associate Professor of Forestry and Electrical Engineering to teach and do research in aerial photography and remote sensing.

--William S. Dvorak begins his service as Director of the Central America and Mexico Coniferous Resources Cooperative. The Cooperative has 5 members with several other entities showing interest.

--Dr. Russ Ballard, Director of the Forest Fertilization Cooperative, resigns in mid-year to take a position in research administration with Weyerhaeuser Company. Ballard later returned to New Zealand and ultimately became the Director of the New Zealand Forest Service and later moved to a position in New Zealand's national education ministry.

--Dr. Jay D. Hair, Director of the Fisheries and Wildlife Program and a joint appointment in Forestry left in May to become Executive Vice-President of the National Wildlife Federation.

--Dr. D. Lester Holley returned to the Department after a one-year assignment with the North Carolina Forest Service.

--Dr. Thomas V. Gemmer is named one of three University Alumni Distinguished Professors.

--Dr. Arthur W. Cooper served as President of the Ecological Society of America for 1980-81.

--Revision of Forestry undergraduate curriculum, with greater emphasis on communications and quantitation, approved by University Courses and Curriculum Committee. Administration of undergraduate program revised with two Committees, one on Courses and Curriculum and the other on Advising and Scholarships, established. Courses and Curriculum Committee proposes a process for evaluating and improving undergraduate courses. Advising and Scholarships Committee analyzed scholarship funds and allocated 8 merit and 8 work scholarships during the year.

--Discussions with VPI initiated toward development of a joint VPI-NCSU photography and remote sensing cooperative. Discussions eventually proved fruitless.

--Small Woodlot Research Program becomes fully operational.

--Tree Improvement Cooperative completes six-year project to broaden the genetic resource base of the program.

--In the Fertilization Cooperative several models predicting response of loblolly pine to fertilization were developed, recommendations were made as to source and timing of nitrogen fertilization, and analyses were made of response of fertilized stands to thinning.

--Studies of biomass related to wood-for-energy from planted and natural stands of hardwoods were made in the Hardwood Cooperative.

--The SESFOR "Symposium on Engineering Systems for Forest Regeneration" held at the McKimmon Center, sponsored by ASABE & the Department, internationally attended with its proceedings reprinted over 3 times.

--Graduate enrollment reaches 69 and the number of international graduate students begins to grow.

1981-82

--H. Lee Allen assumes Directorship of Forest Fertilization Cooperative. Dr. David A. Adams moved from a visiting appointment to Associate Professor of Forestry and University Studies. Dr. Lawrence A. Morris took over directorship of the Site Productivity Study and Dr. Gary Kronrad began a post-doctoral appointment in the Small Woodlot Program.

--Major turnover and diversification of faculty has occurred over the past 5 years. In 1976 14 of 26 full and adjunct faculty were full professors; in the fall of 1981 there were 40 full and adjunct members, only 13 of whom were full professors and 21 of whom were new since 1975-76. Mean age of faculty has declined from 48 to 40 years over the same period. New disciplines represented include remote sensing, forest engineering, wildlife habitat management, biomass analysis, environmental impact assessment, and small woodlot management.

--New undergraduate curriculum fine-tuned. Junior year sequence of silvics and silviculture taught for the first time and senior year courses revised to assure continuity. Because many students were having difficulty with the quantitative subject matter in the freshman course in forestry, new mathematics requirements were instituted based on entering freshman predicted mathematics scores. After much debate faculty votes to require a grade of C or better (or a GPA of 2.0) for entrance into summer camp and in FOR 303, 304, 319, 405, 406, and ST 312. Continued emphasis is placed on writing improvement and, for the first time, the Department has a small number of scholarships to offer as an aid in recruiting. Concern with professionalism and ethics leads to new procedures for evaluating and emphasizing these qualities.

--A special committee evaluates the entire summer camp program and recommends a number of changes in operations and physical plant. Construction of Phase I of the new dining hall at Hill Forest is authorized. Pre-camp course for transfers, FOR 111, taught for first time in May 1982.

--Revisions of the Conservation curriculum effective in 1981-82 materially improve that program.

--Applications for graduate study from international students continued to rise; the first application for graduate study from the People's Republic of China was received (from Li Bailian who completed his doctoral degree at NCSU and later returned to a position in the Tree Improvement Cooperative and ultimately became the program's Co-Director).

--Comprehensive review of the graduate program, begun in 1980-81, are completed. Changes approved include: new procedure for screening applications, elimination of the foreign language requirement, revision of preliminary examination requirements particularly in the ground rules for preparation of propositions, increases in stipends, development of a research seminar to be required of all entering students, revisions of FOR 571, 572, and 614, and proposal of new courses in tree improvement techniques, environmental impact assessment, and advanced wildlife habitat management.

--A study by The School Forests Committee shows that there has been a build-up of growing stock on the School Forests during the last 10 years and that an accelerated harvest of old-growth pine is desirable. Another study shows a need for new facilities at the Hill Forest Summer Camp, including a new kitchen and dining hall. Revenues from timber harvests on the School Forests will be adequate to finance the new construction and road repairs. Permission is sought and obtained for construction of a new kitchen. The study also identified several tracts of land on which development would damage Hill Forest. Approval is sought to acquire one such tract. A proposal is developed to justify carry-over authority in the School Forest budget. Such authority is deemed essential to sound fiscal management of the properties.

--Despite difficult economic conditions in the forestry business membership in the Department's five industrial cooperatives continues to grow. CAMCORE makes significant strides in its first full year due to the work of Mr. Dvorak and Dr. Zobel often carried out under difficult and hazardous social and physical conditions in Central America. As a result of joint efforts with Duke and the US Forest Service the Southeastern Center for Forest Economics is established with Dr's. Holley, Laarman, and deSteiguer participating.

1982-83

--Dr. Henry V. Amerson's appointment was changed from a visiting appointment in Botany to Assistant Professor of Forestry.

--First mention made in Annual Reports of use of "contingent on continuing availability of funds" provision for hiring into tenure track positions. In 1983, 7 of 9 assistant professors were on that sort of appointment.

--Dr. Charles B. Davey receives Barrington Moore award for research from the Society of American Foresters.

--Dr. Bruce J. Zobel is named Man of the Year in Forestry for 1982 by the North Carolina Forestry Association.

--After study by faculty committees major changes made in departmental advising program and new procedures are developed in the job placement program.

--First computer laboratory established in the College. It is used by five forestry undergraduate courses.

--Changes approved in 1981-82 for the graduate program are implemented and a manual describing policies and procedures used in administering the graduate program is prepared.

--Plans for the new kitchen at the Hill Forest are approved and new equipment is ordered. A 100-acre tract near the entrance to the Hill Forest Camp was condemned and court proceedings are underway to determine its value. No action is taken on request for carry-over authority in the School Forest budget.

--Total research funding in the Department reaches \$2.284 million with roughly one-third each coming from State and Federal appropriations, private industry, and grants and contracts.

--The Tree planter developed in the Forest Engineering Cooperative results in a patent ownership by NCSU.

--Camcore adds one new member each in Brazil, Columbia, and South Africa.

1983-84

--Dr. Thomas V. Gemmer dies of cancer in October 1983.

--Dr. James D. Gregory replaces Dr. Gemmer as departmental undergraduate placement coordinator.

--Mr. Jerry L. Bettis is hired to serve as a Lecturer for two years and becomes the first black faculty member in the College of Forest Resources. He is responsible for recruiting with special emphasis on minorities.

--Graduate program reaches a new peak of 76. Rapid growth of the graduate program in the early 1980's is reflected by 15 students receiving their PhD degree at the May 1984 commencement.

--Graduate student Patrick B. Durst receives a Fulbright Grant to study reforestation in the Philippines becoming the Department's first Fulbright Fellow.

--In the spring of 1984, the Department's undergraduate forestry program undergoes a 10-year accreditation review by the Society of American Foresters and the Department undergoes its 5-year Cooperative State Research Service research review.

--Special analysis of the undergraduate Forestry curriculum carried out in March 1984 by faculty assisted by input from alumni and from persons currently hiring NCSU students. Review reveals a need to change the content of the introductory course and to add a course in policy. Other problems identified with humanities and social science electives, lack of a procurement course, and with concentration areas. As a consequence the content of the introductory course is strengthened and the course in policy is added as a requirement.

--New kitchen at summer camp completed and equipped prior to the 1984 summer camp.

--A long-term management plan is completed for the Goodwin Forest and plans are begun for the Hill, Schenck, and Hope Valley Forests.

--Research funding in the Department reaches \$2.267 million.

1984-85

--Economic conditions in the forestry industrial sector continue to be poor and are reflected at forestry schools by declining enrollment in undergraduate programs and increased competition for scarce industrial research dollars. Nationally, enrollment in forestry graduate programs increases.

--The curriculum in Forestry earns 10-year accreditation by the Society of American Foresters.

--The SAF accreditation review found our program to be "clearly one of the nation's leading forestry schools" and the CSRS review was equally complimentary of the research program. Each review pointed out areas for improvement. The Department works during this year to respond to these issues.

--The Department implements the new fall orientation program, where incoming freshmen and transfers receive their orientation in late summer immediately before classes begin rather than earlier in the summer with other students.

--Joyce Hilliard-Clark is awarded her doctoral degree in May of 1985, becoming the first black female PhD in forestry in the nation.

--Alleviation of the department's serious, long-running, space problems is offered by the proposal of a Natural Resources Research Center. Funding is sought for the building from the General Assembly.

--Research funding reaches \$2.422 million not including funding for research in acid deposition which, if included, would bring the total to over \$3 million.

--Despite declining enrollments the department does not lose State-funded faculty positions thus allowing a continued breadth of productive faculty that is cited by both the SAF and CSRS reviews as a major factor contributing to the excellence of the program.

1985-86

--Condition of the forest industry sector continues to be unsettled. Changes taking place appear to be long-term adjustments that will require changes in the forestry education sector if it is to remain competitive.

--General Assembly agrees to fund construction of a two-tower Natural Resources Research Center building that will, to a great extent, alleviate the serious space problems of the Department of Forestry. The building will combine space for Forestry and Marine, Earth, and Atmospheric Sciences and envisions a research program that will provide coordinated studies in a wide array of natural resource subjects.

--Dr. Awatif Hassan is on a sabbatical leave at the National Institute of Agricultural Engineering in England and Dr. Richard A. Lancia is on a one-semester teaching sabbatical at the University of California, Berkeley.

--Concentrated attention is given to recruiting with visits made to over 100 high schools and materials mailed to 396. Special attention is paid to minorities.

--Undergraduate enrollment continues to decline while graduate enrollment continues to increase reaching a high of 83.

--For the second year a group of undergraduate students and faculty travel to Washington for meetings at the SAF, the National Forest Products Association, the National Wildlife Federation, and the US Forest Service.

--The undergraduate curriculum is reviewed resulting in two new curricula, Forest Management and Forest Science, being proposed. In addition all required courses were reviewed to develop better coordination among them. FOR 110, Introduction to Forestry, undergoes major revision.

--Negotiations are carried out with North Carolina A & T State University toward development of a 3+2 transfer program.

--The graduate program is reviewed in March 1986 identifying a number of issues that will be reviewed by the faculty in 1986-87.

--Research support in the Department totals \$2.55 million.

--Funds are obtained to purchase a plasma emission spectrophotometer for the Department's soils analysis lab.

--A research program in Forest Biotechnology is established.

1986-87

--Major changes in the forestry sector continue to occur. These include mergers and takeovers among companies, a move toward divestment of forest land ownership, and a lessening of interest in research, including both money and personnel. These changes, particularly those involving research, lead to a proposal by the Department to restructure its organized research program. It is unclear how our industrial supporters will respond to the proposed change.

--Forestry becomes increasingly internationalized and our programs follow suit with particular opportunities in Central and South America and in Asia.

--Undergraduate enrollment continues to decline but graduate enrollment continues to be strong with quality being particularly good.

--The Department hosts the 30th Annual Conclave of southern forestry schools.

--An Alumni Symposium is held in the fall of 1986 with selected graduates of the Forestry program returning to have dinner with undergraduates and to discuss various aspects of employment.

--The proposal for an undergraduate Forestry degree with two concentrations, Forest Management and Forest Science, is approved and becomes effective in the fall of 1987.

--Review of the graduate program is, on the whole, complimentary. As a result of the review, a complete study of all graduate courses is conducted resulting in the elimination of several cross-listed courses, nine course revisions, and six proposals for new courses. In addition, a new process for evaluating applications is instituted, stipends are increased to \$8,000 for master's students and \$9,000 for PhD's, a recruiting trip to six northeastern forestry schools, the Graduate Handbook is completely re-written, and a new recruiting brochure is prepared.

--Discussions are held with Western Carolina University concerning the forestry courses in its recently-approved Natural Resources program. No faculty member from NCSU indicates an interest in taking responsibility for those courses.

--Discussion with North Carolina A & T State University regarding approval of a 3+2 transfer program in forestry break down and the effort is abandoned.

--There is dramatic increase in interest in tropical forestry among graduate students and a course is developed which becomes popular. Many incoming graduate students indicate an interest in third-world or tropical forestry.

--Intensive review of the Department's cooperative research programs leads to, among other things, a recommendation for establishment of a Forest Biology Research Program that would replace the Southern Forest Research Center. It would include the Site Productivity Project, the Tissue Culture Program, the Biotechnology Program, and a new forest physiology initiative. The proposal is discussed by the various research cooperatives at their spring meetings.

--Research in biotechnology begins with the addition of Dr. Anne Marie Stomp to the faculty. She remains working with the Forest Service biotechnology program in California while a laboratory is remodeled for her use.

--A position in forest physiology is advertised in the winter of 1987.

--A serious effort is made to develop a program of continuing education courses. A retired industry scientist is engaged to study the needs for such courses and develop those that seem appropriate. Three courses are developed. Two do not open due to low enrollment but the third does. The effort does not seem to be terribly successful.

--For the first time every member of the Department has a personal computer. In addition, equipment is acquired and cables are laid to hard-wire the department's computers so that they are all interconnected.

--Champion International relinquishes its lease on the Hofmann Forest and management of the forest is turned over to the College of Forest Resources. Members of the forestry faculty work with the land management committee of the Forestry Foundation to develop a management plan and strategy for the Hofmann. The new situation at the Hofmann Forest represents a major opportunity to develop a source of support for school programs and for the Department and the Foundation to work together in a new, highly constructive, way.

1987-88

--Job situation for graduates stabilizes with more interviews held than in any recent year. Fully half the jobs for which our students interview describe some sort of general natural resources management knowledge is desirable.

--Continued discussions of departmental research program with industrial supporters indicate that there are areas of basic research in which we are not now involved and in which we should consider developing programs.

--Dr. Ronald R. Sederoff returns to NCSU taking a position in the department with a charge to play a lead role in developing a forest biotechnology program. Together with Dr. Anne Stomp the job of putting together laboratory facilities for the program begins together with writing research proposals to support the programs' work.

--Dr. Leslie Tolley-Henry fills position in forest physiology

--Dr. Thomas O. Perry retires after 27 years on the faculty.

--Enrollment in undergraduate programs continues to decline as do undergraduate programs in all other major US forestry programs.

--The graduate program continues strong with many newly enrolled students having a strong interest, and in some cases background, in international forestry.

--In an effort to increase enrollment of blacks a group of 9 students from Tuskegee University was entertained. Although we continue to enroll more black students than any other forestry program in the US absolute numbers remain very low.

--Discussions aimed toward producing a better sequencing of courses in the Forestry major. They began with the courses in the junior and senior years.

--The course in Tropical Forestry is submitted to the Graduate Board for approval. It is anticipated that other courses in international forestry will follow.

--Two new undergraduate curricula, natural resource management and forest engineering, were developed. The natural resources curriculum is a revision and renaming of the existing Conservation curriculum. It is viewed as a very important part of the department's continued efforts to serve students. Discussions continue with the College of Agriculture and Life Sciences to iron out differences between the Colleges. The forest engineering curriculum is a concentration within the Forestry major and has not yet been approved.

--An undergraduate minor in Forestry is developed which makes use of existing courses and includes the present course in forestry for non-majors (FOR 252) as well as a new course for non-foresters making a year-long sequence of such courses.

--There is still no progress on approval of the 3+2 transfer program with North Carolina A & T State University. We continue to be perplexed over this situation as there is no program in either natural resources or forestry, other than the two-year program at Tuskegee, at any of the 1890 universities.

--Research support increases slightly to more than \$3.3 million.

--The Forest Biology Research Center is established and implemented with Dr. Robert C. Kellison as director. Its objectives are to increase the department's basic research programs, to support the applied research of the cooperatives and other faculty, to provide an opportunity for industries to support specific research projects, and to provide greater emphasis on interactive research within and outside NCSU. A total of \$70,000 in seed money is made available from the North Carolina Forestry Foundation.

--Continued discussions with industrial supporters indicates a need for a better coordinated program of research in tree improvement, tissue culture, and biotechnology. The existing 10 faculty in these areas represent the largest aggregation of such talent in the country and the department regards this as one of its most promising areas of research growth.

--The College of Forest Resources is ranked first in the country in amount of industrial funds raised for cooperative research; virtually all of these funds are raised within the Department of Forestry.

--Faculty members in the department participate extensively in the development of a management plan for the Hofmann Forest. Developments to this point indicate that within 10-15 years the Forest may become a major source of funding for the College.

--The department completes the first phase of its electronic communications capability with 70% of computers hardwired together and access to such capability is available for the remainder. This has allowed development of a full electronic mail capability that is used for routine communication within the department.

--Dr. Eric L. Ellwood retires after 17 years as Dean of the College. Larry W. Tombaugh is appointed as the new Dean.

1988-89

--The forestry sector prospered in 1988-89 with production in the pulp and paper sector reaching new highs and production of solid wood products also increased. However, the forestry enterprise has come under increased pressure from environmental interests and entering students are beginning to show this concern. It becomes clear that forestry education programs must stress sound environmental practices as essential features of forest management practices if they are to attract new students.

--Two faculty members take administrative intern appointments, Dr. James D. Gregory as the first NCSU administrative fellow working with the Dean of the College of Humanities and Social Sciences, and Dr. Russell Lea as a $\frac{3}{4}$ time intern in research administration.

--Dr. Bruce J. Zobel receives the Sir William Schlich Medal of the Society of American Foresters yet another recognition of his long and distinguished career in forestry.

--Dr. David A. Adams was named the Outstanding Teacher in the College of Forest Resources.

--Undergraduate enrollment underwent a small decline from the previous year and enrollment in the graduate program increased by 13. The proportion of international students remains high as does the number of students with interests and/or experience in international forestry.

--The Alumni Symposium in the fall of 1988 featured a variety of recent graduates discussing their earliest experiences on the job.

--Efforts to increase minority enrollment continue to splutter. In the fall of 1988, 5 blacks enroll but only two remain to continue into the sophomore year.

--The 3+2 transfer agreement with North Carolina A & T State University is approved in principle at A & T, is signed on the NCSU campus, and is returned to Greensboro for final approval. Dr. Lincoln Moore is assigned by the US Forest Service to A & T and it is hoped that he will be able to attract students to enter this program.

--Changes proposed in the Conservation curriculum, including the name change to Natural Resources, and approved by the College of Agriculture and Life Sciences and are readied for submission for approval in the fall of 1989.

--Because entering students are now much more computer literate, the Department drops its previously-required sophomore course in computer use and replaces it with a first semester freshman course designed to acquaint students with computer facilities available in the College. In addition, there is a commitment by the faculty to include appropriate computer-based exercises where possible in all undergraduate courses.

--Departmental faculty and graduate students, working with those in Soil Science and the Duke University School of Forestry, develop a successful proposal to the Pew Charitable Trust to assist in the planning of a major new program in sustainable agriculture and forestry and in conservation biology. A joint seminar held in conjunction with this effort attracts an average of over 50 per session.

--When the College of Education and Psychology drops its course in college teaching, which was one way our graduate students could meet their requirement for experience in college teaching, Dr. Lester Holley developed and offered a 6-week seminar in college teaching as a substitute.

--When contacts with prospective graduate students indicate that our current stipends may not be competitive, an examination of all stipends is begun.

--Effective in the Spring of 1989 the Atmospheric Impacts Program is transferred to and now reports through the Department of Forestry.

--Major attention is given during the year to preparation for a 5-year Cooperative State Research Service review.

--Dr. Ronald R. Sederoff and Associate Dean Ellis B. Cowling serve as members of a National Research Council Committee on Forest Biology charged with making recommendations for the future of the nation's forest biology research efforts.

--Funds available to the Department from the Hofmann Forest are now \$110,00 per year, up from just \$30,000 two years ago. Drs. Robert C. Kellison and E. Carlyle Franklin play a lead role in planning for future management of the Hofmann.

--The Department recognizes the need for an administrative infrastructure with assignments in specific areas of responsibility.

1989-90

--The department is saddened by the sudden death of Dr. Donald H. J. Steensen, who passed away of a heart attack shortly after administering his final exam at summer camp.

--The department continues to face the dilemma that faces the forestry profession, that traditional forestry is often perceived as creating environmental problems rather than resolving them. In the face of this perception the department aggressively continues to include environmental considerations in its course offerings to insure that its graduates will be well qualified to practice the kind of forestry that the future will require. In addition, new research programs relating to environmental considerations such as wetland management, restoration ecology, and bioremediation have been developed in response to environmental issues.

--The Extension Forestry program is moved into the Department of Forestry effective July 1, 1990.

--Dr. William L. Hafley retires on June 30, 1990. Together he and Steensen had over 50 years of service to our students and each will be sorely missed, Steensen for his dedicated service to students and Hafley for his teaching and research in biometrics.

--Jordan Hall is completed and during the summer of 1989 the Hardwood, Nutrition, Biotechnology, and Remote Sensing programs, plus a number of other faculty, move into new facilities. These moves allow renovation of certain facilities in Biltmore Hall for other research programs.

--Recognizing the need for a better-defined administrative infrastructure in the department, Dr. James D. Gregory is named administrator of undergraduate programs and Dr. D. Lester Holley is named administrator for graduate programs.

--Mr. Gary B. Blank is named College of Forest Resources Outstanding Teacher for 1989-90.

--By the end of the decade undergraduate enrollment has declined from 263 in 1980 to 143 in 1989. However, the decline appears to have stabilized at the end of the decade. This decline reflects similar declines in all US forestry education programs. Enrollment of women also declined from 18% in 1980 to 13% in 1989. Minority enrollment remained about 5% throughout the decade despite much effort devoted to recruiting.

--The job market for undergraduates improves reflecting general improvement in the forestry sector.

--Graduate student enrollment increased during the decade from 69 in 1980 to 76 in 1989 with the proportion of women constant at roughly 20%.

--The Alumni Symposium is held in conjunction with the annual Roleo in the fall. On this occasion the new dining hall is dedicated in the memory of Dr. Steensen.

--First courses relevant to 3+2 transfer program with North Carolina A & T taught in Greensboro.

--New, one-hour computer course for freshmen taught for the first time in coordination with introductory course in forestry for freshmen in which all writing assignments are required to be done on a word processor. In addition, forestry freshmen participate in one-year test of single English course for freshmen recommended by University report.

--As a result of Steensen's death, Dr. James R. Gregory becomes summer camp director and College Forest Manager Larry G. Jervis becomes resident camp director.

--Implementation of Natural Resources curriculum delayed by extended discussions with Agriculture and Physical and Mathematical Sciences, largely related to the name for the curriculum. Regardless of what name is chosen, the department will begin next fall to make a major effort to advertise the opportunity that exists in the department to study natural resources.

--Research funding totals nearly \$4 million for all programs. Pressure increases from industrial supporters for the department to increase its financial contributions to the cooperative research programs, this despite the fact that the department puts more of its own money into industrially-oriented research (over \$1 million) than does any other university in the South.

--Interest in research on forested wetlands increases. A major study is established on the Hofmann Forest and studies of the impacts of forestry practices on wetland soils are implemented at a number of locations in the Southeast.

--During the spring of 1990 a 3-week short course in Tropical Forestry is offered under the auspices of CAMCORE and is attended by about 25 international foresters.

--The Forestry Foundation initiates a formal fund-raising effort on behalf of the College and Department. A small program in the previous year raised about \$20,000.

--Uncertainties associated with both State and Federal funding draw attention to the vulnerability of the department salary structure. Fully one-fourth of the faculty FTEs are supported with soft money and the faculty so supported is vital to the department's research and graduate programs.

--During 1990 the department is involved as a pilot department participating in the development of a process for measuring how well unit goals and objectives are met by current programs.

--Implementation of the Gunnar Nicholson bequest is begun when Dean Eric L. Ellwood visits Sweden in the fall of 1989 and six forestry faculty spend a week in Sweden in May 1990 in discussions with the faculty of forestry of the Swedish University of Agricultural Sciences. The program envisioned will support reciprocal exchanges of forestry faculty between the department and SUAS.

1990-91

--Opportunities for faculty and graduate student involvement with other countries continue to increase. Rapid internationalization of forestry significantly impacts departmental programs.

--Budget cuts begin to have a significant effect on departmental programs. One position vacated by retirement is lost, 3 faculty members leave because funds supporting them have been lost, and one research program is terminated for the same reason.

--Enrollment in undergraduate curricula increase slightly from 1989 with the greatest increase occurring in Conservation emphasizing an increasing interest in the broader field of natural resource management. Graduate enrollment remains stable.

--The last two freshmen classes seem to be of a quality higher than those of the mid-80s with academic performance better, interest in the subject matter of forestry higher, and more remaining in forestry. Perhaps the newly-initiated scholarship program accounts for this.

--Agreement is reached among all parties on the structure of the new Natural Resources curriculum. Two concentrations, Natural Resource Policy and Natural Resource Management, will be offered in Forestry with others offered in Agriculture and Life Sciences and Marine, Earth, and Atmospheric Sciences. Since University approval has not yet been obtained students are registered into the Conservation curriculum and will be transferred to Natural Resources.

--Work continues on closer integration of upper-level forestry courses with considerable emphasis placed on incorporation of quantitative and computer skills.

--New courses in Tropical Silviculture and Conservation and Sustainable Development (taught jointly with Soil Science and Duke faculty) are offered and are heavily enrolled.

--The department serves as one of 5 departments on campus developing a program of outcomes assessment. Included in forestry are evaluation of undergraduates after completion of summer camp, use of external reviewers in evaluation of senior projects in FOR 406, and exit interviews.

--Research activity totals \$3.604 million.

--Research work in biotechnology expands. The Tree Improvement and Biotechnology faculties begin development of a series of pioneering experiments dealing with the use of DNA markers in loblolly pine. Extension, Biotechnology, and Tree Improvement faculty obtain a grant for vegetative reproduction and DNA transfer in Fraser fir.

--Drs. Frederick W. Cabbage and Philip M. Doherty move from the University of Georgia to the US Forest Service Lab in the Research Triangle and begin active collaboration with our faculty.

--Using Nicholson funds, a group of Swedish scientists visit Raleigh in October and begin development of working relationships with several of our research programs.

--The Tissue Culture Program is terminated by its industrial supporters effective December 31, 1991. While closing down the tissue culture research efforts begin to develop a new program dealing with rooted cuttings which we believe will be supported by a number of industries.

--Full integration of the Extension Forest Resources group into the Department is accomplished and Dr. Edwin Jones is named Specialist in Charge effective July 1, 1990.

--As a result of management of the Hofmann Forest nearly \$400,000 is available to the College and Department for program support during 1990-91. These funds were critical in allowing the department to deal with cuts in appropriated funds. Chesapeake Corporation and Canal Wood Company establish endowed scholarships in forestry, further increasing scholarship funds available to our students.

--The classroom building at the Hill Forest is, at long last, air conditioned.

--The department holds a retreat during the fall of 1990. A number of areas of concern were identified. One tangible step taken immediately is the establishment of an executive committee which undertakes as its first mission preparation of a revision of the department's criteria and procedures for promotion and tenure. Problems remain, largely relating to the soft-money salaried positions in the department.

1991-92

--Change toward traditional forestry practices will continue to change during the 90s. In addition, today's natural resource manager is in competition for the "mind of urban America" meaning that all natural resource programs must be developed that are specifically aimed at urban populations.

--"Forestry Research: a Mandate for Change" a report issued by the National Academy of Sciences (and to which Drs. Cowling and Sederoff contributed as committee members) calls for a greater emphasis on basic, as opposed to applied, research in forestry. Four of five areas identified directly related to departmental programs: biology of forest organisms, ecosystem function and management, human-forest interactions, and international trade, competition, and cooperation. The department appears well situated to make important contributions in these areas.

--The department adopts a new policy and procedure statement on promotion and tenure. It also spells out a mentoring system which is available to new faculty and a system for storing data about faculty activities that parallels the criteria for promotion and tenure.

--Dr. Jan G. Laarman is appointed Coordinator of International Programs for the College and department.

--Mr. William T. Huxster wins the Outstanding Extension award for the College for 1991.

--Enrollment in undergraduate programs increases to 199 with the greatest increase again coming in the Conservation major. Much of this enrollment increase appears related to student interest in the new Natural Resources program.

--The department offers almost \$60,000 in scholarships and this appears to be one factor leading to improvement in the quality of forestry undergraduates.

--As yet no students have transferred from the 3+2 program at North Carolina A & T.

--The Natural Resources curriculum, three years in the planning, was approved by the University Courses and Curriculum Committee and is now awaiting approval of The UNC system office.

--Teaching assignments in the upper level undergraduate courses are changed so that students are exposed to a wider array of faculty. Course offerings in the first several weeks of summer camp are adjusted to allow for greater integration of forestry and wildlife students.

--The department continues use of measures developed to assist in outcomes evaluation, such as use of external examiners in the capstone senior course that will be required by the University as part of preparation for its decennial accreditation review in 1994.

--Research expenditures total \$4.24 million, up over half a million dollars from the previous year.

--A research accomplishment of major proportions is achieved when work in Dr. Ronald R. Sederoff's biotechnology lab results in a gene map of Loblolly pine. The map, which had been partially completed by others, was accomplished in 6 weeks.

--Department researchers obtain three competitive grants in biotechnology, further emphasizing the departmental capability in this important emerging area of research.

--A new vegetative reproduction program, developed by Dr. Robert J. Weir and his co-workers, with seven industrial members begins work on January 1, 1992.

--Dr. Theodore H. Shear and Dr. Douglas J. Frederick develop several research projects in restoration ecology, concentrating primarily on creation of forested wetlands and on the rate at which such artificially-created systems assume the properties of natural wetlands.

--Under the leadership of Dr. E. Carlyle Franklin, faculty members participate in gathering data necessary for revision of the current management plan for the Hofmann Forest.

--Tuition remission funds become a problem as graduate student enrollments jump dramatically. Through the continued generosity of the Graduate School the departmental graduate program remains solvent.

--Increased bookkeeping demands associated with newly-implemented fiscal flexibility guidelines and with movement of accounting responsibilities from the office of the Dean for Research to the Department make it clear that a departmental bookkeeper is required. Inasmuch as no funds are available for such a position, released faculty salaries will be used.

--The success and consequent growth of the biotechnology program lead to serious space problems for that program. As has been the case ever since the department moved into Biltmore Hall in 1970 the space allocated to undergraduate teaching is wholly inadequate.

1992-93

--Undergraduate enrollment continues to increase, from 199 to 238, with the largest increase being in what is now the Natural Resources curriculum. This trend underscores the dilemma most forestry programs now face. On the one hand they must offer education in natural resources management that has the same rigor as the forestry degree while continuing a strong program in forestry that places emphasis on resource integration.

--Dr. Charles B. Davey retires in July 1992 and William T. Huxster retires in January 1993. Davey was department head in the 1970s and is recognized as one of the department's most accomplished scholars and teachers while Huxster was a major figure in the rise of the Christmas tree industry in North Carolina.

--Enrollment trends suggest that the department will soon have as many students in Natural Resources as in Forestry. Such a situation requires that the department make a re-evaluation of its course offerings.

--Aided by receipts from several timber sales on the School Forests scholarship aid increases to \$77,000 in offers to students for the 1993-94 school year.

--Graduate enrollment, at 101, tops 100 for the first time. Given current faculty and facilities, the faculty believes that a maximum enrollment of 100-110 should be set on the graduate program.

--As a result of a number of factors, particularly the University System's requirement that hours-for-graduation in all curricula should not exceed 128, the faculty spend considerable time reviewing the forestry curriculum. Specific changes will be proposed next year at the time of the decennial SAF accreditation review. Graduate courses are also reviewed and a number of changes are sent to the Graduate Board. The Graduate Committee continues to consider whether or not the department should have a graduate core curriculum.

--The department continues to implement elements of its outcomes assessment plan. External examiners are used in the field exams in the senior capstone course. Group interviews are used with graduating seniors but they do not prove as satisfactory as the individual interviews done last year.

--Total research expenditures are \$4.27 million. For each dollar in State and Federal appropriated funds, the department research faculty generate \$2.12 in additional funds.

--Extension sponsored workshops on "Conservation and Confiscation: who really owns your land?" that attracted nearly 900 participants. The theme proved highly controversial, with the department receiving criticisms from a number of sources for sponsoring such controversial programs. A less controversial, but equally important, workshop on Longleaf pine involved numerous parties interested in the Longleaf pine ecosystem and its components.

--In order to handle the increasing flow of work at the departmental level resulting from changes in the managerial structure of the College, the department hired an accountant in late 1992.

--Work continued on a new master plan for the Hofmann Forest. A recent doctoral graduate is hired to do the actual drafting of the new plan.

--Lack of laboratory space continues to hamper research in biotechnology and tree improvement. In addition, the only purchases of equipment during the last several years have been computers.

1993-94

--Increased enrollments in both undergraduate and graduate programs lead to some of the overcrowding problems experienced in the mid-1970s.

--Dr. Richard A. Lancia is named the outstanding teacher in the College and Dr. H. L. Allen won recognition as the Outstanding Teacher in the department.

--Dr. David A. Adams who taught courses in renewable resource policy and environmental assessment, retired effective December 31, 1993.

--Three books written by faculty are published in 1992-93: "Renewable Resource Management: the legal-institutional foundations" by Dr. David A. Adams, "Forest Resources Policy" by Drs. Frederick W. Cabbage, Jay O'Laughlin, and C. S. Bullock III, and "A Revolution in Forestry: a history of tree improvement in the South" by Dr. Bruce J. Zobel and Mr. Jerry Sprague.

--Undergraduate enrollment showed a major increase for the third year in a row, totaling 286, with the greatest increase again being in Natural Resources. Graduate enrollment declined slightly to 92.

--The undergraduate Forestry curriculum is thoroughly reviewed during 1993-94 in conjunction with preparation for the Self-Study required by SAF accreditation. The major change involved reduction in total hours from 141 to 128 including summer camp. Although the curriculum still retains its essential elements virtually all electives and other sources of flexibility have been removed. The faculty is not entirely comfortable with this result and will re-visit the issue next year. Results of the Outcomes Assessment program play an important part in curriculum decisions.

--The Department Graduate Committee develops a new Master of Forestry program which is approved by the full Department. This is a course work only degree program that will provide an opportunity to obtain a degree in as little as 12 months. Formal approval by the Graduate School will be sought next year.

--Research funding reaches \$4.377 million; for each dollar of appropriated money the forestry faculty generates \$2.28 in additional research funds.

--Researchers in biotechnology locate a gene that conveys resistance to fusiform rust disease, a significant finding stemming from the genetic map of loblolly pine developed earlier.

--Five new members join the Forest Nutrition Cooperative putting that program back on a solid financial basis after several years of severe fiscal difficulty. A major research effort involves installation and measurement of a large experiment designed to quantify interactions between water and nutrient availability.

--The new management plan for the Hofmann Forest is essentially completed.

--Two new tracts of land are added to the department's holdings. One is a tract of 250 acres of primarily loblolly pine forest in Franklin County and the other is a large tract of wetland forest on the south shore of Albemarle Sound at Bull's Bay. Drs. E. Carlyle Franklin and Douglas J. Frederick carried the brunt of the work associated with this acquisition with funds coming from the North Carolina Heritage Trust program.

--The department obtains one more endowed scholarship and other funds for scholarships continue to rise.

--The College completes its internal computer network providing an essential tool for teaching, research, and managerial tasks. In addition computers in the College computer room are upgraded.

--Renovation of facilities at the Hill Forest is planned using fund from the Rural Rehabilitation Corporation. The water and septic field facilities will be rebuilt together with a new dining room and two new cabins. A tract of about 100 acres, the number one acquisition target for addition to the Hill Forest, is purchased also with RRC funds.

--Five straight years of budget cuts have reduced Academic and Station budgets to the point where they support little more than salaries with operating funds coming almost entirely from released faculty salaries.

--After a year-long search, Dr. Frederick W. Cabbage is chosen as the new head of the department replacing Dr. Arthur W. Cooper who has served since late 1979.

1994-95

--Dr. Frederick W. Cabbage takes over as department head on August 1, 1994.

--Dr. Ronald R. Sederoff is elected to membership in the National Academy of Science becoming the second member of the departmental faculty to be so honored.

--Dr. Gene Namkoong, who left NC State in 1993 to become Head of the Forestry Department at the University of British Columbia, wins the Marcus Wallenberg Prize.

--Undergraduate curriculum in environmental sciences/watershed hydrology finalized, approved by the University, and offered as an option.

--Charge of racial harassment is lodged against the department by a former student. As a result, undergraduate program manual is rewritten to state that the department endorses personal ethics and respect for all persons. The Department Head emphasizes this statement in his remarks at the opening of summer camp and all teachers will follow through with similar statements to their classes.

--Revised course-work Master of Forestry is approved and offered to incoming students. A similar Master of Natural Resources program also developed, approved, and offered. The program has 5 concentrations: Forest Policy and Management, Outdoor Recreation, Spatial Information Systems, Hydrology, and Soil Science (in the Department of Soil Science).

--Department receives SAF five-year re-accreditation. Review team raises issue concerning lack of public speaking experience in the program and steps are taken to respond to this issue. A report from an ad-hoc committee appointed to review the status of speaking and writing coursework and other instructional materials in the undergraduate curriculum is received and is under review.

--Because of concerns over content of the forestry undergraduate curriculum arising from the reduction in hours made in 1994, the faculty begins another review designed to improve content of the program.

--Dr. Craig McKinley is hired and assumes responsibility for Christmas tree extension. State appropriations are obtained for a Christmas tree genetic improvement program.

--Dr. Richard A Lancia becomes Director of Undergraduate Programs, taking over from Dr. James D. Gregory who becomes Director of undergraduate Natural Resources and Environmental Sciences programs.

--Continued budget cuts jeopardize department's ability to provide excellent service in several critical areas.

--The College and the Department begin a substantial strategic planning effort that will identify important external issues that affect the department's mission and important internal issues that impede enhancing our efforts.

1995-96

--Department undertakes a review of most graduate courses .

--A course in wood procurement was developed and taught by Professor Larry Jervis.

--Department assumes co-advising responsibilities (and enrollment credit) for incoming Fisheries and Wildlife Science program majors.

--Research grants totaled \$5.6 million with the industrial cooperatives generating an additional \$1.7 million.

--Department assumes leadership for Christmas Tree extension. Dr. John Frampton is hired to lead the Christmas Tree Genetics program building on previous Fraser fir efforts by the Cooperative Tree Improvement Program.

--Extension faculty continued to coordinate external input and advice to the US Department of Interior Fish and Wildlife Service and the Environmental Defense Fund on development of a "safe harbor" program for use by landowners in development of Red Cockaded Woodpecker Habitat Conservation plans.

--Dr. Richard A. Lancia is appointed as interim Director of the NCSU Center for Teaching Excellence.

1996-97

--Undergraduate Forestry curriculum is revised. The second semester of Physics is dropped, a one-credit change in the required Calculus course, and addition of 2 credit hours permit 7 hours of electives in Forestry.

--A web-based experimental course in clearcutting is developed and taught.

--NR 300, Natural Resources measurements, is completely revised and updated.

--A proposal for a course-only Master of Forest Resources (MFR) was completed and approved by the Graduate School. All required courses were taught during the academic year.

--The old core and concentration curricula for the Master of Natural Resources Administration were reviewed and revised and the name of the degree changed to Master of Natural Resources (MNR). This action was approved by the University and instituted in 1997.

--A two-year strategic planning effort is completed including a summary of implementation recommendations and action items.

--Total research grants in force total \$4.5 million with another \$1.85 million coming from cooperative research funds.

--An inter-institutional proposal for a Center for Sustainable Forestry, involving NCSU, Duke, the Universities of Florida and Kentucky and Southern Forestry Extension, was submitted to the USDA Competitive Grants program.

--After Hurricane Fran hits in September 1996 forestry students apply their skills to help many local residents clean up. Their work brings recognition from the Raleigh Council in February 1997.

--The University's newly implemented Faculty Workload Reporting System indicated that all faculty in the Department are meeting the minimum university standard for overall instructional/research contributions when "release time" for research appointments, graduate student advising, and undergraduate advising was considered.

1997-98

--Undergraduate Natural Resources curriculum is reviewed as a part of the Department's strategic planning effort. Recommendations are made for revisions in core courses and for development of a concentrated short summer session.

--Research grants in force total \$2.9 million with and additional \$1.9 million generated by the research cooperatives.

--The Southern Center for Sustainable Forests is established in cooperation with Duke University and the North Carolina Division of Forest Resources.

--A new forest landowner Education Council is formed by Extension Forest Resources.

--The first year of the Forestry Educational Outreach Program was successfully completed under the direction of Ms. Kelley Duffield.

--Dr. Awatif E. Hassan is appointed as Director of Forestry Undergraduate Programs.

--Dr. Richard A. Lancia completes his term as Interim Director of the Center for Teaching Excellence.

--Brochures describing Departmental programs and curricula are revised.

--A new high-quality plastic greenhouse is rebuilt at Method Road, in cooperation with Horticulture, to provide space for the Rooted Cutting and Christmas tree programs.

--Availability of funds from the University Technology and Lab Fee enable major upgrades of forestry field equipment, including Global Positioning System data loggers, increment borers, bark gauges, compasses, and diameter tapes. Summer camp computer equipment is also upgraded, providing GIS capability.

1998-99

--The Department hosts the annual Southern Forestry Schools Conclave at Ellerbee.

--Twenty-eight students attend the national Society of American Foresters meeting in Traverse City, MI, the largest such contingent from any forestry program in the nation.

--The five-year accreditation review document required by the Society of American Foresters is prepared.

--Research grants in force total almost \$3 million with another \$2.169 contributed to the industrial cooperatives.

--A Strategic Research Initiative to develop an integrated proposal for forestry and wood products across the Departments of Forestry and Wood and Paper Science is prepared.

--The Forest Landowner Education Council began work coordinating activities for professional education of foresters within the State.

--A task force on Nonindustrial Private Forest landowners met to consider means to improve programs for NIPF and to develop recommendations.

--The Forestry Educational Outreach Program continued its successful work but with its third director in three years.

--Dr. Arthur W. Cooper receives NCSU's Holladay Medal.

1999-2000

--A Bachelor of Science curriculum in Environmental Technology is developed and submitted for approval.

--Forestry Extension faculty play a leading role in developing Distance Learning and Computer aided instruction.

--The Department develops and submits a proposed articulation agreement with North Carolina A. & T. State University for their Natural Resources students and our B. S degree in Forest Management.

--The Society of American Foresters continues accreditation for the Bachelor of Science degree in Forest Management.

--External funding for research grants totals \$7.2 million with another \$2.28 million generated by the research cooperatives.

--Biotechnology faculty received \$4.45 million 3-year research grant for a project entitled "Genomics of Wood Formation in Loblolly Pine."

--Mr. Rick A. Hamilton is designated as Acting Department Extension Leader after Dr. Craig McKinley leaves to become Department Head at Oklahoma A. & M.

--Work is begun on a new initiative in forest certification and stewardship including development of a proposal for assessing certification on the College forests.

--Dr. Arthur W. Cooper receives the Gifford Pinchot medal from the Society of American Foresters.

--Dr. Frederick W. Cabbage is named to chair a National Research Council Committee on Forestry Research Capacity.

--About 30 students attend the annual Society of American Foresters in Portland, OR, again the largest group from any forestry program in the country. The students also went their own tour of West Coast forestry in Oregon and Washington. The tour was organized by Dr. Joseph P. Roise.

--Dr. Robert J. Weir, Ms. Alice Hatcher, and Mr. Jerry Sprague all retire from the Tree Improvement Cooperative. Weir is replaced as Director by Dr. Timothy J. Mullin.

--Dr. D. Lester Holley retires effective December 31, 1999.

2000-01

--The Environmental Technology program proposed as a separate curriculum, all but two course action forms are approved and authorization to plan has been granted by the Dean's Council. Several new faculty will be required to meet the demands of this curriculum.

--The Natural Resources curriculum has also been revised and all required documents are ready to submit to the College curriculum committee in the fall of 2001.

--Research grants total \$6.59 million and contributions to the Cooperatives total \$1.98 million.

--Opportunities for international experience are for the first time provided by the Department with students in international forestry and natural resources, together with those in a world forestry course, travel to Paraguay in the spring of 2001.

--The Forestry Educational Outreach Program has a successful year under new Director Dr. Susan E. Moore, the Program's fourth director in as many years.

--The Southern Center for Sustainable Forestry sponsors a certification effort on the College's Piedmont forests, as well as on the Duke Forest and on the State Division of Forest Resources Bladen Lakes forest.

--About 20 students attend the annual Society of American Foresters meeting in Washington, DC. This number again leads all forestry programs.

--Dr. Arthur W. Cooper retires on February 1.

--William E. Gardner and Larry Jervis retire on June 30.

2001-02

--First instructors in Environmental Technology, Ms. Theresa Litzenberger and Dr. Elizabeth Nichols, are hired.

--Mr. Joseph Cox joins the Department as its second College Forest Manager.

--Environmental Technology program is proposed as a separate curriculum and all planning documents clear NCSU and are sent to UNC General Administration for approval.

--External research grants total \$6.74 million, with another \$1.75 million derived from the industrial cooperatives.

--Extension faculty delivered an intensive Christmas tree program in western North Carolina, including site selection, shearing research, business management principles, integrated pest management, and groundwater management.

--Dr. Ellis B. Cowling receives NCSU's Holladay Medal.

--The National Research Council Committee on Forestry Research Capability, chaired by Dr. Frederick W. Cabbage, completes its report.

--A number of undergraduates travel with Dr. Joseph P. Roise to the Society of American Foresters meeting in Denver, CO. Prior to the meeting, the students participate in a wilderness camping experience to gain familiarity with wilderness management. During that trip, the tragic events of September 11, 2001 occurred.

--The College's Piedmont Forests complete the forest certification process, meeting both the Sustainable Forestry Initiative and the Forest Stewardship Council requirements. This effort was led by Susan Moore and Larry Jervis. SFI certification required correction of several non-conformances and a number of conditions had to be met before FSC certification was final. This certification was carried out in conjunction with certification of Duke Forest lands and lands managed by the State Division of Forest Resources.

2002-03

--Five initiatives are proposed as a part of the Department's Compact Plan: 1) Managing Green Infrastructure in a Developing World; 2) Natural Resources Distance Learning and Outreach; 3) Sustainable Forests to Meet World Fiber Needs; 4) Focused Marketing and Recruitment for the Department; and 5) Forest Management Curriculum Revisions.

--Final approval is received from General Administration for the Environmental Technology undergraduate degree. The first class graduates at the May 2003 commencement.

--An external review meeting is held in August with invited forestry professionals and faculty to discuss revision of the Forest Management curriculum. A revised curriculum allowing for five explicit concentrations and providing more focus throughout the four years on professional skills of critical thinking, communications, ethics, and leadership. This revision is approved and becomes effective for students entering in the fall of 2003.

--Students take two international trips, one to Costa Rica in August 2002 and the other to Chile in March 2003. In addition a group traveled to Washington DC in January to visit various government organizations and NGOs involved in international forestry issues reviving an experience begun in the 1980s.

--Research grant funding is \$3.93 million. The industrial research cooperatives bring in another \$1.63 million.

--The 2002 National meeting of the Society of American Foresters is held for the first time in North Carolina in Winston-Salem with Drs. Robert C. Kellison and Arthur W. Cooper serving as co-general chairs. NCSU students, together with Duke students, host the student activities at the convention.

--For the first time students from Virginia Tech were invited to participate in the Rolleo held at Hill Forest November 8-9.

2003-04

--On February 1, 2003, the Department assumes leadership of the Fisheries and Wildlife Program with Richard A. Lancia serving as Director and the Department assuming administrative oversight.

--The first full year for the Environmental Technology Program attracts 50 students.

--The new Forest Management curriculum is implemented. There is greater emphasis on the professional skills of critical thinking, communications, ethics, and leadership as well as more opportunity for selection from concentration areas in International Forestry, Forest Business, Forest Biology, and Forest Management (with a concentration in Urban Forestry being developed).

--Major revisions to the Natural Resources-Ecosystem Management and Natural Resources-Policy and Administration curricula are approved.

--Dr. Bruce J. Zobel receives the Holladay Medal.

--Students travel to Sweden in the summer of 2003.

--A number of undergraduate students attend the National SAF meeting in Buffalo, NY

--Forestry Club members assist the North Carolina Forestry Association with the fall Loggin' Demo.

2004-05

--The College of Natural Resources and the forestry program at NCSU celebrate their 75th anniversary.

--The Tree Improvement Program celebrated its 50th anniversary and the CAMCORE and Forest Nutrition Programs celebrated their 25th anniversaries.

--The new name of the Department, Forestry and Environmental Resources, combining the array of new programs with historical strength in forestry, became effective.

--Dr. Frederick W. Cabbage steps down as Department Head in the summer of 2004 and is replaced by Dr. Barry Goldfarb.

--The four new professional development courses required in the new Forestry curriculum, critical thinking, communications skills, ethics, and leadership, are offered for the first time.

--The undergraduate Forestry Curriculum was reviewed by SAF in the spring of 2005.

--During the summer program in natural resources, students traveled to Yucatan during the summer of 2004 and northern and central Europe during the summer of 2005 and the World Forestry course visited Ghana in 2004

--In the summer of 2005 Fisheries and Wildlife students travel to Namibia with Dr. Werner Dorgeloh.

--The Biotechnology faculty originated the Forest Biotechnology Industrial Research Consortium involving numerous faculty members and industries around the globe.

--The Forestry Issues forum is now broadcast by TV conferencing throughout North Carolina and even into South Carolina.

2005-06

--The undergraduate forestry curriculum is re-accredited by SAF with praise for student performance, breadth and dedication of faculty, and quality of facilities and infrastructure.

--A new course in Urban Forestry is offered and a concentration in Urban Forestry is submitted to the University for approval.

--The summer program in Natural Resources hosted students from Sweden and Purdue University on a tour of North and South Carolina.

--Twelve students visit China in the spring of 2006.

--The World Forestry class visited Costa Rica in the spring of 2005.

--Fisheries and Wildlife students again visit Namibia in the summer of 2006.

--The Piedmont forests are re-certified by the Forest Stewardship Council and the Sustainable Forestry Initiative.

--Progress Energy donates funds for Internships in Water Quality that allow Environmental Technology and Natural Resources students to learn first-hand about measuring water quality and analyzing data while saving money toward their tuition.

--Undergraduate Fisheries and Wildlife student Ben Noffsinger and his partners from the Multidisciplinary Senior Design Center won first place in the Computer Society International Design Competition 2005 World finals, the first United States team to win in the 6 years of the competition. Their project combined GPS technology with wireless sensor networks to track animal movements in the wild.

--Susan Moore received the College Outstanding Extension Award for 2005.

-- The entire Extension and Outreach Program is awarded the 2005 Family Farm Education Award by the National Association of Forest Resources Programs and the National Woodland Owners Association.

--The Extension faculty host a two-day conference on "Energy from Wood: Exploring the Issues and Impacts for North Carolina" in March 2006.

--Ellis B. Cowling, E. Carlyle Franklin, James D. Gregory, and Awatif E. Hassan retire.

--Bailian Li is named Interim Vice Provost for International Affairs.

2006-07

--As part of its recruiting effort, the Department hosts a highly successful 5-day Summer Exploration Camp for 35 rising high school juniors and seniors.

--The Department develops an exchange program with the University of Concepcion in Chile.

--Study abroad programs take place dealing with Exploring Forestry and Natural Resource Management in Turkey in June 2007 and in northern Sweden dealing with Climate Change in July 2007.

--Doctoral program in Fisheries and Wildlife approved January 2007.

--Henry V. Amerson, Philip D. Doerr, and Rick A. Hamilton retire.

--Dr. H. Lee Allen receives the Holladay Medal and also is named CNR Alumni Distinguished Graduate Professor.

--Philip D. Doerr is named Wildlife Society Student Chapter Advisor of the Year for 2006.

--Bailian Li is named Vice Provost for International Affairs.

--Rick A. Hamilton receives the Henry Hardtner Award from the Southern Group of State Foresters.

--Steven E. McKeand was selected as the first recipient of the College of Natural Resources-College of Agriculture and Life Sciences Joint Award for Service to Society and the Environment.

--Susan E. Moore was inducted into the Academy of Outstanding Faculty Engaged in Extension and was awarded the 2006 Outstanding Extension Service Award.

--Toddi A. Steelman was appointed by the Institute for Emerging Issues to its GlaxoSmithKline Faculty Fellowship Program.

--Extension faculty and their partners continue the Working Forest Summit series which has proven to be of value to non-industrial forest landowners.

--The Department's Alumni gathering was declared the best at the winter Appalachian Society of American Foresters meeting.