

# Maine Forester



PULP AND PAPER PLANT

1964

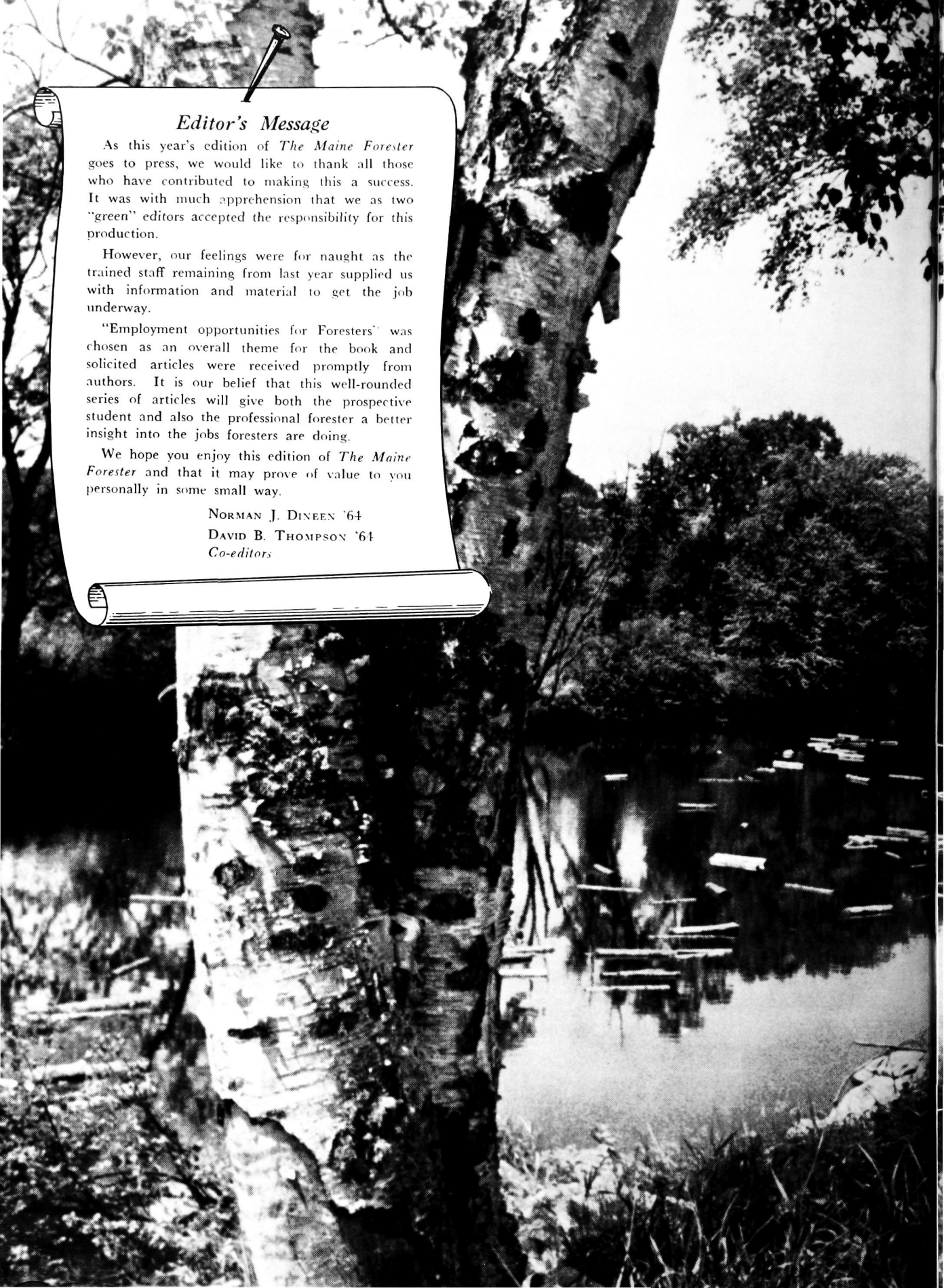


# THE MAINE FORESTER



Published Annually By  
THE STUDENTS OF THE  
SCHOOL OF FORESTRY  
UNIVERSITY OF MAINE  
ORONO, MAINE

# 1964



### *Editor's Message*

As this year's edition of *The Maine Forester* goes to press, we would like to thank all those who have contributed to making this a success. It was with much apprehension that we as two "green" editors accepted the responsibility for this production.

However, our feelings were for naught as the trained staff remaining from last year supplied us with information and material to get the job underway.

"Employment opportunities for Foresters" was chosen as an overall theme for the book and solicited articles were received promptly from authors. It is our belief that this well-rounded series of articles will give both the prospective student and also the professional forester a better insight into the jobs foresters are doing.

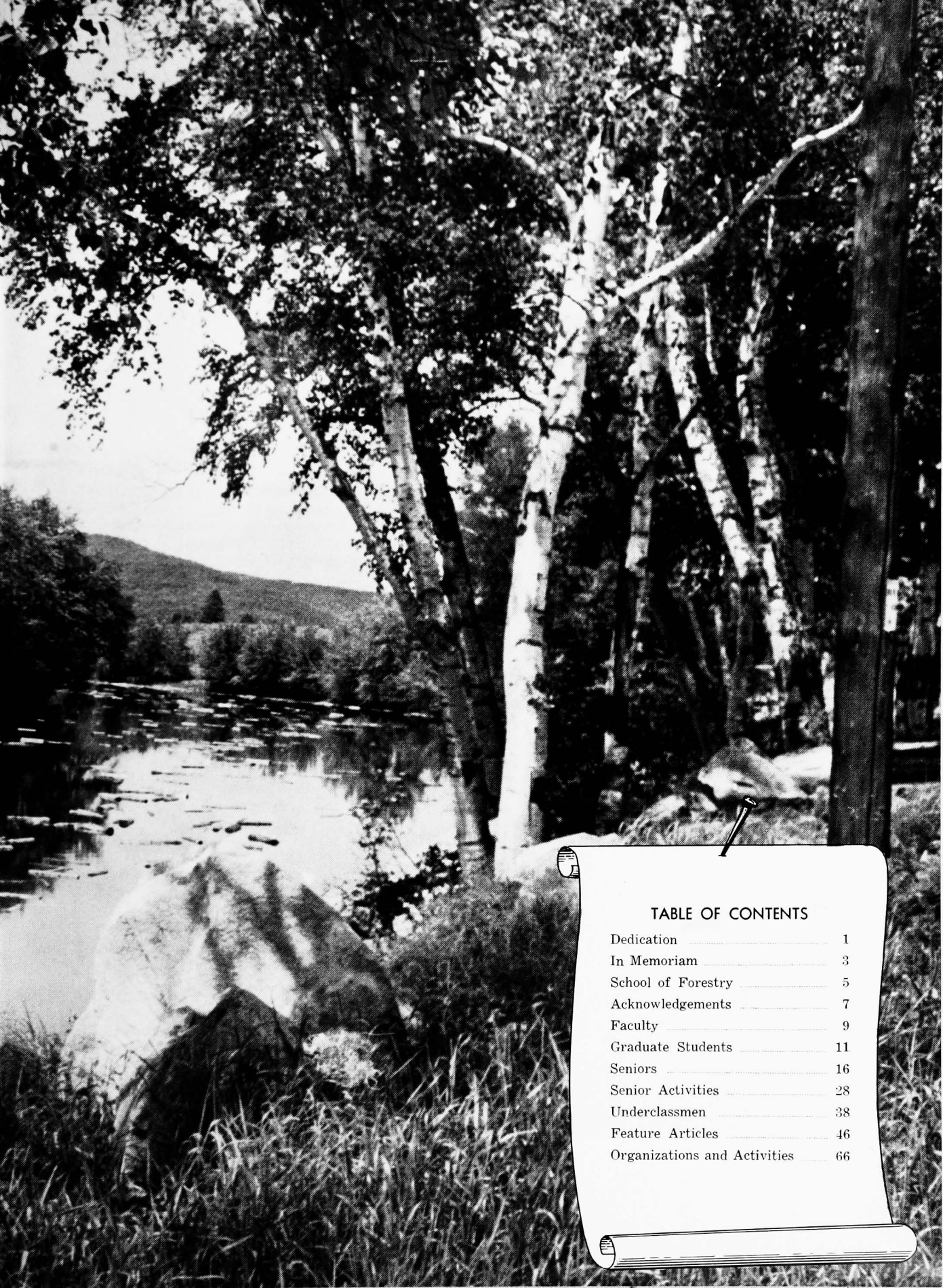
We hope you enjoy this edition of *The Maine Forester* and that it may prove of value to you personally in some small way.

NORMAN J. DINEEN '64

DAVID B. THOMPSON '64

*Co-editors*





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Dr. Ralph H. Griffin

This issue of *The Maine Forester* is dedicated to Dr. Ralph H. Griffin with deep respect and sincere appreciation of his efforts to teach and guide us in our studies of forestry.

Dr. Griffin was born in Roanoke, Virginia, where he attended high school. After graduation from high school he entered Virginia Polytechnic Institute at Blacksburg, Virginia and graduated with a B.S. in Conservation and Forestry in 1943.

During World War II he served as a Lieutenant in the United States Army. Upon discharge from the Army he entered Yale University and in 1947 was awarded a Master's degree in forestry.

From 1947 to 1951 he was employed as a forester by the Virginia Forest Service. In 1953 he received a Doctor of Forestry degree from Duke University with a major in silviculture and a minor in forest mensuration. The title of his thesis was "Evaluation of certain criteria of the Need for Thinning Even-aged Loblolly Pine Stand."

He taught at the Agriculture and Technical College from 1953 to 1956.

Dr. Griffin joined the faculty of the University of Maine in August of 1956 and was promoted to Associate Professor of Forestry in July of 1959.

Dr. Griffin teaches Silvics, Silviculture, Forest Influences, Regional Silviculture, and this year he taught Dr. Young's Photogrammetry class. In addition to this heavy load of teaching he still finds time to conduct research in direct seeding and balsam fir thicket thinning in conjunction with graduate students. Dr. Griffin has been chief advisor to four graduate students. He also works with Roger Taylor, University Forest Superintendent, in determining the cutting methods to be applied to different areas of the forest.

Dr. Griffin and his wife have three sons. Mrs. Griffin is an active member of the Forestry Wives' Club. Dr. Griffin belongs to the Society of American Foresters, the Eastern Maine Forest Forum, Xi Sigma Pi, and the Forestry Club. He takes a very active interest in these professional organizations and rarely misses a meeting.

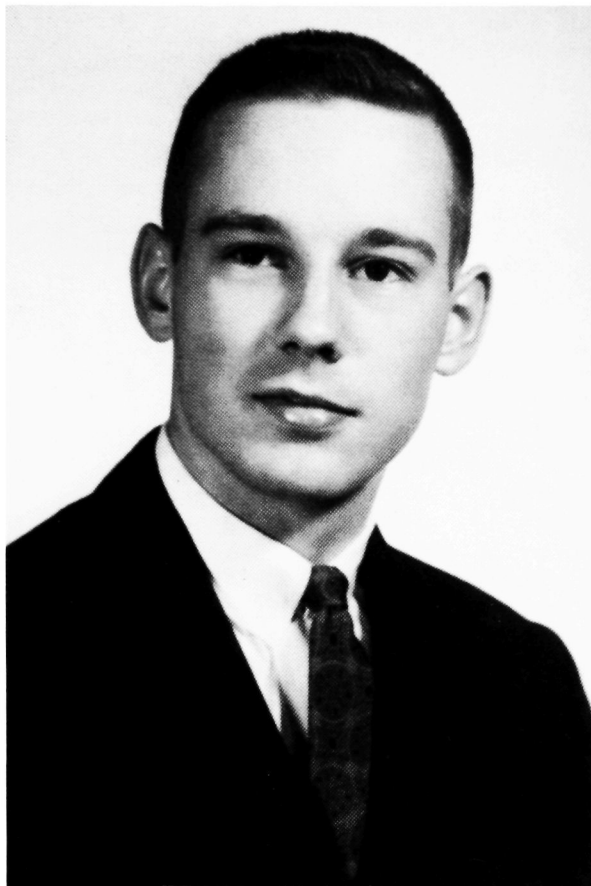
Dr. Griffin's contributions to the students are numerous. His lectures are up-to-date and to the point. He has never given a lecture without first having rewritten it a number of times.

The famous "Silvics Report" may seem long to students, but when they finish most of them realize the value of going into the field and collecting data, organizing this data into tables, and then interpreting the tables to decide what is happening to the stand. Many foresters will be involved with similar reports during their careers and the experience gained from working on the silvics report will prove to be invaluable. It also helps students to appreciate the amount of work that goes into reports and bulletins that are found in the forestry literature.

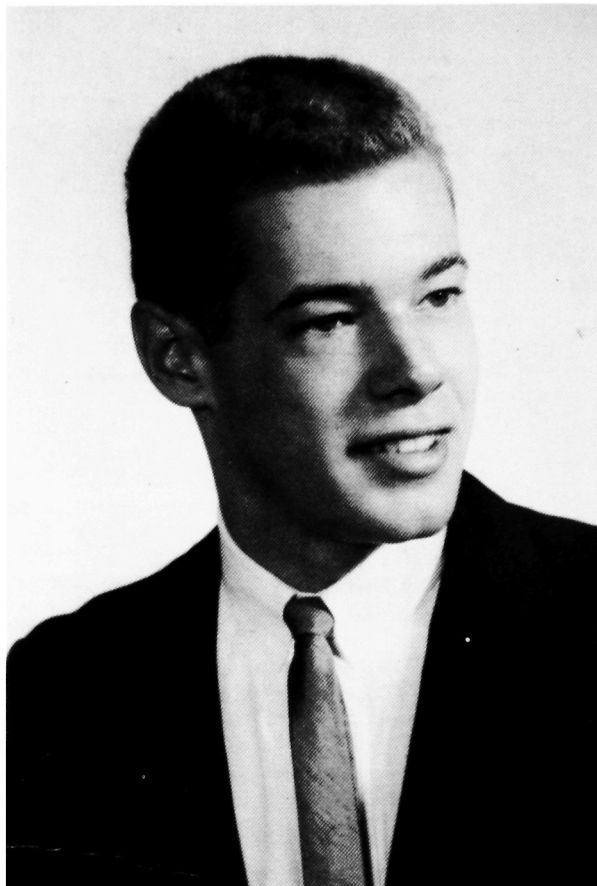
There seems to be a tendency for many members of our profession to be "fair weather foresters." Dr. Griffin teaches his students to work under adverse weather conditions. Last spring he was wading around in four feet of snow with his silviculture class. During lab sessions he doesn't just stand around and supervise—instead he helps students get down hung trees, take measurements and most important, explain why certain trees are pruned or cut while others are left untouched.

In summary, Dr. Griffin is a dedicated forester and teacher. His "always ready-and-willing to assist" attitude towards students in academic as well as extracurricular activities will long be remembered by Maine forestry students.





JEFF FIELD



TOM FELTMAN

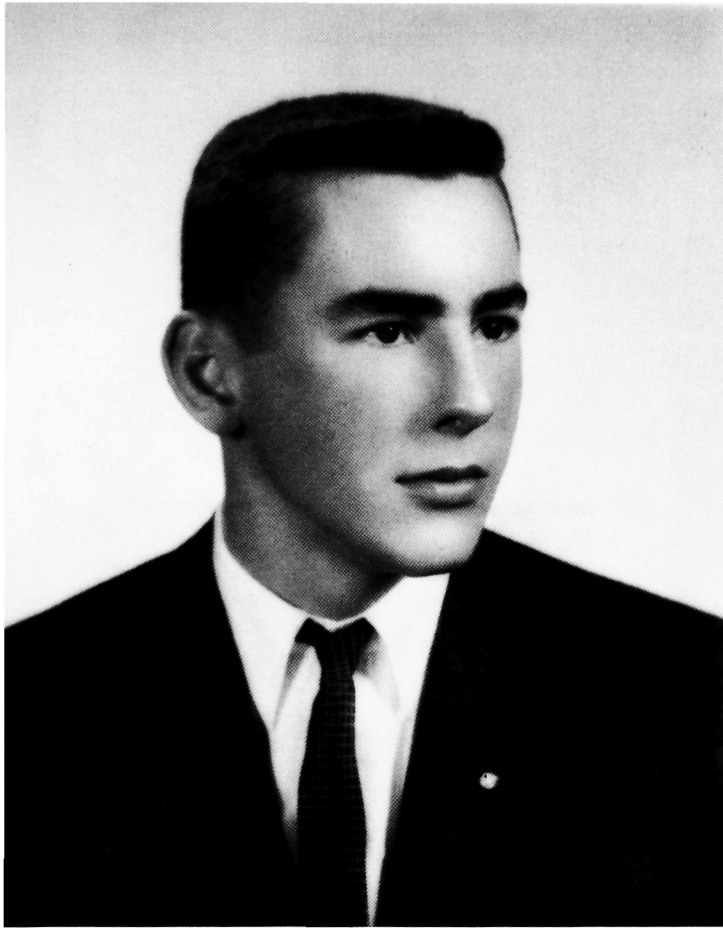
## *In Memoriam*

On the 29th of April 1963, tragedy struck at the University of Maine. Tom Feltman and "Jeff" Field, both promising junior wildlife management majors, lost their lives in a canoeing mishap on the upper Stillwater River.

Both boys ranked in the upper portion of their class, and their enthusiasm and interests proved their dedication in the field of wildlife conservation. Upon entrance to the University, both listed their interests as hunting, fishing, riflery, archery, and various other outdoor activities. Their paralleling interests found them both active in the University and R.O.T.C. Rifle Teams, Forestry Club, Rod and Gun Club, and Wildlife Seminars.

Their pleasing personalities soon gained the friendship and respect of many students and the staff at the University of Maine. The members of the Class of 1964, School of Forestry, wish to express their sincere gratitude in having had the opportunity of being classmates of such fine men and are happy to be able to contribute to the Feltman-Field Memorial Fund established by the parents of the boys and their friends. This fund provides non-interest loans to wildlife majors and is used for purchasing books, films, and various other equipment related to the field of wildlife.



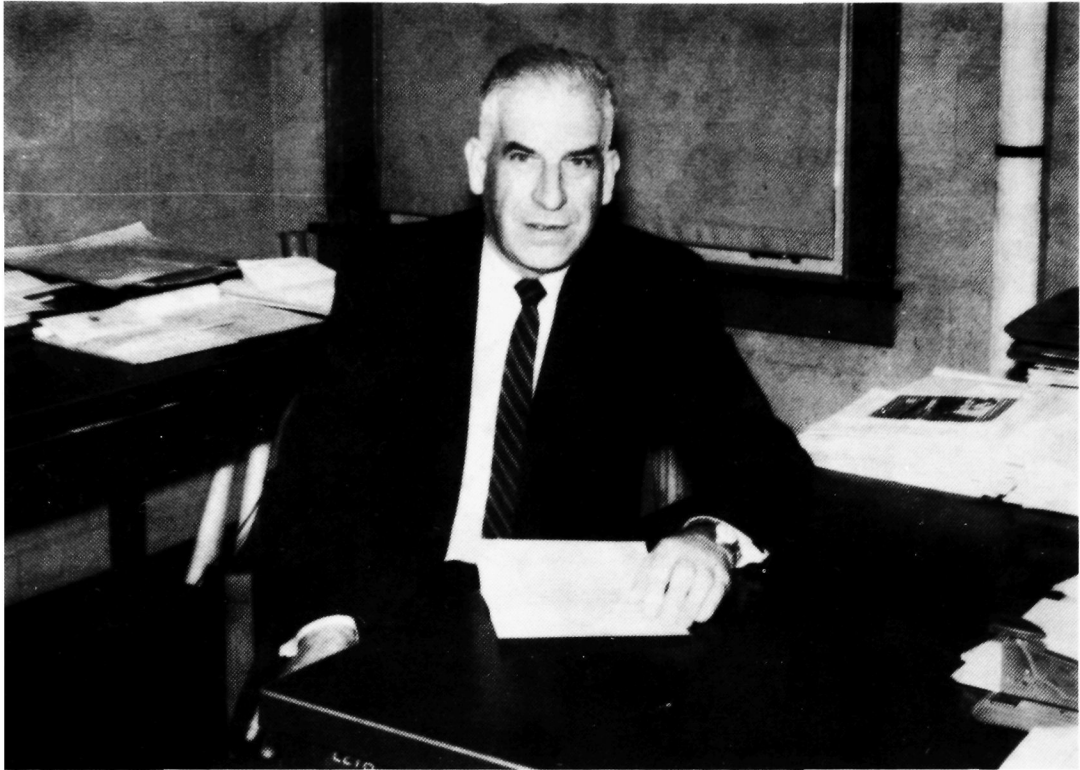


JOHN E. GRIFFIN

John E. Griffin (1942-1963) was fatally injured in an automobile accident at New Gloucester, Maine on September 13, 1963.

A former high school basketball player and a quiet, personable student, John was very popular with his fellow Forestry students. He began his undergraduate work at the University of Maine in Portland and transferred in 1961 to the Orono campus to start his sophomore year.

At the time of his death, John was employed for the summer by the Maine Forest Service.



## OUR FORESTRY SCHOOL

*By* DIRECTOR A. D. NUTTING

In the 1963 Yearbook I reviewed some of the School's present objectives and its accomplishments in its 60 years of operation. This year I will review activities, especially those of the faculty other than teaching.

In our 61st year, as in previous years, we are interested primarily in providing the best possible training in forestry and wildlife for our students. Student academic accomplishments are one way to measure training successes. I am especially proud of our student's grades for the 1963 fall semester. For the first time in several years, at least, two students had all A's—Bruce Wiersma, a senior in wildlife, and Douglas Denico, a sophomore in forestry. Although we have not kept yearly records of the number of Dean's list students for comparison, this year's list is certainly one of the largest—if not the largest—in our School's history. A

total of 38 made the list (B's or better) composed of 13 seniors, 8 juniors, 7 sophomores, 8 freshmen, and 2 special students. Another good accomplishment was that all freshmen passed first semester English and only one freshman was dismissed for low grades.

Our staff welcomed Professor Coulter back to the campus in July after his absence of a year studying at Syracuse for his Ph.D. About the time he returned, Professor Harold Young left for Norway with his family for a year's sabbatic leave of absence where he is lecturing and obtaining information for a forest mensuration textbook. Professor Young was awarded a Fulbright scholarship to study in Norway which made it possible for him to be away for one year. Professor Charles Schomaker joined the staff in July as Assistant Professor and has been teaching forest mensuration classes and

getting research underway on tree growth. He obtained his graduate training at Penn State University and his Ph.D. at Michigan State University.

Professor Corcoran served as a member of Dr. L. J. Lussier's staff for his short course "Modern Management Techniques Applied to Forest Industry" at Laval University in the fall. In April he is returning to the Forestry School at Purdue for three days as a guest lecturer. His major research project is entitled "Product Procurement for Primary Wood-using Market in Maine."

Professor Brock's bulletin entitled "Marketing Maine Lumber to the Northeastern Building Construction Industry" has received wide recognition and was quoted in a recent Kiplinger letter. Professor Brock is our regional representative on forest marketing research studies being carried on by the Agricultural Experiment Stations.

Professors Baker, Brock and Griffin have reviewed their work in wood density, forest economics and balsam fir thickets studies on Monday afternoons preceding Eastern Maine Forest Forums during the past fall and winter months.

Professor Plummer is the Leader of the School's project to establish a forest tree seed orchard of selected trees on the University-owned Weed property in Veazie.

Professor Beyer is the School's representative in a 5-year regional white pine site study.

Cooperative research on Indian Township with the St. Croix Division of Georgia-Pacific Corporation is under the direction of Professor Randall.

Three new research projects have been made possible, through regular McIntire-Stennis funds, in tree growth (Leader, Dr. Schomaker), density of red pine (Leader, Professor Baker,) and Utilization of Maine woods (Staff). Another project "Influences of Known Populations of Deer upon Forest Vegetation" has been approved from the McIntire-Stennis reserve fund (Professor Schemnitz, Leader). These projects will provide financial aid for graduate student research assistantships.

The Wildlife Research Unit has the following major projects: Ecology and Behavior of the Fisher (Leader, Malcolm W. Coulter); Waterfowl Distribution and Experimental Management, Renesting—Homing Study, Waterfowl Hunter Bag Checks and Woodcock Population Studies (Leader, Howard L. Mendall); Breeding Biology of the Common Eider in Penobscot Bay, Maine (Jerry S. Choate, Graduate Assistant—Thesis Adviser, H. L. Mendall); A Study of the Causes of the

Declining Deer Harvests in Eastern Maine (Francis J. Gramlich, Graduate Assistant-Thesis Adviser, S. D. Schemnitz); and Effects of Small Salt Marsh Impoundments upon Ruppia and Macroinvertebrates (James F. Gore, Graduate Assistant-Thesis Adviser, M. W. Coulter).

Lewis Bissell, Extension Forester, has served as producer of 5 television shows sponsored by the School of Forestry during the school year. This is a part of the series sponsored by the College of Agriculture on commercial television. He is Secretary of the Maine Christmas Tree Association and a program committee member for both the Eastern and Western Maine Forest Forums.

The Director is serving on several state and regional committees such as Northeastern Representative on the Advisory Board for McIntire-Stennis Research Program, Vice-Chairman Conservation Education Foundation (Headquarters Bryant's Pond), member Allagash Authority, Maine Forest Products Council, Chairman Utilization Committee and Director Northeastern Loggers Association and Northeastern Forest Experiment Station Advisory Committee, Northeast Forest Pest Committee and Consultant to Northeast Research Committee American Pulpwood Association.

A good forestry teacher has to be actively engaged in research or some other forestry activity that will keep him abreast of the rapid changes and developments in his special area of training.

The various activities of the staff indicates that they are carrying on extensive programs in addition to teaching and that the School has an on-going research program. Most of the forestry research projects are part of the Agricultural Experiment Station Program and the wildlife projects are a part of the work of the Wildlife Research Unit.

The Company-approved expansions of the pulp and paper plants in Maine is good news to foresters, as it means greatly increased markets for wood which in turn means more intensive forest land management and more opportunities for foresters.

Good forestry training programs like others are dependent upon having good students. The School's fall enrollment was as follows: 8 graduate students (5 forestry, 3 wildlife) 56 seniors, 41 juniors, 45 sophomores, 68 freshmen and 8 special students. About 60 percent of students come from states other than Maine and give the School a good cross section of students from the northeastern United States.

*G. A. Mitting*

## *Acknowledgements*

Our sincere thanks to those timberland owners and private industries whose generous contributions have helped to make this edition of The Maine Forester a success.

Dead River Company

Diamond National Corporation

Maine Dowel Corporation

Moosehead Manufacturing Company

Pejepscot Paper Division

Prentiss & Carlisle

R. Leon Williams Lumber Co.

Scott Paper Company

Standard Packaging Corporation

We wish to thank the **Oxford Paper Company** who generously contributed the paper for this magazine and the **Great Northern Paper Company** who contributed photos.



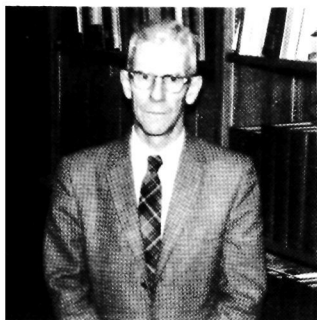


### GOOD FORESTRY PAYS OFF

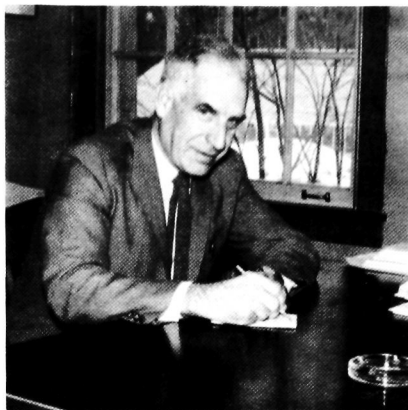
On Great Northern Paper Company lands, seed trees—not one or two per acre, but an average of 45 merchantable trees per acre are left to assure seeding for future crops. It pays to manage timberlands. The area in the above photo was cut by GNP Co. several years ago, and now supports another crop of pulpwood.

**GREAT NORTHERN PAPER COMPANY**  
6 STATE STREET                      BANGOR, MAINE

# FACULTY



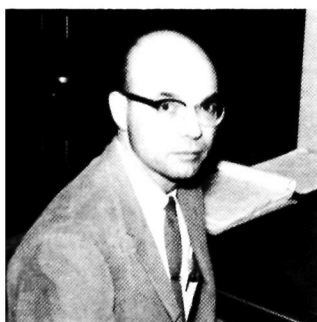
Gregory Baker  
Professor of Wood Technology  
B.S., Maine, 1924  
M.F., Yale, 1939



Director A. D. Nutting  
School of Forestry  
B.S., Maine, 1927



Dr. Harold E. Young  
Professor of Forest Mensuration  
B.S., Maine, 1937  
M.F., Duke, 1946  
Ph.D., Duke, 1948



Ralph H. Griffin  
Assoc. Prof. of Silviculture  
B.S., Virginia Polytech. Inst.,  
1943  
M.F., Yale, 1947  
D.F., Duke, 1956



Arthur G. Randall  
Assoc. Prof. of Forest Mgt.  
B.S., Yale, 1933  
M.F., Yale, 1934



Roger Taylor  
Superintendent of Univ. Forest



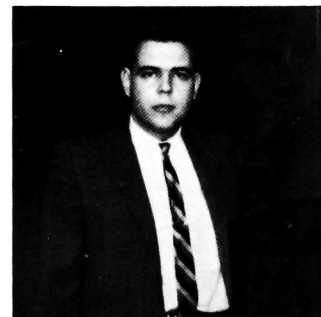
Frank K. Beyer  
Assoc. Prof. of Forest Products  
B.S., Cornell Univ., 1929  
M.S., Univ. of Wisconsin, 1930



Thomas J. Corcoran  
Asst. Prof. of Forest Economics  
B.S., Mich. Col. of Mining  
and Tech., 1955  
M.S., Purdue, 1960  
Ph.D., Purdue, 1962



Henry A. Plummer  
Assoc. Prof. of Forestry  
B.S., Maine, 1930  
M.F., Yale, 1950



Samuel M. Brock  
Assit. Prof. of Forest Economics  
B.S., Univ. of Michigan, 1956  
M.F., Univ. of Michigan, 1956



Howard L. Mendall  
Professor—W. L. Mgt.  
Leader Coop. W. L. Research  
Unit  
B.A., Maine, 1931  
M.A., Maine, 1934



Sanford D. Schemnitz  
Assistant Professor of  
Wildlife Mgt.  
B.S., Univ. Michigan, 1952  
M.S., Univ. Florida, 1953  
Ph.D., Oklahoma State,  
1958



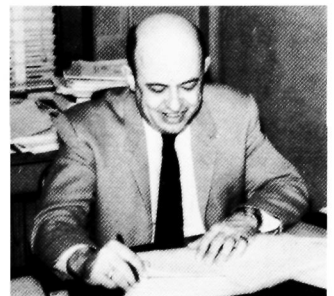
Chester Banasiak  
Assistant Professor  
Dept. of Inland Game  
B.S., Michigan State U., 1948  
M.S., U. of Mass., 1951



Richard J. Campana  
Professor—Forest Pathology  
B.S., U. of Idaho, 1943  
M.F., Yale Univ., 1947  
Ph.D., Yale Univ., 1952



Fay Hyland  
Professor—Dendrology  
B.S., Michigan State U., 1925  
M.S., Maine, 1929



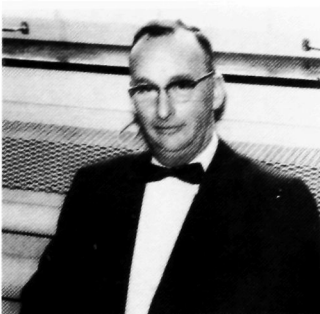
Roland A. Struetemeyer  
Professor—Forest Soils  
B.S., U. of Missouri, 1939  
M.A., U. of Missouri, 1941  
Ph.D., Ohio State U., 1951



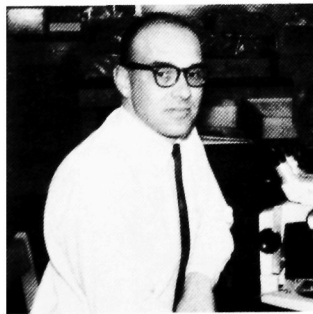
Mrs. Cleale, Miss Gifford,  
Mrs. Wohnsiedler



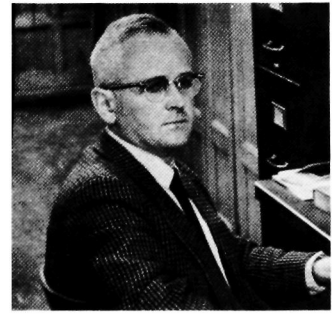
Charles E. Schomaker  
Assistant Professor of Forestry  
B. S. Penn. State, 1950  
M. F. Penn. State, 1954  
Michigan State Univ., 1961



George R. Cooper  
Professor—Plant Physiology  
B.A., Colo. State College of  
Education, 1942  
M.S., Iowa State U., 1948  
Ph.D., Iowa State U., 1950



John B. Diamond  
Assistant Professor of  
Entomology  
B.S., U. of Rhode Island, 1951  
M.S., U. of Rhode Island, 1953  
Ph.D., Ohio State U., 1957



Charles D. Richard  
Associate Professor—Taxonomy  
B.A., Wheaton College,  
Illinois, 1943  
M.A., U. of Michigan, 1947  
Ph.D., U. of Michigan, 1952

# GRADUATE

## GRADUATE PROGRAM OF JERRY CHOATE

### *Breeding Ecology of the Common Eider in Penobscot Bay*

Loss of habitat is a major factor in the present decline of many waterfowl populations. The preservation of duck hunting depends to a large extent on a knowledge of the birds' habitat needs, and preservation of areas which meet these needs. One of Maine's ducks on which we have inadequate knowledge is the Common Eider. Therefore, productivity and related factors in the breeding biology of the Eider will be studied on certain islands in Penobscot Bay. The objectives are to measure nesting densities and annual production; and to determine the factors governing production.

The principal method of study will be by direct observation with the use of blinds and spotting scopes. Thus, the birds will be disturbed as little as possible to increase the reliability of the observations.

Each island will be divided into units according to nesting density. In this way it will be possible to determine topographic, vegetative and other differences which may be correlated with nesting density. This same method will be used to determine the factors controlling hatching success. Physical factors such as exposure to weather, the type of nest and amount of cover will be considered along with relationships to other animals.

Nest losses can have a large effect on production. Therefore, an attempt will be made to determine if nest losses are compensated for by re-nesting. Certain females will be live-trapped, banded and color-marked so that individual birds may be observed. The incidence of mortality of the young will be estimated through observation of average brood sizes throughout the breeding season.

By estimating the number of nesting attempts and hatching success, as well as mortality of the young, it is hoped that an accurate estimate of total production for each island can be made along with a determination of the factors affecting this production.



JERRY S. CHOATE  
B. S. Wildlife  
Cornell University

## GRADUATE PROGRAM OF JAMES COLLOM

### *"Direct Seeding Trials of Red Pine and White Spruce in Eastern Maine."*

The need for reforestation of potential timber growing acres has become more apparent in recent years with increasing land values. At the same time, growing labor costs have made direct seeding appear more attractive in comparison with traditional methods of reforestation. This project is an attempt to study some of the possibilities for direct seeding in eastern Maine.

Two types of areas needing forest cover which are common in eastern Maine, are the sandy blueberry or pine barrens and burnt-over land. One experimental seeding has been established on each of these areas. The experiments were set up to test the direct seeding potential on these areas of two species, red pine and white spruce; two seeding dates, spring 1962 and fall 1962; and two types of sites, prepared and unprepared.

In addition to determining the success achieved in these seedings, other seedings in Maine will be studied in less detail. An attempt will also be made to study other factors important in direct seeding such as the effects of various seed coating materials on germination.

The study areas are located in Washington and Hancock Counties on lands belonging to St. Regis Paper Co. and Standard Packaging Corp. respectively. Other cooperating organizations are the St. Croix division of Georgia Pacific Corp. and the Maine Forest Service.



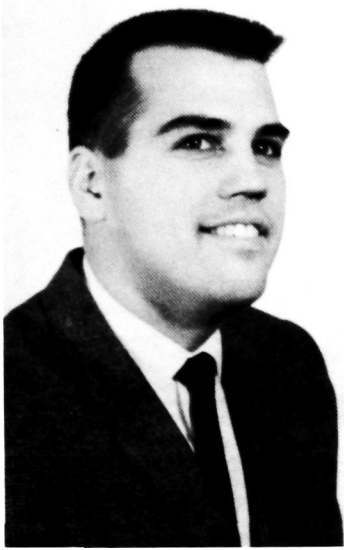
JAMES L. COLLOM, JR.  
B. S. Forestry  
University of Maine



# STUDENTS

## GRADUATE PROGRAM OF JAY GORE

### *Salt Marsh Ecology*



JAY GORE  
B. S. Wildlife Mgt.  
South Dakota State College

During the past 250 years, Maine and other states along the Atlantic coast have lost many acres of salt marshes through drainage; for the furtherance of mosquito control, the production of salt marsh hay, and for farming of industrial lands. Consequently, marsh wildlife has decreased markedly. Waterfowl in particular have been influenced by this wholesale destruction of these marshes. In Maine our salt marshes are used extensively by migrating birds. Primary use of our marshes will not occur unless a good supply of high quality foods are maintained on them.

A study of salt marsh ecology is being conducted by the Maine Cooperative Wildlife Research Unit. The principal study area is the Weskeag River marsh near Rockland. This marsh was drained by small ditches many years ago to facilitate the harvesting of salt marsh hay. A series of these ditches will be plugged with wooden dikes to retain various levels of brackish water, while other ditches will be left in their natural condition as controls. Plugging ditches at various levels will result in differences in water temperatures, salinity and nutrient exchange.

The study will test the influence of various levels of brackish water upon the population of Widgeon grass (*Ruppia maritima*), Baltic clams (*Macoma balthica*), various species of small snails and amphipods of the genus *Gammarus*; all of which constitute important duck foods.

We want to determine what influences, if any, will be exerted on these specific organisms when the ditches are plugged and water is held at different levels or when they are open and permit natural tidal drainage.

A carefully designed sampling plan will be used to permit statistical testing of the significance of population changes that may occur. With this knowledge we will know if these impoundments have any influence on the abundance of *Ruppia* and the selected macroinvertebrates.

This is a pilot study that may point the way to practical management techniques to increase waterfowl food production in this and similar areas.

## GRADUATE PROGRAM OF FRANCIS GRAMLICH

### *A study of the causes for the Declining Deer Harvests in Eastern Maine*

There has been a noticeable decline in the deer harvest in northern Hancock and Washington counties. A block of 20 wildland towns, covering an area of over 700 square miles, has been producing harvest densities about one-third that of surrounding towns. Most of the towns involved reached their harvest peaks about 1940, and the kill has declined in comparison with adjacent towns since that time.

Investigation will involve compilation of descriptive information for the area. General information will include recent historic (since 1920) accounts of land use as: cutting practices and forest products harvested; fire occurrence; descriptions of forest cover types; relative accessibility of the area, including amount and type of road building, number and type of camp leases; hunting pressure and hunter success, deer population trends; geological and soil factors.

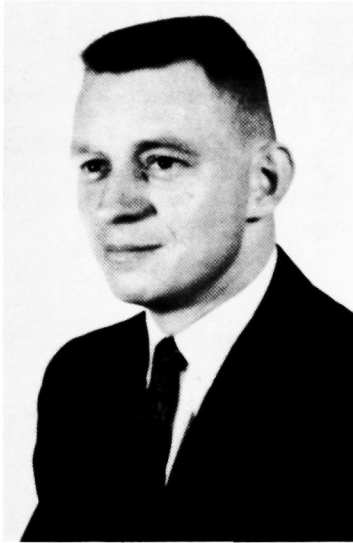
Ten timber companies own most of the land. Much information has been obtained from the files of several companies, and similar cooperation is anticipated from the others.

Aerial and ground surveys will be made to locate deer wintering areas and to obtain an estimate of deer population density. From an analysis of the general information, representative towns within the low kill area will be selected for more intensive studies and comparison with other areas.

The objective of the investigation is to identify the factors contributing to the low deer harvest, and if possible, to formulate management recommendations for improvement.



FRANCIS F. GRAMLICH  
B. S. Wildlife  
University of Maine



LEIGH E. HOAR, JR.  
B. S. Forestry  
University of Maine

## GRADUATE PROGRAM OF LEIGH E. HOAR, JR.

### *A New Approach to Forest Site Classification*

Foresters today have several site classification systems at their disposal. These range from the conventional site index, taken as height at a specific age, to the "Total Site" approach developed by Hill. Two problems common to the present forest site classification systems are as follows:

- (1) Clarification of the system so that most trained foresters will classify a specified site in a comparable manner.
- (2) Lack of ability to measure site productivity of shade tolerant species in the northeast.

The purpose of this study is to develop a forest site classification which solves both problems. It is hoped this can be done by finding a significant correlation between forest site productivity and merchantable volume increase during the years of free growth.

The normal site index curve for shade tolerant species fails to do this because the specific site index age can be attained while the stand is under suppression.

Replacement of the present Soil Conservation System of detailed soil classification schemes with the simple terminology of peat, swamp, fines, till, ledge, and granular soils will further increase the adaptability of the proposed site productivity system.

## GRADUATE PROGRAM OF JOHN LANE

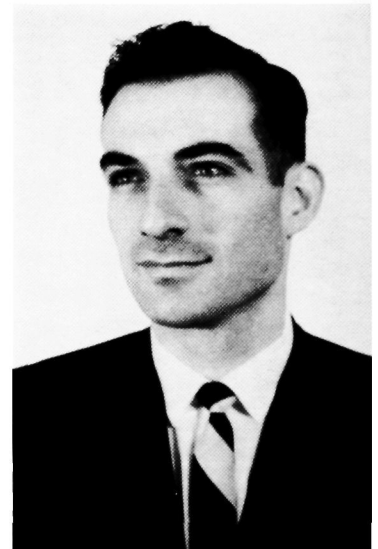
### *The Effect of Selected Herbicides on Young Balsam Fir with Particular Emphasis on their Possible use to Control Stand Density*

Balsam fir has become as important as spruce as a source of pulpwood. The increasing abundance of balsam fir in the spruce-fir forests of Maine has created a need for more intensified management practices if maximum yields of this species are to be realized.

Stands that have developed naturally from extremely dense reproduction are generally decadent, liable to windthrow, and susceptible to the spruce budworm. In such stands growth of individual trees is considerably reduced. Since balsam fir is inherently a short-lived species, any condition that results in a retardation in the growth of individual trees is undesirable.

Since natural regeneration of balsam fir is generally excessive, some type of reduction in density is necessary at an early age if optimum growth of the individual trees is to be realized. It is particularly important that the growth rate of balsam fir be increased to a level where trees of merchantable size can be grown before butt rot and secondary losses become paramount.

Conventional methods of thinning are probably too costly to be applicable except in special situations and then only to relatively small areas. If sizeable acreages are to be thinned economically, more efficient methods need to be developed. Thus, the present study was undertaken with the following objectives: (1) to ascertain the respective effects of selected herbicides when applied at various concentrations and at different times of the year to young balsam fir growing in natural habitats and (2) to investigate the feasibility of using herbicides to reduce the density of balsam fir either through killing or retarding the growth of an appreciable number of trees.



JOHN M. LANE  
B. S. Forestry  
University of Maine



FRANK RICKER  
A. B. Biology  
Bates College

#### GRADUATE PROGRAM OF FRANK RICKER

Frank came to the University in the fall of 1962. He is conducting a waterfowl study on the Penobscot River as part of his thesis work.

#### GRADUATE PROGRAM OF DANIEL SCHROEDER

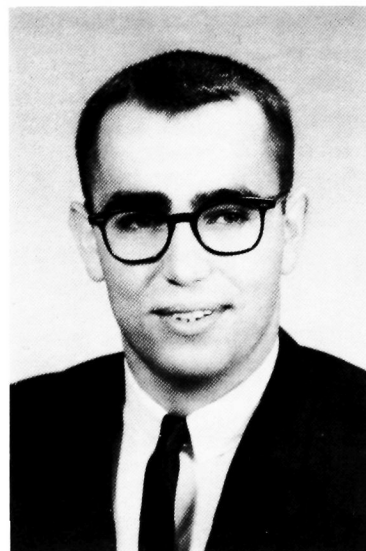
##### *Distribution Patterns of Pulpwood Harvested in East-Central Maine*

The importance of the leading industry in the state, pulp and paper, is increasing and further expansion by mills was announced in 1963. Maine has an abundant supply of raw material in its 17 million acres of forest land and the growth is twice the amount of wood harvested.

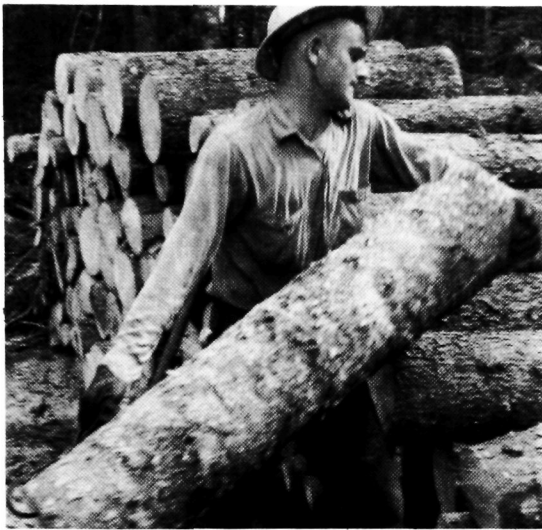
The lack of a practical transportation system to move the raw material to market results in wood not being harvested. Transportation costs represent 25 to 40 per cent of the delivered price of wood at the mill, a cost that varies with the distance from the forest stand to the mill.

Trucking is the most important means of pulpwood transportation to mills in eastern Maine. The types of trucking-woodworking combinations present are many, but were classified into six categories to study the importance of each by the volumes they deliver, the distances hauled, the species hauled, and the size of the load. What combinations are operating in towns and counties and during what seasons of the year, along with information about the ownership of the land from which wood is harvested, was investigated in eastern Maine during 1963 by sampling 10 per cent of the day's wood received at the five mills in the area.

At the time of this writing the analysis of data is incomplete. Company trucks haul the longest distances (47+ miles) and carry loads of over seven cords while farmer-type individuals, who cut and haul only a little wood each year, have an average haul of 25 miles and a load of just over four cords.



DANIEL I. SCHROEDER  
B. S. Forestry  
Michigan Tech.



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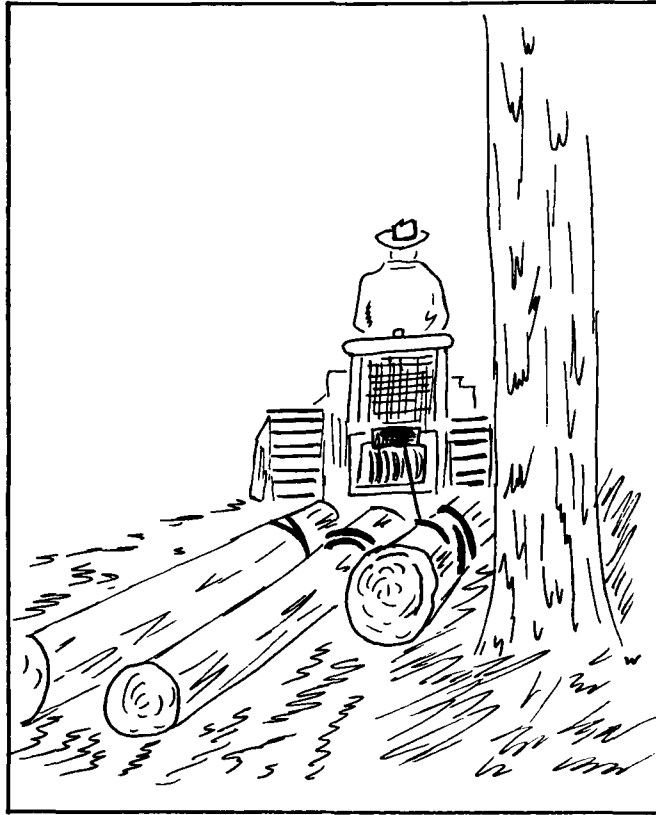
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# SENIORS



1964

# SENIOR CLASS — 1964

by ERNEST HARVEY

The seniors returned to school this fall as well seasoned field foresters still suffering from the black fly, mosquito, and moose fly bites received at summer camp. After eight weeks at the Princeton Campus where we learned many of the practical jobs of forestry, we sallied forth to work or play for the next six weeks before school started. Some went home to work, others worked in the University Forest, others went to the north country on a tree marking job, and some made a cross country trip. Nice work if you can get it! Speaking of work, there seems to be a few more jobs available this year than in the past.

Since we seniors are supposed to be very professional, this fall some of us attended the National S.A.F. meeting in Boston. Those attending found it an informative as well as a very enjoyable affair. Besides meeting many alumni of this school we had a chance to meet and talk with many of the leaders of the forestry profession which was a very stimulating experience.

This past semester saw a first in the School of Forestry. Bruce G. Wiersma an outstanding wildlife student, was designated as the Robert I. Ashman Student. Bruce is

the first wildlife student to receive this award. The St. Regis Scholarship for the northeast was awarded to Robert August last year, and he continued to reap the financial benefits again this year.

Now with less than a semester left we seniors are starting to worry about what comes after graduation. For some the choice is simple and for others not so simple. The job opportunities seem to be fairly plentiful, and the forestry picture in the state seems to be brighter with the prospect of elaborate expansion plans at many of our pulp mills. Of course Uncle Sam is waiting with open arms, especially for the ROTC boys. Some of us have decided we would like to beat our heads against the wall for another two years as graduate students.

These last four years have been an experience that most of us will remember the rest of our lives. For some it has been a struggle to stay afloat while others had an easier time keeping their heads above water. No matter what the case, we are all better off for having been through it. It has certainly better prepared us to meet the real problems we will face when we leave this institution.



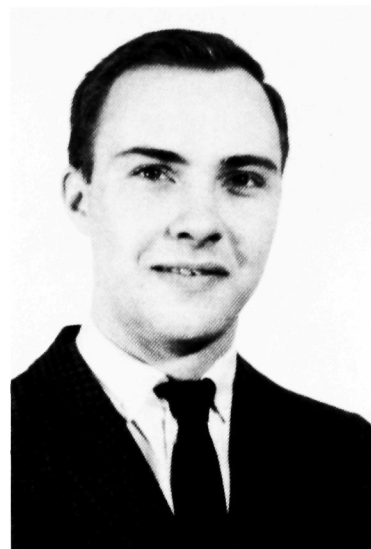
"Does this tickle?"



"Polyporus Betulinus?"



PETER B. ALLEN  
Old Greenwich, Connecticut  
Wildlife  
Chorus  
University Singers  
MCA Choir, Director  
Mu Alpha Epsilon  
Xi Sigma Pi  
Phi Kappa Phi



KENNETH L. BEAL  
Southwest Harbor, Maine  
Wildlife  
Lambda Chi Alpha  
American Fisheries Society  
American Wildlife Society  
Rod and Gun Club, Pres.  
Varsity Rifle Team, Captain  
Forestry Club



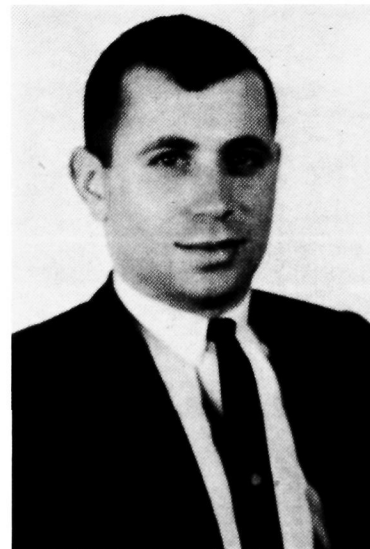
ROBERT M. AUGUST  
Alpha Gamma Rho, Treas.  
Forestry  
Phi Kappa Phi  
Forestry Club  
Hot shots  
Xi Sigma Pi, Sec. and Treas.



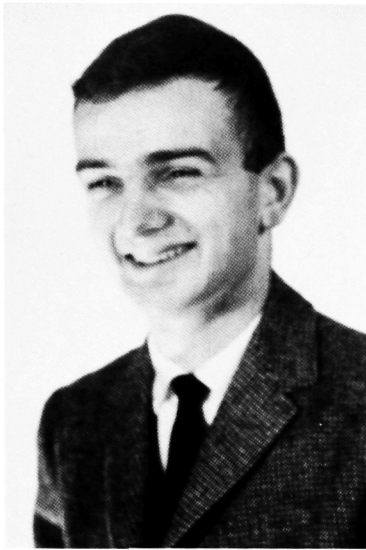
PETER M. BOURQUE  
Bath, Maine  
Wildlife  
Forestry Club  
Rod and Gun Club, Vice-Pres.  
Intramural Athletic Assn.  
Newman Club



ROBERT W. BARR, JR.  
Holden, Mass.  
Forestry  
Forestry Club



PAUL D. BROOKS  
Canton, Mass.  
Forestry  
Alpha Tau Omega, Social  
Chairman



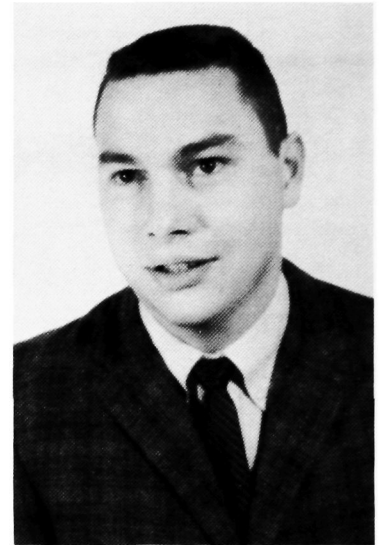
ROBERT G. BRUCE  
Bar Harbor, Maine  
Forestry  
Forestry Club  
MUAB



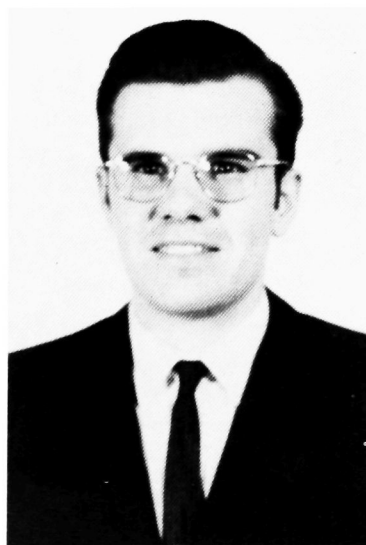
NORMAN J. DINEEN  
Calais, Maine  
Forestry  
Debate Club  
Forestry Club  
Maine Forester, Editor  
Society of American Foresters



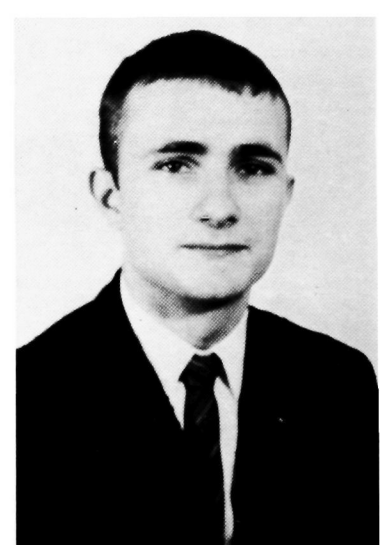
DOUGLAS R. CAREY  
Burlington, Vermont  
Forestry  
Forestry Club



NORMAN H. DODGE  
North Edgecomb, Maine  
Wildlife  
Forestry Club  
Maine Outing Club  
Rod and Gun Club  
ROTC Judo Team



JAMES A. DAVENPORT  
Wyckoff, New Jersey  
Forestry  
Forestry Club  
Hot Shots  
Woodsmen's Team



ARTHUR F. ELLISON  
Meadowbrook, Penn.  
Forestry  
Theta Chi, Sec.  
Maine Masque  
Forestry Club  
Gymnastics Club



CARL FORREST  
Wilmington, Vermont  
Forestry  
Forestry Club  
Xi Sigma Pi



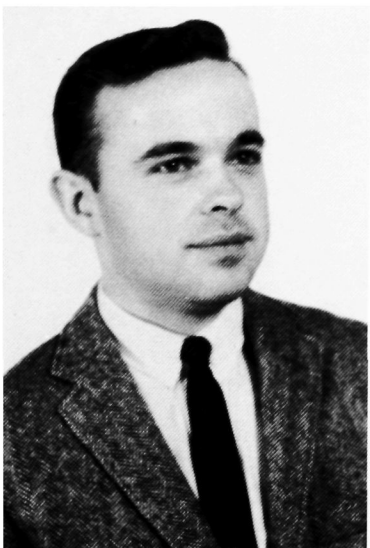
ERNEST B. HARVEY  
Greenville, Maine  
Forestry  
Alpha Gamma Rho  
Xi Sigma Pi  
Forestry Club



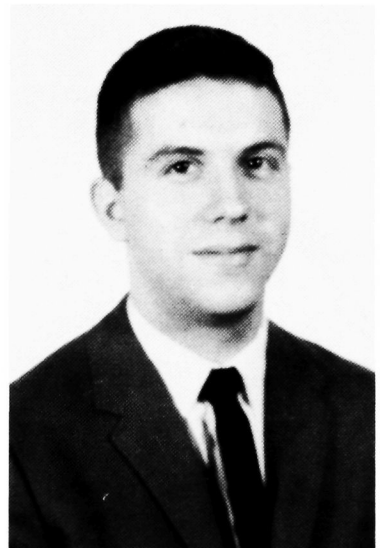
NEIL W. HANSON  
Greenville, Maine  
Forestry  
Xi Sigma Pi, Vice Pres.



JONATHAN C. HESCOCK  
Mamaroneck, New York  
Forestry  
Forestry Club  
Maine Forester, Artist  
Society of American Foresters

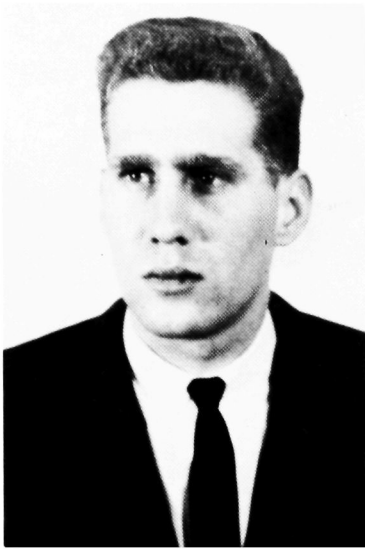


BRUCE L. HARTFORD  
Andover, Mass.  
Wildlife  
Alpha Gamma Rho  
Forestry Club  
Rod and Gun Club



RAYMOND B. HITCHCOCK, JR.  
Springfield, Vermont  
Forestry  
Alpha Gamma Rho  
Forestry Club  
General Student Senate





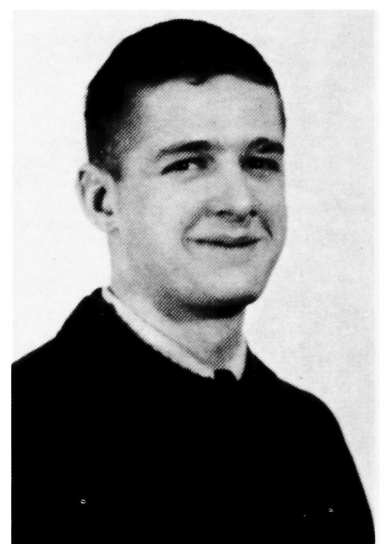
JOHN C. LABAN  
Winchester, Mass.  
Forestry  
Beta Theta Pi, Sec. and Pres.  
Student Senate  
IFC  
Maine Campus, Asst. Bus. Mgr.



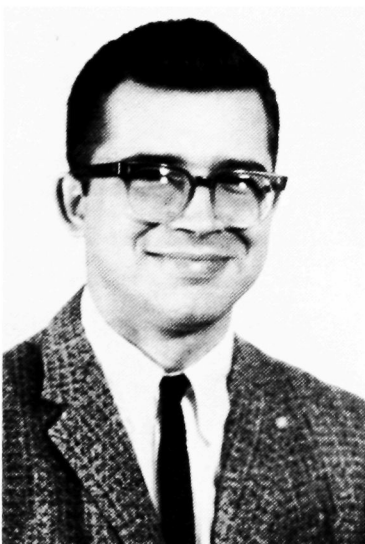
DONALD I. LIPPKE  
River Edge, New Jersey  
Forestry  
Phi Eta Kappa  
Hot Shots  
Forestry Club  
Society of American Foresters  
Maine Forester, Assoc. Editor



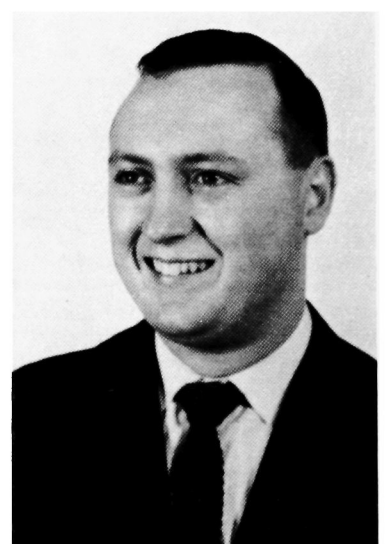
TIMOTHY LAFARGE  
Mount Carmel, Conn.  
Forestry  
Forestry Club  
Society of American Foresters  
Xi Sigma Pi, Forester



ROGER MARIN  
Falmouth, Maine  
Wildlife  
Varsity Tennis



ROBERT J. LESO  
Casco, Maine  
Forestry  
Forestry Club  
Society of American Foresters  
Circle K, Board of Directors



BRIAN H. MARTIN  
Oakland, Maine  
Forestry  
Band, Vice Pres. and Treas.  
Forestry Club



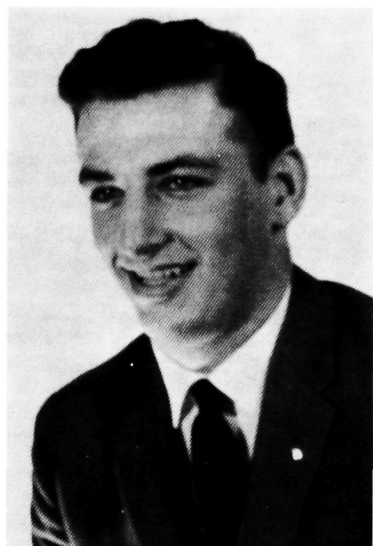
ROBERT W. MARTIN  
Brewer, Maine  
Forestry  
Sigma Phi Epsilon  
Forestry Club



THOMAS K. NEWMAN  
Wethersfield, Conn.  
Forestry  
Alpha Gamma Rho, Usher  
Xi Sigma Pi, Ranger  
Forestry Club  
Scabbard and Blade  
Pershing Rifles  
Counter-Insurgency, ROTC



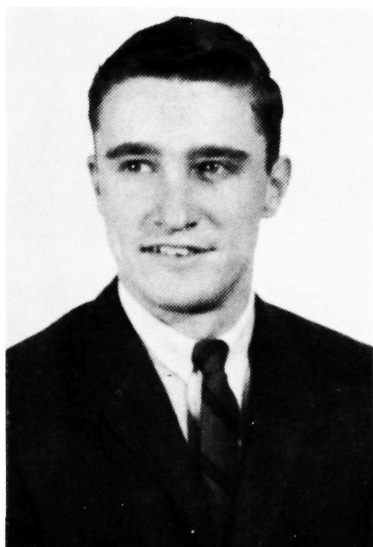
JACK MORONEY  
Oradell, New Jersey  
Wildlife  
Sigma Chi  
Hot Shots  
Counter-insurgency, ROTC



MICHAEL PARKER  
Longmeadow, Mass.  
Forestry  
Alpha Gamma Rho  
Forestry Club  
Maine Forester, Circ. Mgr.



RICHARD G. NASON  
Acton, Maine  
Forestry  
Forestry Club  
Intramural Athletic Assoc.  
M-Club  
Track Team



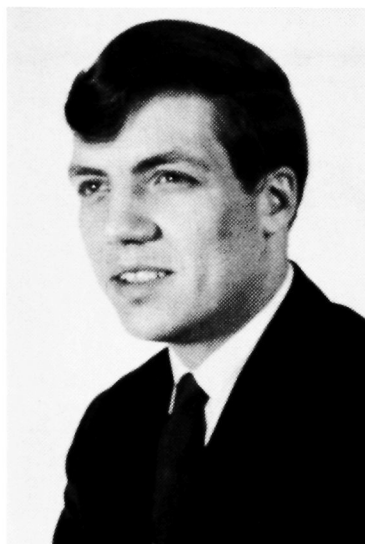
GARY L. RICHARDSON  
South Portland, Maine  
Wildlife  
Forestry Club  
Rod and Gun Club  
Xi Sigma Pi



PETER RIPPLE  
Youngstown, New York  
Forestry  
Forestry Club  
Woodsmen's Team  
Maine Outing Club  
Society Of American Foresters



RICHARD E. SPEAR, JR.  
Tariffville, Conn.  
Forestry  
Alpha Gamma Rho  
Counter-Insurgency, ROTC



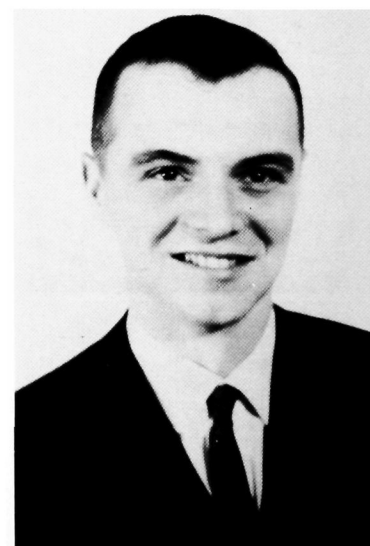
WALTER P. SEAHA  
Windsor Locks, Conn.  
Forestry  
Forestry Club, Sec.  
ROTC Judo  
Woodsmen's Weekend  
Maine Forester Staff



DAVID B. THOMPSON  
Woodstock, Vermont  
Forestry  
Forestry Club, Treas.  
Xi Sigma Pi  
Maine Forester, Editor  
Society of American Foresters



W. THOMAS SHOENER  
Chatham, New Jersey  
Wildlife  
Alpha Gamma Rho, Pledge-  
master  
Forestry Club  
Hot Shots  
Biology Club  
Rod and Gun Club  
Maine Forester, Photographer



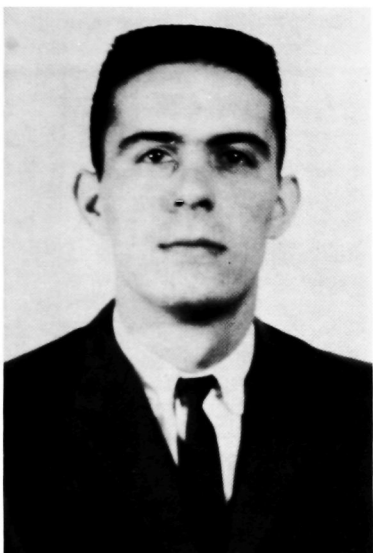
JAMES L. H. THOMSON III  
Hingham, Mass.  
Forestry  
Forestry Club, President  
Woodsmen's Weekend



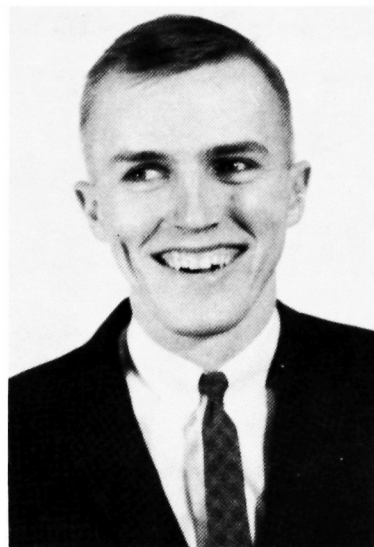
ALAN B. TITCOMB  
Newport, Maine  
Forestry  
Sigma Phi Epsilon  
Circle K Club



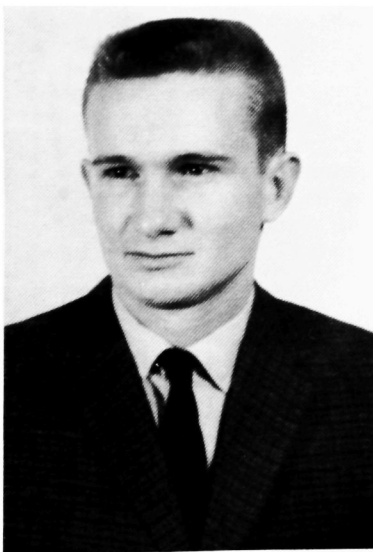
BRUCE H. WHITTEMORE  
Needham, Mass.  
Forestry  
Sigma Phi Epsilon  
Forestry Club  
Intramural Athletic Assn.



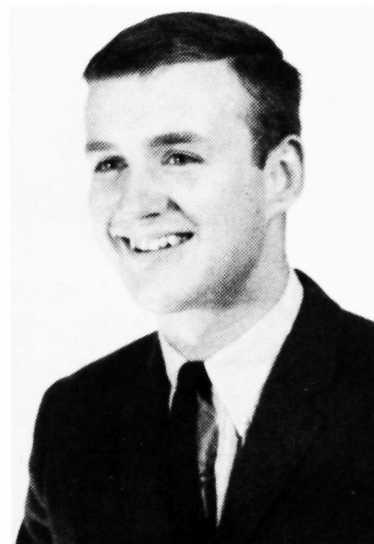
ERNEST A. TOROK  
Fairfield, Conn.  
Forestry  
Alpha Gamma Rho  
Forestry Club  
Scabbard and Blade  
Maine Forester, Bus. Mgr.



BRUCE WIERSMA  
Midland Park, New Jersey  
Wildlife  
Alpha Gamma Rho  
Phi Kappa Phi  
Xi Sigma Pi  
Woodsmen's Weekend  
Society of American Foresters  
Hot Shots



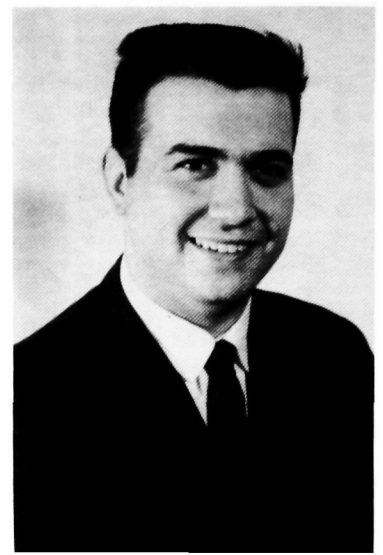
WILLIAM R. WHITMAN  
Pittsfield, Maine  
Wildlife  
Rod and Gun Club  
Wildlife Society



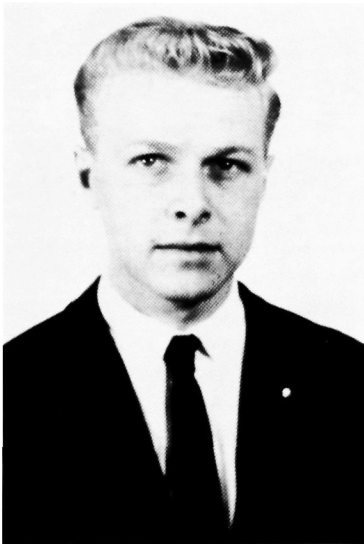
JOSEPH E. WILEY III  
North Attleboro, Mass.  
Wildlife  
Rod and Gun Club



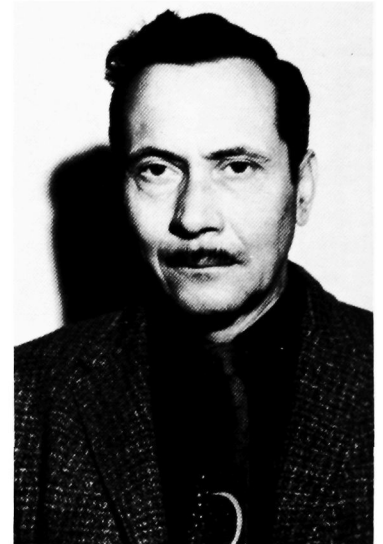
CHARLES H. WILSON  
China, Maine  
Forestry  
Forestry Club  
Maine Outing Club



ANTHONY J. YUODSNUKIS, JR.  
Rochester, New York  
Forestry  
Alpha Gamma Rho  
Forestry Club, Sec.  
Maine Campus Staff  
Maine Forester Staff  
Rod and Gun Club



DONALD A. WILSON  
Moosehead, Maine  
Forestry  
Forestry Club  
Maine Forester, Artist



KENNETH H. HENDRON  
Stillwater, Maine  
Forestry  
Forestry Club



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Compound lever pruner with rope pull for extra leverage. Side-cutting head. 6 to 16 ft. pole lengths. Many other types and models.

Pole pruning saws with blades for every requirement. One-piece and jointed poles. No. 44, illustrated, has 16-in. peg tooth blade, 7 teeth per inch.



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Duck Banding

"Moven Out"





Checking Traps



Inspecting Fishway

## WILDLIFE CAMP—1963

*by*

TOM SHOENER

On June 2, 1963 a crew of nine wildlifers with varying degrees of skepticism and anticipation left the warmth and security of Orono to head for the place we had heard so much about from upperclassmen—Indian Township. Ahead of us we had one week at Camp Robert I. Ashman studying wildlife ecology in the field and bringing into focus some of the wildlife management principles which we had learned in the classroom.

Early arrivals at the camp found Dr. Schemnitz and wife busily unpacking an array of traps, mistnets, and other equipment we would be using during the week. Jake Moulton and Pete Bourque wasted no time in volunteering to get the swimming dock in position while others helped get things rolling by setting up mistnets and launching canoes. That evening most of us followed Gary Richardson's and Roger Marin's lead and tried out our favorite bass lures; two notable exceptions were Bruce Hartford who sought the salmon at Grand Lake Stream, and Bill Whitman who was busy with his trailer in Princeton.

Monday morning we loaded the canoes and took the first of many memorable trips in the back of our favorite green truck. This time it was to Musquash Stream to set out live traps for muskrats and to study marsh ecology. That afternoon we took to the woods to set out traps for a small rodent population study.

Tuesday, after checking the traps, we headed for compartment R2S2, Indian Township to study porcupine damage in a forest stand. Dr. Schemnitz's bird dog, Heidi, did a little investigation by herself and got a snoot full of quills.

Wednesday we were joined by state game biologist Bill Peppard who gave us a guided tour of small pond and duck marsh developments in Washington County. We also visited several alewife fishways in the area.

The following day was spent at Moosehorn National Wildlife Refuge with refuge biologist Eldon Clark where we conducted a waterfowl brood count. It was quite a warm day and several of us found temporary relief from the heat by accidentally exceeding the upper limits of our hip boots.

Friday morning found us back at Moosehorn for a look at woodcock habitat investigations and deer browse damage studies being conducted there. That afternoon we were off to St. Andrews N. B. to visit the Fisheries Research Station where we received an introduction into the fishery research being conducted by Canada. We were all impressed by the laboratory and by the beauty of the area, both natural and feminine.

Our education didn't cease upon returning to camp every afternoon as many interesting observations of flora and fauna were made in and around the camp itself. A song bird banding program was carried out in the mornings and evenings, with binoculars and notecards as essential a part of one's equipment as his insect repellent. The entire week proved to be an unequalled opportunity for us to observe wildlife and wildlife management techniques in action.

Early Saturday morning Joe Wiley and Bruce Van Duesen said their farewells and headed home. The rest of us settled back with our fishing rods to await the arrival of our forester friends who were soon to join us for eight weeks of forestry training.



"Princeton Campus"

## SUMMER CAMP-1964

by WALT SEAHA

Vacation—eight weeks in the north woods of Maine. Enjoy fishing, swimming, canoeing, volleyball, baseball, picnicking, nature hikes, horseshoes, basketball, and visits to real Indian villages.

Other supervised recreational activities include guided tours of local industry, of the Moosehorn Wildlife Refuge and of other wildlife projects in Eastern Maine; instructions in woodlore, surveying, forestry practices; visits to woods operations, pole climbing, instruction in fire suppression, and the use of a bulldozer. All this and Thursday night fireside parties, too.

Camp Robert I. Ashman is located on the south shore of Long Lake in the town of Princeton, Maine—two hours east from Bangor, thirty-five minutes North from Calais, twenty minutes from Belande's, and nine minutes and fourteen seconds from the line store. Camp R. I. A. is operated under the leadership of four experienced woodsmen and one apprentice. Your host and camp director will be Professor Arthur Randall, who, along with the assistance of Professor Henry Plummer, Dr. Thomas Corcoran and Wally Robbins, will plan your itinerary so that your stay at camp will be one of the most memorable summers of your life.

Your sojourn in camp will require that you bring all of your usual vacation equipment plus plenty of bug dope, one pair of high water boots, one raincoat, and three sheets of carbon paper. Non-essentials include shaving equipment, dress clothes, and a whistle. Above all, be sure that your car has a high road clearance.

Guest housing is provided in seven log cabins that comfortably accommodate a maximum of six persons each. The cabins are constructed so that all the guests of a

cabin get acquainted with each other quite quickly, and during the first heavy rainstorm, there will be an opportunity for all the members of the cabin to work together for a common purpose.

A register of the summer's activities at R. I. A. will include:

A guided tour of Indian Township with special emphasis given to projects involving forest management and research. Included in this trip is a picnic at Long Lake Camp Ground and a visit to the Dana Point Indian Reservation.

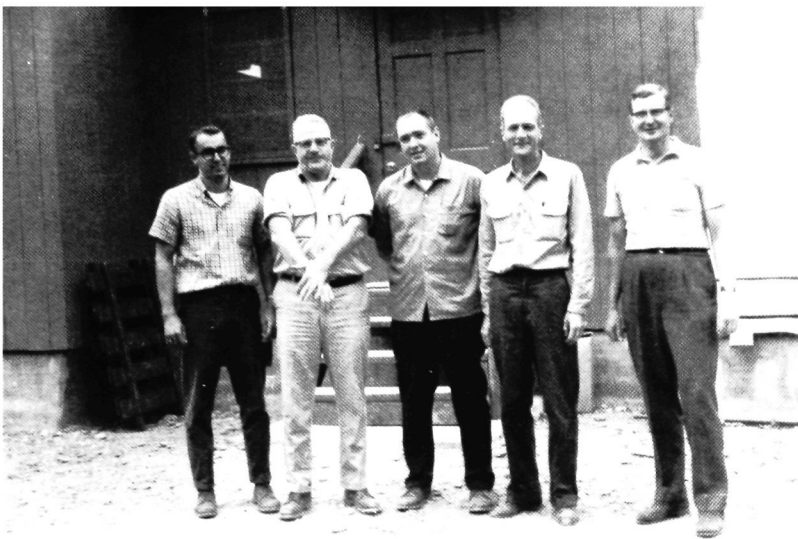
A study of the Passamaquoddy Lumber Company and a comparison of this operation with that of Guy Friel and Sons.

A visit to Ash Peasley and Blue Boy. On this day you will learn all about bobcats, pole climbing, and fire suppression. On the next day in the same area, you will hike to the St. Croix fire district lookout tower, participate in a pumper race, and practice the glorious techniques of hand fire line construction.

A St. Croix Paper Company mill trip. Here you will find the basis for the economy of the Eastern Maine area and be escorted and educated in pulp and paper manufacture.

Participation in a pulpwood cutting operation. The highlights of this excursion are felling and bucking with a chainsaw, and bulldozer operation. For the ambitious guest, there is also a pulpwood "show" for profit every night after supper and on weekends. To supplement timber cutting, the camp directors have arranged two days of guest lecturers who will instruct the patrons on the proper methods of saw filing and maintenance.

Expeditions guided by expert naturalists. The two most noteworthy are a dem-



## THE FACULTY

MR. SCHROEDER  
 PROF. PLUMMER  
 DR. CORCORAN  
 PROF. RANDALL  
 MR. ROBBINS

onstration of fisheries projects in the Indian Township vicinity and a journey to the Moosehorn Wildlife Refuge.

An opportunity to construct two maps. You will be instructed in the use of the plane table at Long Lake Camp Grounds, and you will make a topographic survey with an accompanying map of the R. I. A. area.

Exploring George's Brook Flowage. It will be yours to survey a designated area and spend \$40,000 on the recreational facilities of your choice.

Other supervised do-it-yourself activities include C.F.I. establishment and remeasurement, recreational development, roadway surveying, and a number of cruising exercises using various cruising techniques. The most noteworthy of these is a four day cruise of an assigned block with a subsequent preparation of a forest management plan for Indian Township.

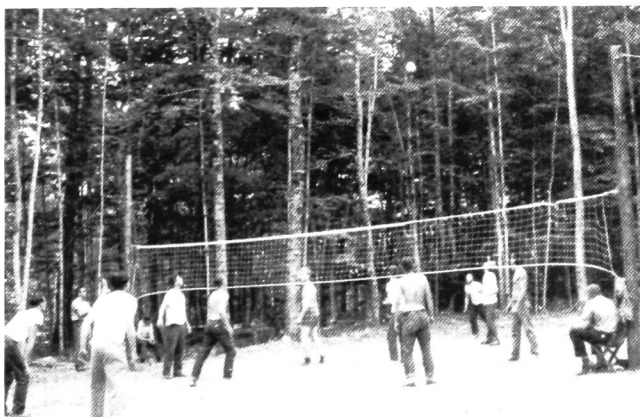
It is standard practice for the guests to

volunteer their Thursday nights for the betterment of camp. This custom has led to improvements in the waterfront facilities, mess hall, recreation area, and has also made inroads on the project of expanding camp facilities in future years. Volunteers are rewarded by a bonfire and hot dog roast, and occasionally there is some impromptu entertainment.

The final day of camp will undoubtedly be the most illustrious. Inter-cabin competition with prizes awarded for various athletic and woodsman's contests makes up most of the day which is completed with a lobster banquet.

Chain!!

Accommodations at Camp Ashman are by reservation only. Due to its immense popularity, the camp is already booked solid for the next three summers. If you are not already on our reservation list and wish to be, inquire to the Director of Admissions, University of Maine.



Recreation?

Top Crew—Field Day







Three Chiefs and one Indian



The "Professional" touch



Start of the pumper race



... and the end



Annie Oakley never misses!



Who needs a chainsaw!



How do you read this thing?



What measurement do we need?

Climbing practice?



# THE UTILIZATION CAPER

*by*

TONY YUODSNUKIS

An odd-looking bus that was to evoke many stares of disbelief left campus last June for the week-long utilization trip. Much to the delight of those of us on the trip, Hadley Burrill, our driver and "champion," began his good natured jesting that kept spirits and morale high the whole week.

This year, as in most of the years past, a sometimes humorous, oftentimes rewarding, but mainly informative trip was preplanned by Professors Plummer and Baker. The first day we headed north and after a stop at International Paper Company, we arrived at Ashland to spend the night fighting mosquitos. The next day our agenda consisted of a trip through a hardwood mill at Eagle Lake and a grouping of forces at Fort Kent. From there we headed into Thomas Pinkham's operation in the Allagash country. Mr. Pinkham, a rather large and imposing figure, was immensely proud of his operation and its equipment. We saw and photographed the experimental Swedish Yarder,

road building equipment, and a felling exhibition put on by one of Mr. Pinkham's best crews.

Later our first meal at a logging camp proved to be a pleasant surprise. The next day, after a night of showering, shaving, and sleeping between the sheets, we headed for Fraser Company Ltd.'s operations in New Brunswick. After brief stops at a truck unloading siding and a mechanical slasher site, Hadley turned north towards New Brunswick's beautiful interior country. Summit Depot was our destination. From here Fraser Company supplies its outlying camps with the necessary foodstuffs, equipment and other needs. An afternoon of touring operations in the area was capped off by an evening seminar where the spruce budworm control project was the topic of conversation. On Wednesday we left Summit Depot immensely impressed and pleased with the treatment we received.



Old



New

Our next stop was the Irving Operations. Pat Marceau, the chief forester for the area, was our guide and showed us a spruce planting project, a hot logging show, and an ultra-modern sawmill. This company, unlike most others in its field, provides the chain saws for its cutters and pays on a per hour basis on its hardwood cutting operations. We made our way across the border again despite Hadley's jokes that went unappreciated by the customs inspectors.

Indian Head Plywood Company in Presque Isle was to be our next stop. We arrived there only after tracking down the smoke signals thought to be coming from the Plywood factory but instead coming from the town dump. We followed the veneering process from the logs to the finished sheets. That evening we returned to Ashland and spent the night.

Thursday morning we made the trek southward, stopping at a sawmill in Sherman Mills and then heading to Millinocket. Here we started our tour of the Great Northern Paper Company's operations. The tour through the yard and the woodroom at the Millinocket mill was followed by a stop at Ripogenus Dam and wood sluice. At the boom house on Chesuncook we boarded one of Great Northern's boom jumpers for a tour on the John Hilton towing a boom down the lake.

From Chesuncook our trip led us down the east shore of Moosehead Lake to Green-



Luxury Cruise down Seboomook Lake

ville, northward again past Rockwood, and on to Great Northern's Pittston Farm. We spent an enjoyable night at Pittston and set out the following morning to tour the area. Great Northern is one of the very few companies left that still depends on water transportation to get the wood to the mill. Their water level control systems, boom sites, and fine public outdoor recreation facilities were pointed out to us.

Scott Paper Company's operations west of Moosehead were next on our agenda. Forester Carl VanDusen conducted the tour, explaining their hot-logging operation, scaling systems, road construction methods, camp set-ups, and public relations programs. We left the woods operations and travelled to the Forks, where the company has erected a slasher that uses a pneumatic knife system. Although the slasher was not operating at the time the black flies were, and we hastily made our retreat.

It was only a short trip from The Forks to Bingham, where we spent the last night of the trip. Saturday was a full day consisting of tours through a veneer mill, a local sawmill, and a selection forest.

Everyone who made the trip will agree that it was quite interesting. The many unplanned humorous incidents along with Hadley's continuous flow of wit kept spirits high. Let's hope that Professor Plummer gets things "all firmed up" so that this year's trip will be as successful.

