The Maine Forester 1986
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DEDICATION

First Row: Gina Pelletier, Marie Roy, Laurie Shaw, Nora Ackley, Dolores Stone
Second Row: Mary Lou Hodge, Cindy Puschal, Lynne Lavoie, Maxine Horne, Helen Beylea

This publication is dedicated to all the secretaries of the College of Forest Resources, who are the backbone of the college with their invaluable assistance to both faculty and students. For their forebearance and frequently unrecognized service and toils, we wish to express our deepest gratitude and appreciation.
A dictionary might define "dedicate" to mean something having to do with a declaration of respect or affection for someone. This is terribly inadequate when it comes to expressing our appreciation for the contributions made each day by the secretaries in "Forestry." They are the HEART to our Departments and without them, we would be like a patient with an artificial heart—limited in the progress we can make and limited in the energy needed to be dynamic and fully functional. Today, as always, we feel that the most crucial people in our organization are the secretaries. Although words cannot express fully how we feel, we hope that this dedication to Helen, Cindy, Mary Lou, Marie, and all the other secretaries in Nutting Hall will warm their hearts as they have warmed ours.

Floyd L. Newby, Chairman
Forest Biology Department

Faculty members often have received recognition for the many programs with the College of Forest Resources, while all the secretaries often have made major contributions to these programs, but have gone unmentioned. I have been impressed that even though this often happens, I never have heard any of the secretaries in the College utter a single complaint relative to this lack of recognition. All of the faculty and administrators within the College recognize the tremendous contributions the secretaries make to all programs, but I will focus my attention on my personal secretary, Regina Pelletier. Actually, Gina’s formal title became "administrative assistant to the Dean" shortly after Forest Resources became a College, but she still prefers to be thought of as the College’s secretary. This issue of the Maine Forester could not provide adequate space to mention all the things Gina has contributed to the College and previous School over many years. She has devoted long hours well beyond the call of duty in performing every task with precision. Even more commendable is the fact that Gina has continued through all the trials and tribulations of working with me, and still maintained a very pleasant and friendly personality. Her rapport with students, staff and faculty have been the source of many compliments over the years. The College of Forest Resources definitely would not be the strong College which it is today if it were not for Gina’s devotion and service. THANK YOU, GINA!

Gregory N. Brown, Dean

The personnel department of the University would be completely frustrated if they had to come up with a complete evaluation of the secretarial and clerical staff in Nutting Hall. Personnel departments, even when being critical, like to use polite phrases such as: “most of the staff have a slightly excessive tendency to verbalize opinions to faculty and students.” Freely translated—most of them are mouthy. (Have you ever heard Marie and Tom Brann discussing his word-processing system?) As Building Manager I occasionally get death threats from Maxine—“You’re going to die if I don’t get some heat in my office.” A second general statement Personnel would make is: “Frequent group observances of personal events are noted to occur.” Translation—Any excuse for a party. They use the K-Mart system. When K-Mart opens a new store in Boise, Idaho, they have a sale in Bangor. The last party here celebrated the birthday of Laurie’s third cousin who she has never seen as she lives in Alaska.

I could go on citing further shortcomings that Personnel would undoubtedly observe, but let’s take a look at the positive side. Why do we have such an excellent staff, reputed to be the best on campus? In the first place, they are highly productive and have done a tremendous job over the past few years transferring their skills to the world of computers and word processors. They are also highly efficient and conscientious. (Have you ever tried to slide a misspelled word by Marie?) The faculty find that the secretaries are an excellent group to work with and really appreciate the high quality of their product, be it their typing or their keeping us out of trouble by making sure we keep our appointments and make our meetings on time. (The faculty are like the kids in Lake Wobegon—“slightly above average”as a group to work for.)

The real reason for our reputation and why they come here to work is you, the students. They think that you’re the greatest! They like working for you while you’re here and really miss you when you graduate. Where else on campus do you find someone who is the epitome of charm and friendliness like Mary-Lou, who is a den mother who writes poems to you to make sure you get paid as Nora does, or who can quickly supply you with a publication from her files as Dolores does, all on one floor? I think that it is a real tribute to them to have the Maine Forester dedicated to them this year. Let’s put a copy in each of their files and send them over to the Personnel Office! There is one thing, by the way, that we don’t want Personnel to find out—a full fledged Dean’s secretary is supposed to be able to give a student a look that will freeze him or her on the spot and make their knees shake. Gina has not and probably never will master this art.

Richard Hale
Wood Science
Secretaries in Review

Wildlife

Ask any wildlife grad student (and faculty too) who does the legalizing, supervising, and deputizing and they’ll answer with one voice on bended knee, “Maxine!” It’s a good thing 240 Nutting Hall doesn’t have charge of a mess hall, or else KP duty would be a regular assignment for some nonconforming grad students and faculty (right Jorde!). Then again some grads would rather do KP duty than be assigned to “injured bird” calls or carrying boxes that would strain a hydraulic lift. Alas, those rare grad students who survive on the good side can count on having their mail forwarded to them after graduation by the Executive Department Chairman herself.

In keeping with current trends, the newest wildlife secretary is a computer jock!, figuratively speaking. If you ask Nancy about thimbles and character strings, you’d better be thinking about printers and word processing terminals; not sewing! Faculty and students can always count on her guidance and help; so long as she isn’t on standby duty to answer the department telephone. For Christmas (or the next upcoming holiday, preferably before Memorial Day), Nancy would like either a department telephone extension in her office or a hole in the wall.

At the height of a frustrating week of preregistration last semester, a freshman forestry student was heard to utter, “Hi Mom” in Laurie’s office, and promptly received an apron string to hold on to during the painful growing-up years of academic life. From the world of “Tiggers”, photocopiers, and proposals to coat duck food with cheese comes an, “Oh dear, the poor thing,” accented by those big suddenly saddened eyes, and followed by, “I’m so sorry, is everything going to be alright?” Yep, after melting to butter in Gina’s office, faculty and students alike mellow into warm milk in Laurie’s storybook world.

Forestry

How many of you know that Cindyrella and her Prince Charming both work at Nothing Hall? She’s keeper of the Canon personal control card . . . and it’s magic! Cindyrella has had tours of duty all over Nothing Hall . . . 4-5 office moves since the beginning of the decade. Where to next, Cindyrella?

College Administration

Did everyone know that the “upstairs-downstairs duo” were highly trained departments of the treasury agents? Nora not only doubles as an “armed guard” stationed outside the vault where Jan controls hundreds of thousands (and we don’t mean paper clips), but Nora also controls who can set foot into the hallowed of Nothing Hall after hours. Yes, within their lair emulates the power over if, when, and how research projects will fly. If you need a lesson in humility and servitude, well . . . you know where to go, and be darned sure you have that supply request signed by your respective department chairman herself.

Awhile ago a student with a heart of stone and hell-bent on seeing the Dean marched into Gina’s office and . . . well, you know the story. Yep! Her soft voice melted that stone heart like butter. The pinnacle of diplomacy is to be able to tell a person where to go in such a way that they would look forward to the trip. Under Gina’s “soft voice” spell there are those who, upon realizing where they are headed, just don’t have the heart to object.

CFRU is produced, directed, and marketed by the Lynne Consulting Co., LTD. Old Town. Since the turn of the century, Lynne has been through as many typewriters and word processors as Cindyrella has with offices. When are you going to upgrade to laser technology, Lynne? Go for it! . . . and don’t let anyone on the odd side of Nothing Hall tell you that they know more about running a CFRU than you do.
If there ever were any unsung hero or heroines here in Nutting Hall, it would be, unquestionably, all of the secretaries (AKA administrative assistants). I mean after all, as students, who do we see to find out what's going on in Nutting course-wise or who do we see when we have to find out what we need to graduate (when we finally get there!)? Who do we see if we have to add-drop or borrow something like tape, stapler, ruler? Need I go on? We always seem to turn to one of the secretaries. They always seem to have a CLUE.

tish carr

Jan + Nora

The best advice, at least the most useful advice, given to me by outgoing (successful) survivors of the CFR was "get to know Jan and Nora, believe and do whatever they tell you." If you follow that advice, you too will survive the financial maze of lower Nutting Hall: a tribute to the skill, professionalism and courtesy of Jan and Nora, the magicians of budgetry—"No questions asked, just sign here..." P.O., IDT, TA, Pay, etc., etc.

"Wait a minute I've got to make a photocopy!" (Nora)
"So what's this?" (Nora)
"Where's your green card?" (Jan)
"Yes, you really have to do it that way." (Jan)
"Don't ask me why, I just work here." (Nora)
The secretaries in the College are outstanding. They are hardworking, dedicated, and dependable. In spite of this, they are also just plain fun to work with! It would be pretty dull around Nutting without their pleasant comments???, smiles, birthdays, lunches out, Christmas parties and much, much more. Our thanks to all of you.

Bucky

Dear Secretaries:

I am always impressed that you guys can get anything done, with all the distractions that are inherent in your job, 50 phone calls/day, 100 student requests, 1000 faculty requests, computer problems, Xerox machine breakdowns. Out of all this confusion, you manage to produce letters, memos, forms, manuscripts, etc.

Ever since we (grad students) got office telephones, I have found out firsthand what it is like. Fifteen times a day. Hello, is (Roland) there? (He never is.) When will he be back? Is he in the computer room? Then some 10-minute message. About phone call number 10, I feel like answering, no, he is not here, he is never coming back, no, I will not take a message.

So thanks, secretaries, for being helpful and good natured (most of the time). I can see it ain’t always easy.

Jennifer

I will comment on two very special people that I work with on a regular basis. Regina Pelletier has been my friend for many years. She is totally devoted to the College and to the students. Gina is a great organizer and a very fine administrative assistant. Laurie Shaw works directly with me as the devoted assistant to the Associate Dean. She loves every student who enters the office and will work far beyond the call of duty to help them solve problems. These two dedicated people deserve this special recognition. I am proud of their work and their dedication and express my love to both.

Fred B. Knight

I wish to express my deepest thanks and gratitude to Cindy and Helen for their invaluable assistance to me while I have struggled to finish my program here. They have gone beyond their job responsibilities for me, and have displayed personal concerns as well as given me encouragement. Thank you, Cindy, for helping me through the final days.

Roger Williams

The secretaries: backbone of Nutting Hall . . . as professionals, invaluable . . . as friends, outstanding. . . . My hat goes off to these special people who, in their own ways, help to advance natural resources. Without them the College of Forest Resources would be just another empty building.

Andrew Alexson

Alumnus
Greetings from the Dean

The theme of the 1986 MAINE FORESTER is “water resources.” Forest resource managers must be knowledgeable in the management of a broad array of resources including timber, wildlife, recreation, aesthetics, and water. Production of all forest resources is limited more often by water than by any other production variable.

Approximately 60 percent of the soils in the United States have capability limits related to deficient or excess water. In the future, the acreage of water-stressed forests will increase because of an increasing competition from other water users, declining ground-water levels in many areas, and increasing use of droughty or poorly-drained soils. More efficient management of surface and ground waters will become vital to improving water quality and yields from forest lands.

Many of our nation’s forests are growing on watersheds important to population centers, and water characteristics are impacted by changes in forest ecosystems resulting from management and harvesting practices. Also, atmospheric deposition and direct chemical applications may impact water quality at sites far removed from application sites.

Maine, like other forested states, must respond to resource needs related to water quality, water quantity, and seasonal distribution of water availability. Excessive water runoff resulting from an imbalance in forest ecosystems can result in severe erosion which directly and indirectly affects sedimentation rates and water quality. A major component of the 1985 Federal Farm Bill recently passed in Congress contains sodbuster, swampbuster, conservation reserve, conservation easement, and conservation compliance regulations. All of these provide incentives/disincentives directed toward proper management of soil and related water resources.

Issues related to water and soil resources have been identified at the top of the USDA priority list for future research investments.

Many streams and lakes associated with our forest lands already have been impacted by chemical applications and atmospheric deposition. These processes, in turn, have affected fish and wildlife. Forests associated with streams and lakes, particularly in the riparian environment, can provide an ameliorating influence to protect waters from severe changes in sedimentation and quality.

The Emergency Wetlands Resources Act is pending federal legislation which also addresses water resources. It proposes increasing federal funds available for wetlands acquisition, increasing the Duck Stamp program, and charging entrance fees at designated National Wildlife Refuges.

Water is only one of a broad array of resources associated with the forest, but proper management of forest water resources will drastically influence timber, wildlife, recreation, aesthetics and all values related to the forest.

Since publication of the 1985 MAINE FORESTER, our College has welcomed Dr. Larry Gering, Assistant Professor of Forest Resources in photogrammetry, filling in for Marshall Ashley during his leave of absence; Dr. Jody Goodell, Assistant Research Professor of Forest Resources in biology and pathology; Dr. Dennis Jorde, Instructor of Wildlife in wildlife biology; Dr. William Krohn, Leader, Cooperative Fish and Wildlife Research Unit and Associate Professor of Wildlife in wildlife ecology; Dr. William Livingston, Cooperating Assistant Professor of Forest Resources and Assistant Professor of Plant Pathology in forest pathology; and Dr. Mark McCollough, Instructor of Wildlife in wildlife ecology. During this same period, John Bissonette, Acting Leader, Cooperative Wildlife Research Unit and Associate Professor of Wildlife, and David Leslie, Assistant Professor of Wildlife, have left the College for faculty positions at Utah State University and Oklahoma State University respectively. Searches are actively ongoing for Dr. Leslie’s replacement, for a new Assistant Leader, Cooperative Fish and Wildlife Research Unit and for the Curtis Hutchins Professorship in Forest Ecology. Hopefully, all these positions will be filled in the near future.

I would like to close this letter with a special recognition and challenge to the Class of 1986. Your class will be the next class to graduate from the College of Forest Resources at UMO and enter the professional world as forest resource managers. Many of you will find yourselves involved in multiple land use management. Regardless of the primary land use with which you will be affiliated, water resources will play a vital role. As professionals, you will find yourself involved with management of these forest water resources. I have been positively impressed with the performance and attitudes of our student body, and take great pride in being associated with the students of the Class of 1986 as they move into the professional world. On behalf of the College of Forest Resources, I wish our 1986 graduates success, peace, and happiness in their careers and lives.

Sincerely,

Gregory N. Brown
Dean
Comments by the Associate Dean

Each year it is a pleasure to write down a few words especially for the members of the graduating class. I have become acquainted with each of you at least by name and for many I have come to know you well and can relate to you as a colleague and friend. Everyone in the class will be joining one of the professions in natural resources. I hope that from this time we will be on a first name basis with each other as equal professionals.

I know that these four years, for a few perhaps five, have dragged at times but now that the end is in sight perhaps all look back thinking that the time has been very short. There have been frustrations, grades that might have been different and efforts that have gone unrecognized but also triumphs when an unexpected thank you has been received or when a friend has been helped by something you did. All has been a part of these years that are now closing with the completion of the primary goal. The four years seem short to me also but there is a difference because each year I watch a group of fine individuals leave the University while another begins their studies. It is a special joy to be part of the process.

Now is the time to cement relationships with your University and your College of Forest Resources. I am a member of the Forestry-Wildlife Alumni Association (1949) and you will be too when you receive your degree. One of my jobs is to publish a brief newsletter for the association two times each year. We obtain our mailing labels of the graduates from the College from the General Alumni Association files. If your address is incorrect in those files you will never receive the newsletters. I hope you will put the Alumni Association as a high priority on your list of places and people to be notified each time you make a change in your address; we want you to know what is happening in your College.

It is difficult to think of a way to close as we look to the future with much uncertainty. We must be optimistic that the world will become a better place with passing time where we can practice our professions with confidence that our efforts to provide for people while maintaining a sound environment will be fruitful. I wish good success for all of you and a strong measure of good health and happiness in the future.

Sincerely yours,

Fred B. Knight
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Larix laricina
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Dean
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Forest Recreation, Recreation and Park Management

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Ph.D., West Virginia University, Forest Genetics, 1980
Forest Tree Improvement

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Tree Physiology

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Forest Policy

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Environmental Interpretation

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Statistics and Computer Applications to Forestry

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Wood Science and Technology

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Primary Wood Processing

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Timber Management

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Biodeterioration of Wood

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Photo Interpretation and Remote Sensing
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Waterfowl Ecology

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Population Dynamics

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Migratory Birds

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Forest Resources, 1970  
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Wildlife Management, 1980  
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Forest Management/Harvesting

DAVID S. SCHEIDT
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Forest Roads

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Planning and Design, Forest Recreation

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Forest Engineering

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Frank K. Beyer, Associate Professor Emeritus of Forestry  
Lewis P. Bissell, Extension Forestry Specialist Emeritus  
Richard J. Campana, Professor Emeritus of Forest Pathology  
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Howard L. Mendall, Professor Emeritus & Leader of Cooperative Wildlife Research Unit  
Albert D. Nutting, Director Emeritus  
Henry A. Plummer, Associate Professor Emeritus of Forestry  
Arthur G. Randall, Associate Professor Emeritus of Forest Technology  
Roland Struchtemeyer, Professor Emeritus of Forest Soils  
Roger Taylor, Forest Superintendent Emeritus

FACULTY ASSOCIATES  
Barton M. Blum, Project Leader, USFS  
Patrick Corr, Maine Inland Fisheries and Wildlife Department  
Hewlette S. Crawford, Research Wildlife Biologist, USFS  
Robert M. Frank, Research Forester, USFS  
David Grimble, Forest Entomologist  
Lloyd C. Irland, State Planning Office  
Jerry R. Longcore, Biologist, US Fish & Wildlife Service  
George Matula, Maine Inland Fisheries and Wildlife Department  
Sarah Redfield, Professor, Franklin Marshall Law School  
Thomas B. Saviello, Research Forester, International Paper Co.  
Lawrence Safford, Research Forester, USFS  
Alex Shigo, Research Forester, USFS  
James Sherburne, Maine Inland Fisheries and Wildlife Department  
Dale S. Solomon, Research Forester, USFS  
William Warner, Maine Department of Conservation
Nutting Newcomers

by Kate Piatek

Dennis Jorde, a Ph.D. candidate from Wildlife, while teaching senior level Wildlife Management last semester, used to say that "Your time is like money; you have to be careful how other people spend it," (after Jerry Longcore). However, how that has worked for the students, we didn't ask.

Dennis graduated from the University of North Dakota in 1977 and again, with an M.S., in 1981. Here, at UMO, he is studying the various aspects of wintering Black Ducks. He hopes to finish in June and is looking for positions with the Fish and Wildlife Service as a research scientist. His secondary choice would be teaching at a university; however, most of all, he would like to stay at UMO. His favorite quote is from P.S. Lovejoy: "The function of a politician is to take the people where he or she things they want to go, and the function of an ecological engineer (wildlifer or forester) is to take the people where they will be glad to be when they get there."

Mark McCollough has spent the last five years studying the maturation period in bald eagles, that is, the time between leaving its nest and returning five years later with white on its head and tail. Mark was primarily concerned with their travel routes and final destinations as well as modes of death. He taught Ecology last semester and now is finishing his dissertation.

After receiving his undergraduate degree at Penn State University, Mark came to UMO as a graduate student and received his master's in 1981. He is looking at job opportunities with Maine Inland Fisheries and Wildlife, the non-game program, to further pursue his interests in bald eagles and other endangered species.

"How long is this going to take?" was Dr. Krohn's first question. Then he placed himself comfortably behind his desk and started with the list of his accomplishments.

Dr. Krohn is the leader of the Maine Cooperative Fish and Wildlife Research Unit based at UMO. He is originally from New Jersey, but in pursuit of his education he travelled to the University of Alaska, where in 1967 he received his B.S. degree; UMO, where he investigated the summer behavior of woodcock and received a M.S. degree in 1969; and the University of Idaho, where he studied the population ecology of Western Canada geese and received his Ph.D. in 1974. Some of his experiences include research biologist for the U.S. Fish and Wildlife Service and the assistant chief in the FWS's Office of Migratory Bird Management in Washington, D.C. He returned to Maine last September. "I believe I can bring a broader perspective to wildlife than [someone with] a more traditional approach," he says.

Dr. Krohn's research interests include migratory game birds, methodologies for evaluation of wildlife habitats and integration of wildlife management into land management practices. He expects to work primarily with graduate students and extract from their projects the answers to fish and wildlife problems—the CFWRU's main concern. He will also teach a new course at UMO, Evaluation of Wildlife Habitat, starting next fall.
“Always be willing to question what it is that is being taught,” is the motto of Dr. Bill Livingston, a new faculty member of Botany and Plant Pathology. He teaches Forest Pathology and would like to establish a new, 500-level advanced pathology course.

Dr. Livingston received his B.S. from Michigan State University in 1976 and went on to the University of Idaho to work on root diseases and bark beetles in Grand fir where he received his master’s in 1978. During his dissertation work at the University of Minnesota, he received a Fulbright scholarship to study in Germany. There, he studied root diseases of declining Norway spruce and toured the country in his spare time.

On one of his trips, wearing a University of Minnesota T-shirt, he was approached by a German who had visited Chicago. Later, he was introduced by his German friend to his present wife, Ulrika, who is also at UMO and is a secretary at the Admissions Office.

Upon the return from Germany, he resumed his study of plant substances in relation to physiology and control of eastern dwarf mistletoe in Minnesota and received his Ph.D. in 1985.

With Marshall Ashly gone to Haiti, Lawrence Gering, a recent Ph.D. from the University of Georgia, fills in the faculty position, alas temporarily. Dr. Gering received his B.S. from UMO in 1979 and his M.S. from Clemson University, SC, in 1982. “I spent four years sitting in the last row of 100 Nutting trying to be little noticed and obscured, and I never dreamed that I’d be back here as a professor. But I enjoy being back; it’s like coming home,” he says. Dr. Gering teaches Remote Sensing. He believes in “hands-on” experience in the lab, although “using outdated equipment when it’s available.”

Jody Jellison pushes the return key of the personal computer to scan the optical density of the solution which is an indirect measure of the fungal antigen present in the samples. The numbers don’t appear on the screen. “This program was written by a friend,” Jody explains, “and it doesn’t catch sometimes.”

Jody Jellison is an assistant research professor in Forest Biology working on the chemistry of wood decay fungi, a joint project with Barry Goodell. By adapting medical techniques in her work, she hopes to be able to quantify the amount of decay fungi to better detect incipient decay.

Jody received her B.S. from the University of New Hampshire and M.S. from Oregon State, both in Botany and Plant Pathology. For her dissertation, she worked with lentils at Oregon State and received her Ph.D. in Plant Virology. During both the M.S. and Ph.D., she minored in Biochemistry and Biophysics. A postdoctoral position took her to Harvard’s Department of Cellular and Developmental Biology where she investigated the molecular basis of disease resistance.

At UMO, her position doesn’t include any teaching, and her contact with students is limited to a few work-study undergraduates. Her plans for the future include obtaining more funds and taking on a graduate student. “Good luck is so elusive,” she refers to her present study, “but today everything seemed to go OK.”
Dr. Ralph Griffin was born in Roanoke, Virginia and received a B.S. in Conservation and Forestry from Virginia Polytechnic Institute in 1943. He entered the United States Army as a Lieutenant and after World War II resumed his education at Yale University where he received a M.F. in 1947. He was employed from 1947 to 1951 as a forester with the Virginia Forest Service and from 1953 to 1956 as a professor of forestry at the Agricultural and Technical College of North Carolina. Dr. Griffin earned his D.F. at Duke University in 1956, the same year he started teaching at the College of Forest Resources, University of Maine at Orono.

Dr. Griffin has contributed greatly to the advancement of forestry through his interest and activities in the ecology and silvicultural management of forest types in the Northeast, especially with natural regeneration of mature forest stands and the relationship of growth to measurable stand and site variables. He has demonstrated a thorough knowledge and understanding of forestry throughout his career. His dedication to the field and his students is well known. As a professor, Dr. Griffin has impressed upon his students the many skills and qualities necessary to be a successful forester. A few of these are: 1) the need for close observation and attention to detail; 2) firm grounding in the fundamentals of biological sciences and their application; 3) continual growth in professional studies after graduation; 4) a diversity and range of knowledge; and most importantly 5) the ability to work in all types of weather conditions.

Throughout Nutting Hall, Dr. Griffin is known for his soft spoken manner that is gently spiced with a witty sense of humor. He is always genuinely courteous and respectful to both students and faculty. All of us at the College of Forest Resources would like to wish Dr. Ralph Griffin a fond farewell.
"There are only two things you have to do, come to Silvics and die!"

"There may be a lot of red marks on your test, but that's so I can stay awake."

"I know it's boring, but that's besides the point."

"I must hand it to the girls; they are neat. The answer may be wrong, but they are neat."

"We don't bother those dominants . . . otherwise we do not have a stand."

"For the sake of uniformity, let's carry out the decimal to the fourth place. This way, for the fourth number we will all have either a zero or some other number for that last number."

Talking about a man with a German accent: "I can't see how anyone living in the same place for 20 years can still have an accent."

"Now I don't pick Loblolly Pine because it's a southern tree. . . ."

"How long do you think we should wait here? . . . The clock ain't going no place . . . Well, I can depend on my trusty watch—so long as I remember to wind it! . . . Anybody out there know a good joke?"

"It may be possible to add to this list, but I doubt it—it's quite impressive."

"If you don't like your grade, you can just scratch it out and put your own grade on it."

"About the only thing we can enjoy in this world is our work."

"Mark those trees like you're proud of it so that you can show everyone what a good job you've done."

"This was very common when I first came to Maine—which wasn't very long ago . . . in Geologic time, that is."
Support Staff

Mary Viik, Jobie Carlisle, Sue Serreze

Keith Paschal

Peggy Smart

Frank Spizuoco
Kate Wynne

John Leslie

Jerry Longcore

Jack Witham

Pete Caron, Greg Reams, Ron Lemin
"Dr. Knight's head keeps falling off." Laurie

"It's the slow thorough death that counts!" Dr. McCormack

"Hopefully there will be much less trash in 1986!" Walter Legree

"I've come across a few 'Boy George' ducks in my day." Buddy Johnson

"Have there been any drips in your office today?" Barry Goodell

"I bet Gordon Lightfoot never took Dendrology!" Chris Mund, 4:02 a.m.

"If you had a dumpcoat like this would you wear pants?" Terre Pearson

Andy Alexson: "Want to go dump picking?"
Dawn Newman: "Sounds like a line to me."

"Go ahead, talk about me in front of my back." Rob Messenger

"What the dog won't eat the faculty will!" Cindy Paschal

"I have three easy question for you..." Dr. Gering

According to Professor Kimball the public opinion of forester is: "Someone who cuts trees, lives in a state park, and sits in a fire tower."

"If ducks had any sense at all they wouldn't be seen with wildlife types." Dr. Brann

"Summer camp is give and take, we give and they take." Crew C-2 (at 5:15 a.m.)

"Don't think about it, just do it! Cuz' if you think about it you get confused." Heather Hill

"I know how to use everything in this building, I just don't know how to use them right." Marie Roy

"Your brother was smart enough to get the right degree." Dr. Field

"I'm having statistical difficulty beyond my control." Fred Martell

"I've got my lighter if I really need atmosphere." Prof. Kimball

"Do you think she likes leather?" Cindy Paschal

"As long as you have flush toilets it's recreation." Andy Alexson

"I was never a beginner." Louis Morin
“It’s hard to dress up and look classy when you’re not wearing any clothes.”

Terre Pearson

“If you think that it’s tough attending an 8:00 a.m. class you should try teaching it!”

Dr. Pat Brown

“That’s what I like to see . . . domesticated men!”

Dawn Newman

“If a chair could talk it would sound like him.”

Jessica Lowell

“Students are not the kindest of people.”

Louis Morin

“Pit toilets are NOT recreation.”

Dr. Newby

“I don’t tell terrible jokes!”

Prof. Kimball

“I don’t know about soils being sweeter after fire, it all tastes like dirt to me.”

Prof. Kimball

“I don’t know anything about that course but I highly recommend it.”

Dr. Pat Brown

“No, I’m not making this up as I go along!”

Dr. Field

“I’ll smile alot if you give me a discount.”

Cindy Paschal

“I’m too cute for a nerd picture.”

Duane Diefenbach

“My advisor would never say ‘stop’.”

Sue Livingston

“Back off, Man, I’m a scientist!”

Bill Murray

“I’m more comfortable doing things one-way!”

Dr. Brann

“For public employees the size of the salary is directly proportional to the size of the state bird.”

Dr. Hoffman

“I think the other planimeter went to Haiti.”

Dr. Gering

“School, like beautiful women, usually takes up too much of one’s time.”

Dave Schmitt

“I think that being eaten by a grizzly bear is part of the wilderness experience.”

Tim Bowman

“Cats are psychoanalytic—you have to watch what you say and do around them.”

Dr. Pat Brown

“Come on, put your notes away, this is a Field test.”

Dave Stevens

“Oh (Louis), don’t be so scientific—you know what I mean!!”

Cindy Paschal

Lisa DeBruyckere: “Hey, want to see my new technique?”

Tim Bowman: “Here?”

“Pretty Muchly.”

Dr. Field

Laurie: “I’m old fashion . . . I like the old stuff!”

Dr. Pat Brown: “Oh, that must be why you get along with the faculty.”

“You go ahead of me, I’m too tired.”

Bucky Owen

“Eagles deserve to be endangered.”

Sue Livingston

“We don’t really know how eagles fly.”

Mark McCollough

Roger Williams: “Ralph, how do you feel about retiring?”

Ralph Griffin: “I don’t know, I’ve never done it before.”
Feature Articles
BIG A
by Jessica Lowell

On March 29, 1984, Great Northern Paper filed an application for a license to construct a hydroelectric generating station on the West Branch of the Penobscot River, at Big Ambejackmockamus Falls. On October 21, 1985, Maine’s Land Use Regulation Commission (LURC) returned its decision, the first in a series that must be made before the dam can be built.

During that year and a half, a torrent of debate raged that has not yet subsided. Although LURC has returned its decision—a conditional approval—the project must also be approved by the Federal Energy Regulatory Commission before construction can begin. FERC cannot approve the project until the Maine Board of Environmental Protection grants a water-quality certification, stating that the water quality will not be diminished.

The “Big A” project is a proposal to build a generating station and a dam on the West Branch. The facility will have a capacity of 40,500 megawatts, and once in place, will reduce the consumption of oil by 438,000 annually. Construction costs were estimated at $100 million in 1985.

Great Northern contends the energy generated by the Big A project would lower the costs of producing its newsprint and groundwood specialty products. By reducing its overhead, it would be able to better compete with the eastern Canadian paper producers, which are government subsidized.

In response to suggestions that biomass boilers could be built to produce the needed energy, Great Northern has said the boilers would not reduce the existing energy costs; the cost would be two to three times as much as the electricity produced by the Big A project.

Another argument in favor of the Big A project is jobs. Great Northern contends that the jobs of about 4,000 employees will be either protected or created as a result of the project.

In 1981 Great Northern granted a conservation easement to the state of Maine for 75 miles of the river corridor. The easement precludes any development activities for all time on all sections of land in the area, except the lower West Branch where the Big A would be located.

Great Northern has conceived a plan that will allow rafters access to the river by releasing water three days a week for their use.

Opposing Great Northern, among others, is the Penobscot Coalition to Save the West Branch. The Coalition is made up of private citizens, environmental groups, and whitewater and sports outfitters. It maintains that the section of the West Branch affected, a four-and-a-half mile stretch including the Ripogenus Gorge—reputed to be the best whitewater in the northeast—is unique. Every year more than 12,000 people raft through the Ripogenus Gorge. There is also a thriving population of landlocked salmon which lives and breeds in the river.

The Coalition is arguing that the area is a national treasure and should not be flooded as the result of dam construction. The Coalition considers the area to be a public trust, and does not feel that Great Northern should be able to limit access to that part of the river.

Sandy Neily, coordinator of the Penobscot Coalition, said the Maine Office of Energy Resources had issued an evaluation of the Great Northern plan. In it she said, the OER questioned every figure Great Northern gave on the cost effectiveness of the dam versus the biomass boiler. Neily said the figures submitted for the dam were too low and those submitted for the boilers were too high.

An analysis by LURC disagreed with many of the arguments made by Great Northern during the public hearings that were held on the project in the spring of 1985.

In addition, LURC analysts reached conclusions differing with those of Great Northern regarding dam safety and the ability of the dam to solve the company’s problems with the productivity of its older machines and Canadian competition. LURC concluded that if a biomass boiler were profitable and if Great Northern were willing to provide the energy needed to run its marginal machines with a biomass boiler, more jobs would be available in Maine than if the Big A dam were built.

Under the terms of its conditional approval, LURC would like Great Northern to guarantee future employment levels, and to do an energy audit to see if the dam is needed.

On February 26, the Energy and Natural Resources Committee of the Maine Legislature voted 10-2 in support of a bill that would bypass any action by the Board of Environmental Protection, including denial of water quality certification.

The bill is a rewritten version of one submitted by Gov. Joseph E. Brennan, who had said the bill’s intention was to clarify a cloudy provision in the state’s 1983 River-Protection Act. He denied the bill was drafted to help the Big A project; it is intended to apply to future applications. The second version submitted would automatically grant the water quality certification for the proposed dam.

Paul McCann, spokesman for Great Northern, said the company was encouraged by the committee’s decision, and that Great Northern would not write off the
dam project despite the BEP's 6-2 decision not to reconsider its earlier denial of a water quality certification the project needs to proceed.

The BEP maintains that in order to satisfy environmental standards at the federal level, it could not grant certification if the project were to diminish water quality. The BEP applied standards for rivers in evaluating Great Northern's application, which are different from those applied to great ponds.

FERC cannot approve the proposal to build the dam until it receives state certification that water quality will not be diminished.

Great Northern has announced that it will lay off at least 1,200 people over the next several years to cut costs. The company cites an oversupply of paper in the world markets as the reason.

On Thursday, March 13, 1986, Great Northern Paper announced it was dropping the "Big A" dam project.

Great Northern spokesmen cited state regulatory and political setbacks as well as continued environmental opposition as reasons for discontinuing the process.

Two crucial points were the conditional approval of Great Northern's application by LURC and the Maine State Legislature's failure to overturn the permit refusal by the BEP. Great Northern could not promise that it could maintain a work force of 4,000, and that most likely it could not re-create the 1,400 jobs that were discontinued by the construction of the dam.

By continuing the project, Great Northern would have had to spend millions of more dollars—on top of the $6 million the project has already cost—to fight environmental and governmental red tape.

"The immense drain on our resources of pursuing this project is more than we can continue to support."

—Great Northern President Robert Barlett

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**Figure 1**

Location Map

BIG A PROJECT

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Wetlands have played a prominent role in North American history. Vast wetland resources were found in almost every corner of the New World, and offered an abundant supply of shellfish, fish, birds, and mammals. Native Americans and settlers both found wetlands to be important providers of food. As the methods of transportation and harvest improved, market hunters and commercial fishermen exploited wetlands to help provide food for the growing urban centers, and continued to do so into the 20th century.

The economic values of wetlands are even more evident today. In the extensive coastal marshes of Louisiana and Texas, the sale of shrimp, shellfish, fish, alligator meat and hides, furbearers, and leases for sport hunting and fishing provide millions of dollars annually. Similar benefits are derived from marshes in such diverse areas as California, Missouri, Maryland, and Maine.

The values of marshes are not limited to the fish and wildlife resources they provide for consumptive use. The abundance of birds and mammals found in wetlands is a great attraction for people, and many people now recognize wetlands as producers of fish and wildlife. These resources provide many economic and recreational benefits derived from either sport harvest or by the pleasure they provide through observation. Less widely recognized, but no less important, are the values of wetlands in recycling nutrients, flood control, and atmospheric stability.

After ecologists documented the incredibly high productivity of many types of marshes, their value as "nutrient sinks" and nutrient recyclers became clear. Many towns have used these characteristics to their advantage by creating marshes that trap or recycle nutrients from domestic sewage. Such sewage treatment areas provide low-cost, reliable, and efficient sewage treatment, and habitat for many marsh-dwelling animals.

A more subtle value, protection from floods, has been documented most clearly in the lower Mississippi Alluvial Valley. In pristine times when this 25 million acre area was forested, the flooded basin could store an amount of water equivalent to a 60 day discharge at the mouth of the Mississippi River during the peak of the highest flow ever recorded.

Clearing of these lowland forests for agricultural production of soybeans and other cash crops reduced the forest to 4.8 million acres, and similarly reduced the water-holding ability to only 12 days. The devastating floods that ravaged Louisiana during 1982 and 1983 illustrated the unexpected costs of converting the lowland forests to agricultural fields. The reduced water holding capacity of these lands resulted in tremendously increased flood peaks immediately after heavy rains. A study of the eastern Arkansas region has shown that the conversion of enormous acreages of lowland hardwood forests has also had effects that were detrimental to the lives, economic and otherwise, of people living in this area.

The importance of wetlands for atmospheric stability is less well known, but current evidence suggests that production of methane in wetlands acts as a regulator of the ozone layer in our atmosphere. This layer provides vital protection for plants, animals, and man by preventing harmful levels of ultraviolet radiation from reaching the earth.

With all of these and other values of wetlands known, it is mystifying that wetland destruction continues at a rate as high as 50,000 acres per month. Millions of acres of our best agricultural lands were once our most productive wetlands. These wetlands produced a variety of resources (including forest products and wildlife) that have been replaced with record surpluses of agricultural products. Loss and degradation of wetlands continues because of human activities related to urbanization, transportation, industrialization, agriculture, and other activities.

As wetland area continues to decline, the need to inventory and identify wetlands is critical for wise decisions to be made in acquisition, protection, and management of these habitats. The U.S. Fish and Wildlife Service has developed wetland classification systems and is conducting a detailed inventory of remaining wetlands. Wetland maps are now available for many parts of the country.

Historically, wetlands were poorly protected legally, but now through the efforts of private "duck clubs", and private groups such as the National Audubon Society and The Nature Conservancy and other groups, a fair degree of legal protection exists from laws dating as early as the Rivers and Harbor Act of 1899 and as recent as Section 404 of the Clean Waters Act of 1977. Ducks Unlimited, Inc., an organization that is funded primarily by hunters, has protected a wetland area in Canada equivalent to the area of the entire National Wildlife Refuge System in the lower 48 states through long-term easements, and their program has continued to grow and diversify. Although legal protection is important, and private organizations can play important roles, no single approach is likely to succeed in protecting wetlands. A combination of tax
benefits and incentives for private landowners, acquisition, protection through easements, education, and regulations is needed.

Wetlands are complex communities with many interactions between their physical and biological components. Wetland quality and type depend on the soil, water chemistry and quantity, climate, hydrology and hydroperiod (timing and quantity of water), and herbivores, such as beaver. All of these factors, and some others, interact to structure the life of each marsh and make them extremely dynamic systems. Vegetational communities may be completely altered in some wetlands in as little as 2-3 years, and return to the original state in just as short a time. In fact, dynamic wetlands are thought to support a greater number of wildlife species than those that are stable and have their nutrients locked in the anaerobic bottom sediments. Ironically, wetland productivity requires periodic drought to renew the wetland and recycle nutrients.

Nearly all wetlands undergo annual and long-term fluctuations in water level. Wetland wildlife must be adapted to cope with these fluctuations. For example, waterfowl are long-lived and highly mobile, allowing them to exploit these habitats when basins are filled and to move to better basins as the quality of old ones diminishes.

The colorful Wood Duck typifies many wetland species. It requires a complex blend of habitat characteristics including different types of wetland basins for egg laying females and growing ducklings. These habitats range from ephemeral wetlands that are a few centimeters deep, to relatively deep, permanent wetlands. But even though the Wood Duck is tied to wetlands, it also requires specific-sized and shaped cavities in snags (dead and dying trees). Because Wood Ducks are migratory, they require similarly complex wetlands in their southern winter homes.

At the turn of the century, many people believed that the Wood Duck was on the road to extinction. Numbers were reduced to perilously low levels primarily by overharvest, but the elimination of beaver from the landscape and unwise land use practices that destroyed and degraded wetlands were also detrimental to wood ducks. Numbers of wood ducks steadily increased after enactment of the Migratory Bird Treaty Act of 1918 and now the wood duck is really quite abundant. It is hard not to think there is a lot to learn from our history with wood ducks. Lessons on the effects of overexploitation, health of the land, the results of cooperation by people concerned about a resource all come to mind. The result was that a valued part of our wildlife heritage was protected so that people could enjoy them for as long as we resolve ourselves to manage their populations carefully. Maybe that’s the greatest lesson of all.
LET’S PARK AND RECREATE!

Susan Glenn

Increased recreational demands are being felt nationwide. Our parks are overflowing with visitors, private businesses and adventure programs are flourishing, and the fitness craze is accenting an out-of-doors orientation. This increased demand has placed pressure upon our natural resources and raised questions about the value of recreation and aesthetics.

Water-based recreational activities have invaded Maine in an exemplary manner—white-water rafting, canoeing, kayaking, and let us not forget leisurely tubing down a stretch of river, scuba diving as well as other boating and fishing interests. These activities are creating environmental impacts on our natural resources. Growing numbers of users lead to greater pressures upon the waterways which in turn can lead to more frequent travel into remote areas to degradation of the resources. Increased numbers of recreationists tend to degrade the quality of an experience because a large portion of the experience depends upon a certain solitude and communion with nature. For example, passing a number of different parties while canoeing a stretch of river siphons from the wildness and specialness of the experience.

Recreation has become important economically as the result of the increased recreational enthusiasm among the general public. People are investing time and money into wilderness expeditions and enrolling in outdoor leadership and adventure programs in search of the coveted wilderness experience. Large corporations have become involved because of the positive benefits to their employees, therefore the corporations are investing significant amounts of money to send executives to gain confidence, leadership traits, and reduce stress. In addition, military affiliates are actively pursuing and developing the fitness and recreational assets to their organizations because of improved personnel performance.

State and Federal agencies face a different problem. The difficulty of assessing the value of aesthetically pleasing resources is prominent particularly to conservation groups. Conservationists have been forced out of the realm of emotional defenses because the terms “wilderness” and “pristine” do not easily translate into dollar signs. Enormous strides have been made to qualify the value of certain experiences and the willingness of consumers to pay. Resource preservation has dramatically swung from the original criteria for national parks; “land with no commercial value,” to the high regard held for the natural phenomena of Yellowstone, the Rocky Mountains, and many other gems of lightly developed grandeur. These public agencies are also finding themselves competing with specialized profit-oriented private interests, battling fiscal cutbacks, understaffing and virtual threat of closing such attractions as a campground in Acadia National Park. Emphasis is being diverted to marketing strategies and other incentives.

Recreation associations are experiencing additional problems of significant magnitude. Both public and private recreation agencies are battling the increasingly detrimental effects of insurance and liability. Programs from the community level to high risk adventure programs are faced with the inability to afford and to even acquire insurance. Liability is a fuzzy area in many state statutes. Until states establish definite standards of negligence, liability, and assumed risk, federal and state park systems, recreation facilities and private organizations must assume the responsibility of inevitable law suits. Insurance companies are cancelling policies and raising premiums to the point where every program down to the local town park and recreation departments are struggling.

These obstacles arise against a backdrop of the traditional difficulties of park vandalism, resource protection and park access. A fine line must be drawn between compromising the wildness of the experience to allow access to a greater number of visitors. For example, must those who decide to hike down into the Grand Canyon deal with helicopters and other aerial sight seekers? Exponentially increasing numbers of park users are impacting the resources by compacting the soil and degrading the vegetation.

Commercial development is impinging upon skylines, air, and water quality and creating conflicts which pit economic benefits against recreational and aesthetic values. Maine’s proposed “Big A” hydroelectric dam demonstrates the strides that recreation interest groups have made in terms of power and influence. The economic value of Maine’s tourism is being realized as is the drawing power of Maine’s waterways. The numerous lakes and rivers entice outdoor enthusiasts including hikers, boaters, campers and fishermen. In addition, the sundry islands off of the coast of Maine are heaven for sea kayakers and whale watching tours.

Increased demands on public and private recreation agencies are compounded by difficulties of obtaining insurance, controlling environmental impact, and dealing with preserving resources, in particular recreational experiences. Similarly, studies which define the financial capital growth brought into a state through recreational activities, travel expenditures and other economic benefits need to be incorporated into the analyses of the consumers’ willingness-to-pay. In particular, the forest and water resources decorating the State of Maine represent an enormous wealth and provide a vast opportunity for recreation enthusiasts.