

# The MAINE FORESTER



1965

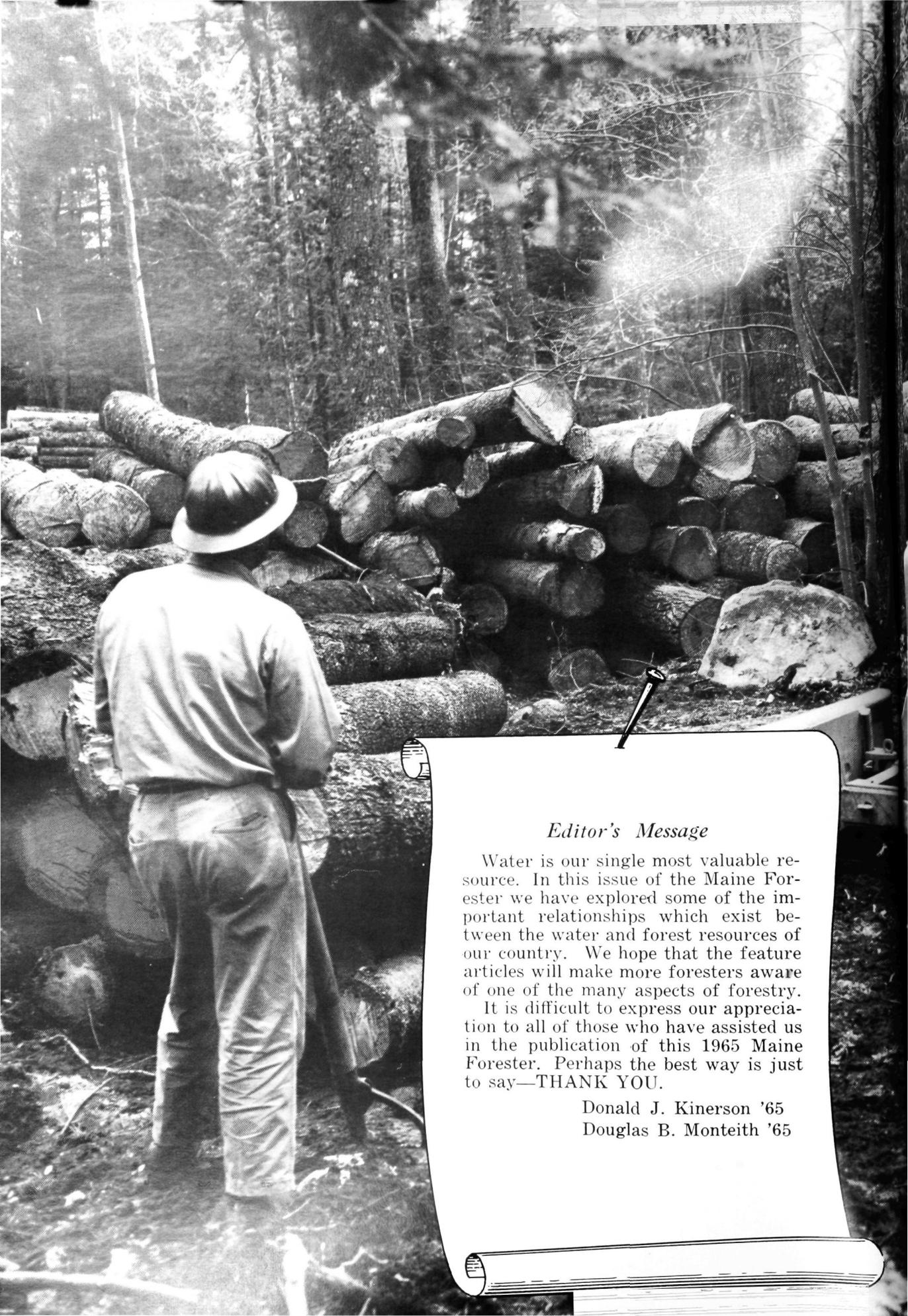


# THE 1965 MAINE FORESTER



Published by  
**The Students**  
Of  
**The School Of Forestry**

UNIVERSITY OF MAINE  
ORONO, MAINE

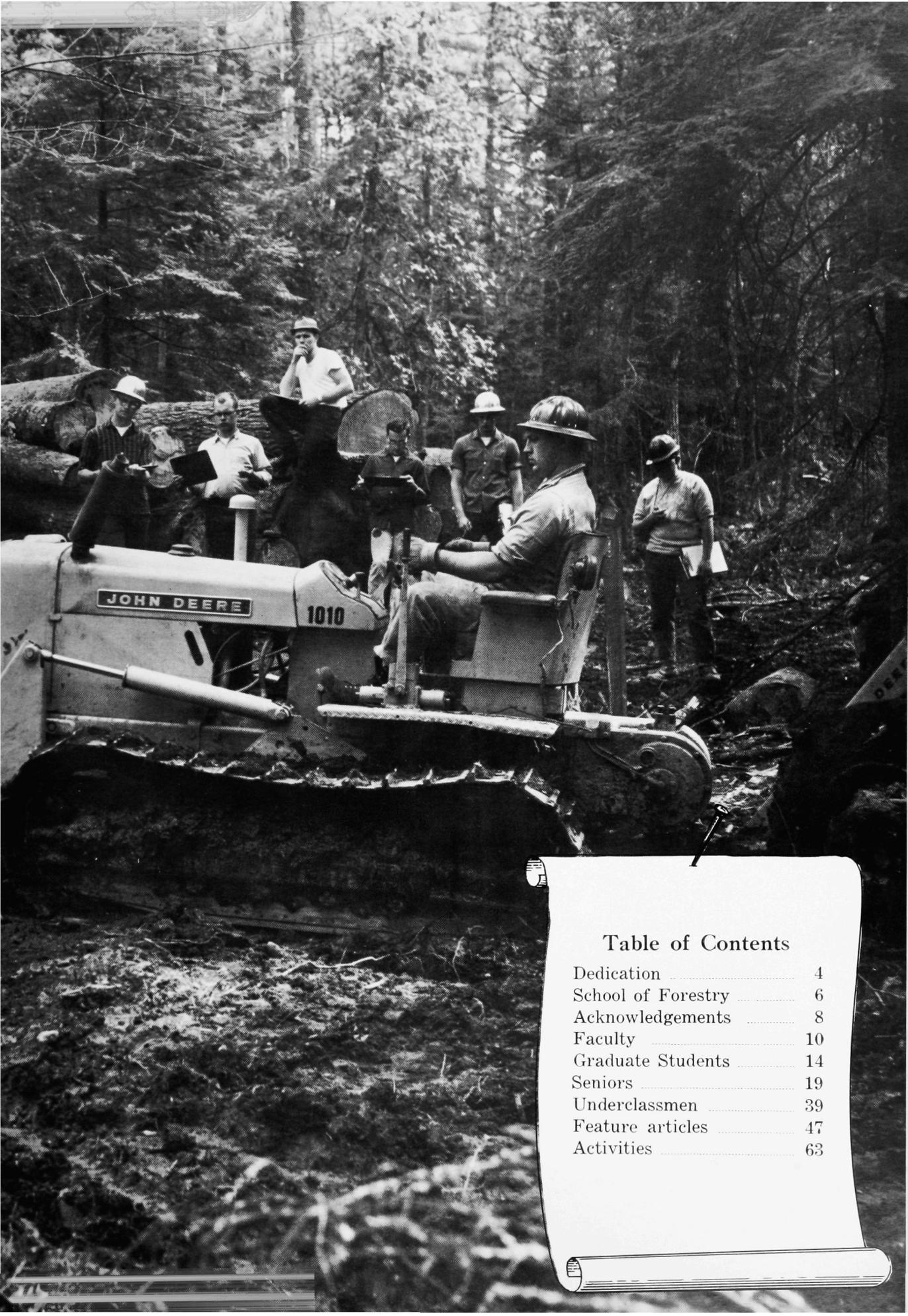


### *Editor's Message*

Water is our single most valuable resource. In this issue of the *Maine Forester* we have explored some of the important relationships which exist between the water and forest resources of our country. We hope that the feature articles will make more foresters aware of one of the many aspects of forestry.

It is difficult to express our appreciation to all of those who have assisted us in the publication of this 1965 *Maine Forester*. Perhaps the best way is just to say—THANK YOU.

Donald J. Kinerson '65  
Douglas B. Monteith '65



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## Dr. Thomas J. Corcoran

We of the forestry class of 1965 take great pride in dedicating this years *Maine Forester* to a member of the faculty who we feel personifies the highest ideals of the profession of forestry and whose enthusiasm as a teacher make him an outstanding member of the faculty of the University of Maine. His enthusiasm and dedication to his work make him an inspiration to his students. He has proven himself to be an outstanding instructor and an excellent counselor to the many students who have had the opportunity to study under him.

With deep respect and sincere admiration we proudly dedicate this issue of the *Maine Forester* to Dr. Thomas J. Corcoran.

Dr. Corcoran received his B.S. from the Michigan College of Mining and Technology in 1955. He served in the United States Army from 1956 to 1958. After completing his tour of duty he attended Purdue University where he earned the Master's degree in 1960 and the degree of Doctor of Philosophy in 1962. His doctoral thesis was entitled "Optimizing the Allocation of Timber Products from Woodlands in Multiple Product Situations."

Since Dr. Corcoran's appointment as an Assistant Professor of Forest Economics at the University of Maine in 1961 he has authored two publications. At the present time he is chief advisor to three graduate students and devotes one quarter of his time to teaching. His lectures in Production Analysis in Forestry, Planning and Control of Forestry Operations, and Forest Economics are always thoroughly prepared and clearly presented and he is never too busy to spend whatever time is necessary in aiding his students. Dr. Corcoran is also on the staff of the Forestry summer camp.

In addition to his research and teaching activities he finds time to take an active interest in the Forestry Club as advisor to the Woodsman's Team, in Xi Sigma Pi and the Society of American Foresters.

Dr. Corcoran was promoted to Associate Professor of Forest Economics this year and it is our hope that he will choose to continue combining those essential qualities of valuable research ability and outstanding teaching ability to the benefit of the forestry students of the University of Maine.





## UNIVERSITY OF MAINE — 1865-1965 School of Forestry — 1903-1965

*By* DIRECTOR A. D. NUTTING

The University of Maine is celebrating its 100th Birthday this year with Pride in the Past and Faith in the Future. The School is proud to have been an important part of the University for 62 of the past 100 years.

Students, alumni, and staff of the School expect 1965 to be a very significant year in the School's history. The long need for a new well-equipped forestry and wildlife building appears to be close to reality. In a year with much support for expanded educational opportunities over the country and in the state legislature, a new forestry and wildlife building is high on the list of priorities in the University requests for new facilities and high on the Governor's budget recommendations. Added to this

is the active support of Maine forest industry, alumni, and conservation groups. Such a building will bring together in one facility staff that are now housed in 3 campus buildings and provide much needed space for modern laboratory facilities and offices.

In April the School Alumni Association will complete its first year as a formal organization with Professor Emeritus Robert I. Ashman as President and Fred Holt '40 as Secretary-Treasurer. The Association has published a news review for alumni and given active support to the School needs and problems.

Students are the most essential and the truly important reason for the School and its activities. The staff is proud of the

academic achievements of its students during the past year. A goodly number—one of the largest groups in the School's history—made the Dean's list (3.0) as a result of their efforts last fall. The numbers by classes are: Seniors—12, Juniors—6, Sophomores—7, and Freshmen—8. Two students received all A's for the second time this past semester—Douglas Denico, a forestry junior, and Stephen Clark, a wildlife senior.

With a freshman admittance maximum, the enrollment remains about the same as for recent years. Last fall's enrollment was: Seniors—44, Juniors—47, Sophomores—46, Freshmen—67, Special Students—3, Graduate Students—9.

The School faculty is proud of the student's support and efforts in extra-curricula activities illustrated by an active Forestry Club, Woodsman's teams, and Xi Sigma Pi, the School's Honorary Society.

Our faculty is becoming more active in research. Every staff member, except Extension members, is engaged in research activity. Their projects were covered in detail in last year's *Maine Forester*.

Dr. Harold Young was welcomed back to the School this last fall semester after spending last year in Norway as a Fulbright scholar. He is very actively engaged in research on the use of the whole tree.

Dr. James E. Shottafer, Associate Professor of Wood Technology, joined our staff in October with three-quarters of his time assigned to research and one-quarter to teaching. He received his training at Syracuse and Michigan State where he obtained his Ph.D in Wood Technology. His training and experience adds strength to the staff on which we expect to build and improve our wood technology and utilization programs.

Dr. Samuel Brock left the School in July, 1964 to join the Bureau of Land Management staff in Washington, D.C.

Continuing Education and Extension are important phases of the School's pro-

gram. Lewis Bissell devotes full time to Extension and Professor Plummer, since July 1, 1964, has been assigned to half-time Extension.

Graduate students are assisting in several laboratory under-graduate programs including summer camp, silvics, silviculture and photogrammetry.

Most of the School staff members have participated in the subject matter monthly up-dating programs sponsored by the School the past 3 years, from November through April, for foresters and others. These have been well attended by School alumni and have covered many subjects from mensuration to forest recreation, and have been held in the afternoon, preceding the Eastern Maine Forest Forum meetings.

This year the wildlife members of the staff are helping conduct a 10-week Fish and Game Warden training session sponsored by the School and other University departments.

Staff members Bissell and Plummer are organizing wood safety training one-day schools. These Extension activities have benefits both to those attending them and those giving them, in helping each other keep up-to-date on the rapid changes taking place in the forestry profession.

As a result of the interest among the high school students in forestry and natural resource training, the School receives about 25 letters weekly from prospective students asking about our curricula. These letters come from all areas of the country. They indicate a variety of reasons for inquiring such as having read about the School, having been informed about it through a teacher, having found it listed by the Society of American Foresters, and having become interested as a summer visitor to Maine. These inquiries are pleasing to receive as they indicate a very active interest by youth in the country's forest resources. The School has, for most of its history, drawn one-half or more of its students from other states. We are always pleased to answer the questions of all who inquire about our programs.

# *Acknowledgements*

We wish to thank all timberland owners and private industries whose generous contributions have made this edition possible.

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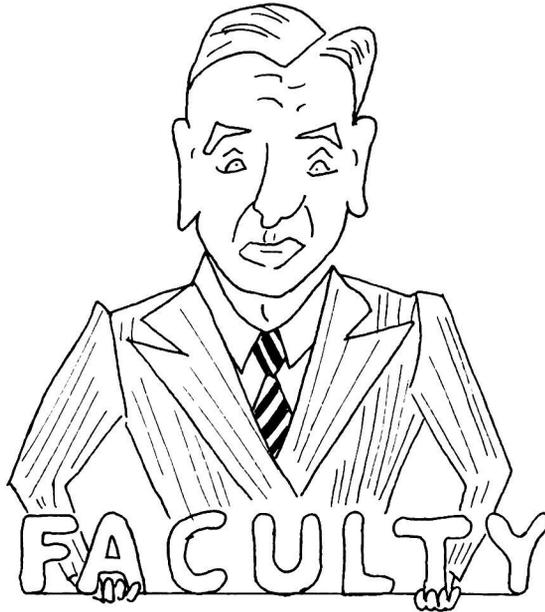
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"CLEAR CUT AND BURN"



"USING SAMPLING METHODS"

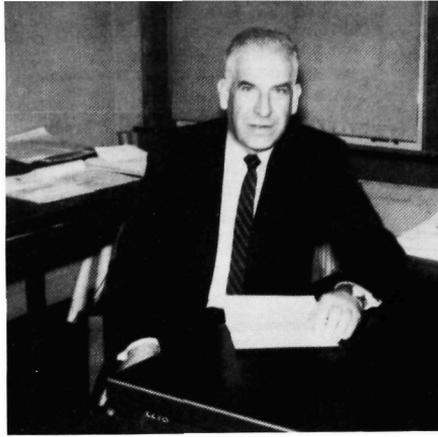


"RABBIT-DOG?"

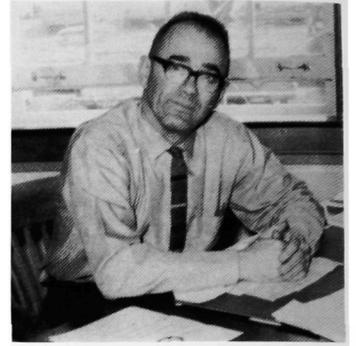


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# FACULTY



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B.S., Maine, 1927



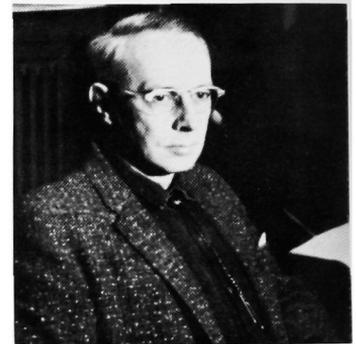
**Dr. Harold E. Young**  
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B.S., Maine, 1937  
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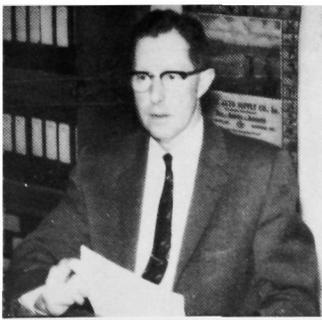
**Thomas J. Corcoran**  
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B.S., Mich. Col. of Mining  
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**Henry A. Plummer**  
Assoc. Prof. of Forestry  
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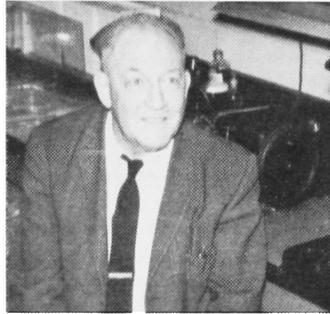
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 Ph.D., Ohio State U., 1951

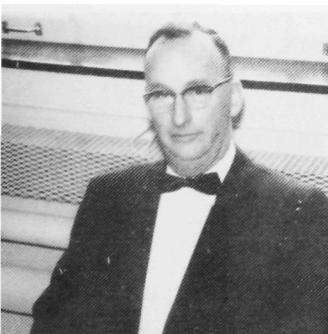


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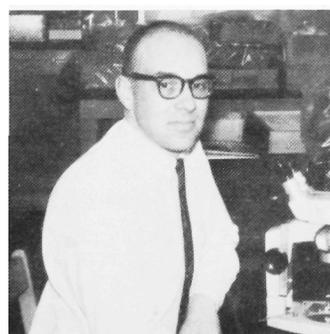


**Malcolm W. Coulter**  
 Assoc. Prof. of Game Management  
 M.S., Maine, 1948

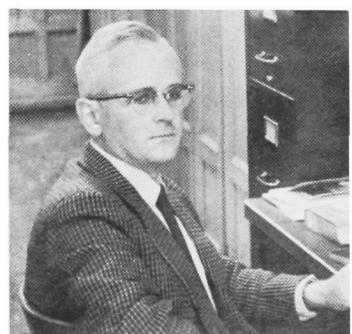
Michigan State Univ., 1961



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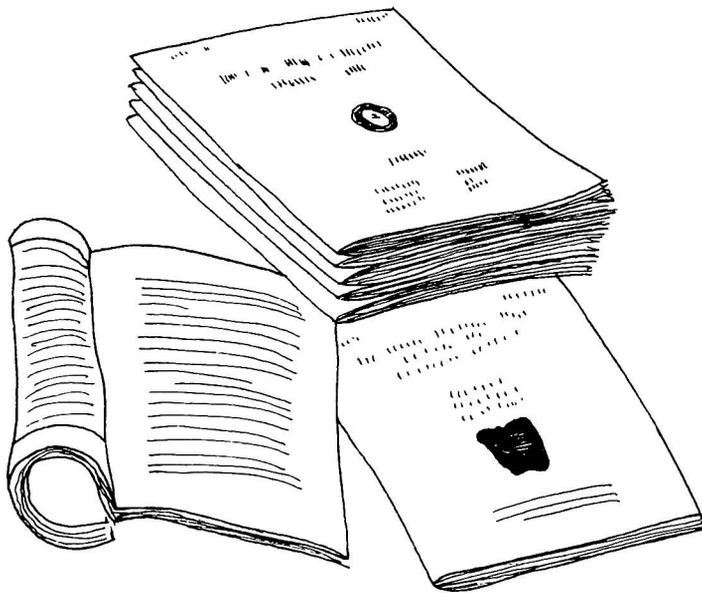
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# GRADUATE

# STUDENTS



## GRADUATE PROGRAM OF ROBERT BARR, JR.

### *Developing a Cost Accounting System for Sawmills*

Cost accounting has three major purposes which are:

- 1) Provide data for planning and controlling operations
- 2) Provide data for business decisions
- 3) Inventory valuation and income determination

By using the proper cost accounting techniques, firms can determine what their standard costs should be for the various processes. After these standard costs have been determined, any variation, either favorable or unfavorable, can be noted and examined. These variances must be detected as soon as possible, through proper accounting methods, because control can only be effected before or during an occurrence, not afterward.

It is possible that with the use of a cost accounting system several advantages may be realized.

- 1) Determination of costs for each process
- 2) Valuation of inventory by knowing the accumulated costs of any product at any stage of production
- 3) Reduction of costs through control of costs and operations
- 4) Data available for certain pricing decisions
- 5) Provide data for decisions on product mix because the contribution margin for each product will be known
- 6) Make figures readily available for tax purposes or any financial statements.



ROBERT BARR, JR.  
B.S. Forestry

## GRADUATE PROGRAM OF JOHN BAIRD

### *The Deer—Habitat Relationships on Isle au Haut, Maine*

One of the most important aspects of deer management is determining the number of deer which can be supported on an area without affecting adequate forest regeneration. Our forested areas must be utilized to their fullest extent to assure harmony among various interests.

Isle au Haut is approximately 6600 acres in size and is located five miles off the coast from Stonington, Maine. A high density of deer, overbrowsing, extensive utilization of starvation food species, and the relative isolation of this area combine to present a unique opportunity for study. The vegetation is composed of a spruce-fir forest, typical of the coastal islands of Maine.

This study will investigate the direct effect of the deer upon the existing habitat. Several censusing methods will be employed in estimating the number of deer occupying the island. A cruise census, aerial counts, and drive counts will be the primary techniques used in deriving the population level. Modification of these census techniques may aid in utilizing these methods more efficiently and more accurately here in the northeast. The vegetative analysis will consist of sample plot measurements. The overstory, understory, and herbaceous ground cover will be measured to determine the condition of the habitat. We will be able to achieve greater harmony in land utilization by a better understanding of the carrying capacity for deer.



JOHN BAIRD  
B.S. Wildlife

## GRADUATE PROGRAM OF JERRY S. CHOATE

### *Breeding Biology of The Common Eider in Penobscot Bay, Maine*

Loss of habitat is a major factor in the present decline of many waterfowl populations. The preservation of waterfowl, both for hunting and for their aesthetic value, 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 are being studied on certain islands in Penobscot Bay. Principal objectives are to measure nesting densities and annual production and to determine the factors governing production.

Field work was initiated in May, 1964. Four islands were chosen as major study areas while another served as a minor study area. These islands had nesting gulls as well as breeding eiders.

Periodic nest searches were conducted on these islands. Each nest found was given a number and marked with a wooden stake. The data for each nest were recorded in a notebook. Nests were revisited each week until they were either destroyed, abandoned, or hatched.

A limited number of observations from a blind was made. The activities of nesting birds were observed. Predatory activity of gulls on eider nests and on other gull nests was also noted.

An attempt was made to study the behavior of young eiders. However, much difficulty was encountered in this phase of the study. After hatching, the young dispersed over much of the bay and became difficult to locate.

Each of the four major islands was mapped to show vegetation types and nest locations. These maps will be used to determine nesting densities and the type of vegetation preferred by nesting eiders; also the relationships between cover types and hatching success.

Approximately 600 eider nests have been recorded for the five islands. Because of the great amount of data recorded for these nests, an electronic computer is being utilized for analysis.



JERRY S. CHOATE  
B.S. Wildlife

## GRADUATE PROGRAM OF JAMES L. COLLOM

### *Direct Seeding Red Pine and White Spruce on Several Sites in Eastern Maine*

The need for more efficient use of forest land, coupled with growing costs of tree planting, have led to increased interest in reforestation by direct seeding. Areas in eastern Maine in need of reforestation include the sandy pine barrens and burned over land. A study has been conducted on both types of areas to determine the possibility of successful direct seeding. The experiment tested spring and fall seeding of red pine and white spruce on prepared and unprepared seedbeds.

Results indicate that recent burns can be successfully reforested by direct seeding using any of the treatments tested. On the pine barren area, all of the treatments used were successful with the exception of seeding white spruce on unprepared seedbeds. The best chance for success, on the burn areas as well as the barren areas, appears to be in the fall seeding of red pine on prepared seedbeds.



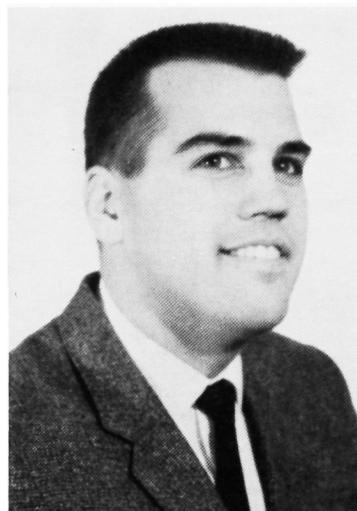
JAMES L. COLLOM, JR.  
B. S. Forestry  
University of Maine

## GRADUATE PROGRAM OF JAY GORE

### *Salt Marsh Ecology*

Many acres of salt marsh along the Atlantic coast have been lost to drainage during the past 250 years. Consequently marsh wildlife, waterfowl in particular, has decreased markedly. Therefore the current study was initiated in an effort to develop techniques to make drained salt marshes more productive. This study is an attempt to test the influence of various levels of impounded brackish water upon the production of Widgeon grass (*Ruppia maritima*), and populations of Baltic clams (*Macoma baltica*), various species of small snails, and amphipods of the genus *Gammarus*, all of which are important waterfowl foods.

In May 1964, wooden plugs were placed in several small tidal ditches to create the impoundments. After one growing season, no noteworthy responses of the organisms to the treatments have become evident. Sampling will be repeated during the coming season. Tests in the ditches have revealed the presence of widgeon grass seeds; further study of factors inhibiting germination will be made. To date, impounding ditches has not increased mosquito production.



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

## GRADUATE PROGRAM OF FRANCIS J. GRAMLICH

### *A study of the causes for the low deer harvests in eastern Maine*

A block of 20 wildland townships, covering 700 square miles of northern Hancock and Washington counties, has been yielding deer harvests about one-third that of the surrounding towns. Most of these towns reached harvest peaks about 1940, and the kill has declined noticeably since that time. The objective of the investigation is to identify the factors contributing to the low deer harvests.

With the cooperation of the timberland owners, land use information, for low kill and surrounding areas has been compared. These data include: type and amounts of timber products harvested since 1920, history of forest fires, accessibility, camp leases, and hunting and deer population trends.

The area and surrounding townships were compared for forest cover-type, soil, and geological relationships. A summer browse survey was completed. One hundred fifty plots, stratified by cover-type, were examined for availability and use of browse.

A combined ground and air hunting-pressure survey was conducted along 160 miles of road on the first Saturday of the South-eastern zone season. The survey indicated peak hunting pressure of about one hunter per two square miles.

Personal interviews were conducted with hunters during the open season. About 350 hunters were polled. They indicated their experiences, habits, and opinions on deer hunting in the area. Hunters averaged 15.4 seasons of hunting within the area. They were almost unanimous in the opinion that they do not see deer as often now as when they first hunted the area. Almost half the hunters were based at commercial camps. Preliminary analysis seems to indicate that hunting pressure is lower inside the area than in the surrounding area.

A deer yard and browse survey will be completed this winter.



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



**ERNEST B. HARVEY**  
B. S. Forestry  
University of Maine

## GRADUATE PROGRAM OF ERNEST B. HARVEY

### *The Development of Production Standards for Wheeled Skidders*

In recent years there have been many new pieces of equipment used in the production of pulpwood. Among these has been the rubber-tired (wheeled) skidder. Because of this and the fact that the machine represents a large investment to its owner, a study is being conducted to determine the production capabilities of these machines operating under large scale commercial conditions.

During this study both environmental and non-environmental factors existing around each machine will be measured. Some of the factors to be considered are volume per acre, trees per acre, basal area per acre, average stand diameter, merchantable volume per acre, cutter hours, machine hours, and two subjective ratings of operating conditions. With statistical regression techniques these factors will be related to the production of these machines, allowing predicting equations to be developed. With these equations the production that can be expected for any given machine, given a certain set of factors, can be determined before the operation begins. This allows the development of production standards which will help in the planning of new operations and in the yearly budgeting process. With the regression techniques it will also be possible to test for differences between different types of machines, between summer and winter operations and between second and old growth stands.

Besides providing a means to more efficiently plan the use of these machines, this study should also provide some insight into possible improvements that could be made in the pulpwood harvesting system.



**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.



**DAVID B. THOMPSON**  
B. S. Forestry  
University of Maine

## GRADUATE PROGRAM OF DAVID B. THOMPSON

### *Survey of Pulpwood Truck Owners in Maine*

The state of Maine, with its 17 million acres of forest land and a growth rate of about twice the annual cut, has an abundant supply of raw material for its forest industries. Pulpwood production in 1962 reached 166,810,000 cubic feet in Maine. This was sufficient to rank Maine fourth in the nation in pulpwood production.

Trucking is the most important means of pulpwood transportation throughout most of Maine. Over 90 percent of the pulpwood harvested in east central Maine is transported to the mills and purchasing points by independent truckers. Transportation costs represent from 25 to 40 percent of the delivered price of wood at the mill. At the present time very little is known about the population of independent pulpwood truckers. The objective of this study, then, is to gather data by means of a mail questionnaire about the independent pulpwood truckers.

The data collected will be analyzed for the independent pulpwood trucking industry as a whole. From this analysis various categories of truckers can be determined based on size, i.e., number of trucks, capital investment, number of employers, etc., types of products hauled, special equipment, etc. This study, then should provide a base for future studies in the area of truck transportation of pulpwood.

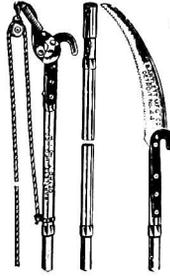


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# SENIORS



# SENIOR CLASS – 1965

by STEVE CHANDLER

Who knows where the time has gone? It seems like yesterday that we were wandering around the campus looking for Deering Hall. Since then many changes have taken place in our class. Some have changed courses, some have departed for reasons best left unmentioned, some have found the right phase of forestry, and we have even picked up a few independent Vermonters.

The forestry curricula develops the abilities that each individual possesses. It instills in us a professional attitude, good judgment, and above all common sense. It points out our individual capability to progress while at the same time it points out our limits and provides the tools with which we can reach our goals. The school work is only a small part of our education which has been started here at the University. The friends and experiences will last long after we leave. Now in this last year we can pause and think over the fun and hardships since we arrived on the Maine Campus in the fall of 1961.

Following the Silviculture Trip, Utilization Trip, and Wildlife Camp we gathered at

the Princeton Campus for 8 weeks on Indian Township. We spent the summer gaining experience in many fields from cruises to runs on the "Line Store". Summer Camp helps many of the undecided decide about their future in Forestry or Wildlife.

Upon gathering again this past fall we noticed that in our month of freedom after summer camp most of the insect bites had healed. We can now plague the Junior Class members with stories of the past summer.

As we start through our last semester all thoughts are of the future. Letters are being written for applications and interviews here and there across the country. Some are hoping for Federal, State, or some form of private industrial employment while several are sweating out acceptance from graduate schools. Others will not have to worry for at least a couple years for Uncle Sam is not to go unanswered.

The past four years have been a struggle for some of us, but for others perhaps not so hard. Here's hoping the persistence to grind ahead remains with us in our future years of work.



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Franklin, Maine  
Wildlife  
Xi Sigma Pi, Assoc. Forester



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Cumberland Center, Maine  
Forestry  
Forestry Club, President  
Xi Sigma Pi  
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Richmond, Vermont  
Forestry  
Alpha Gamma Rho  
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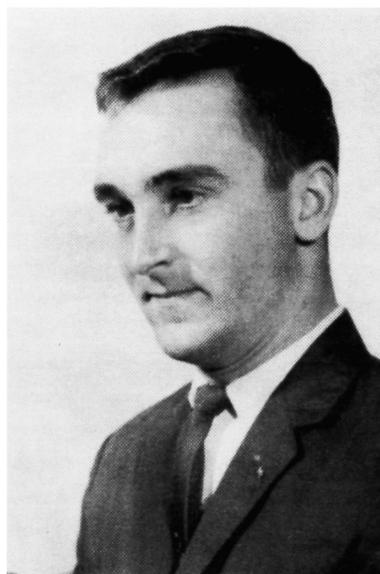
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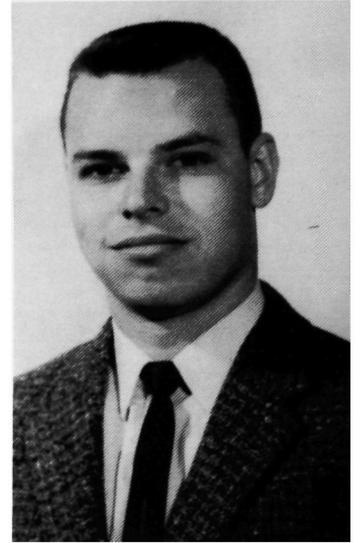
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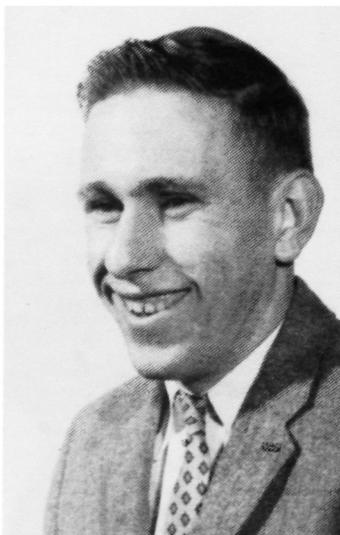
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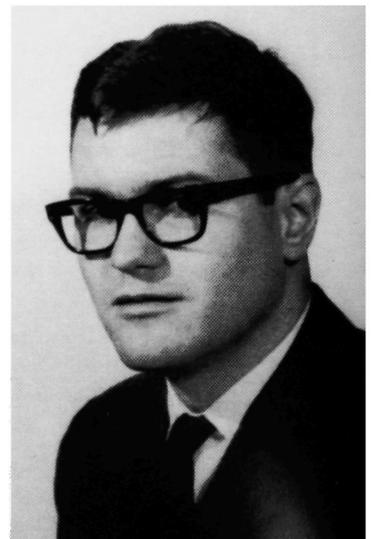
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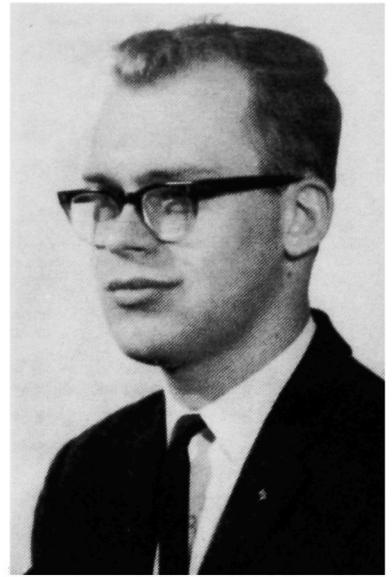
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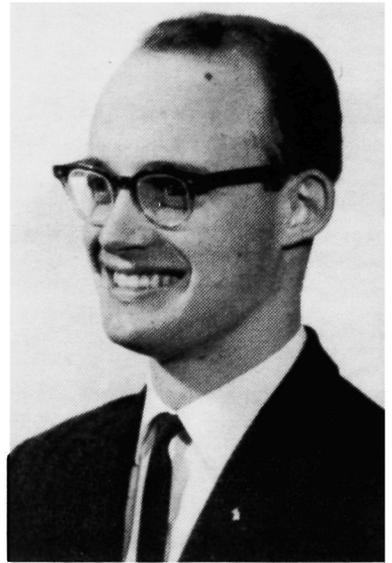
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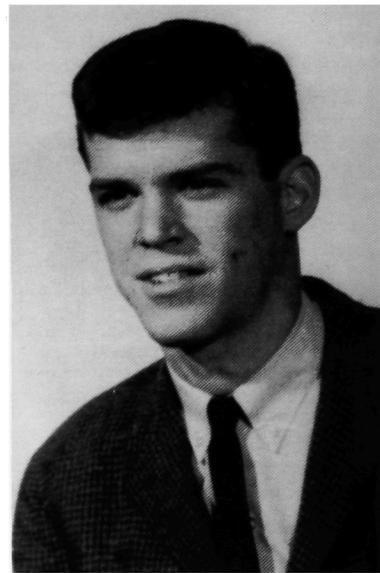
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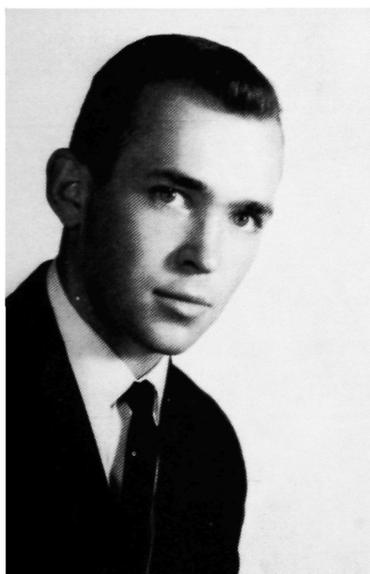
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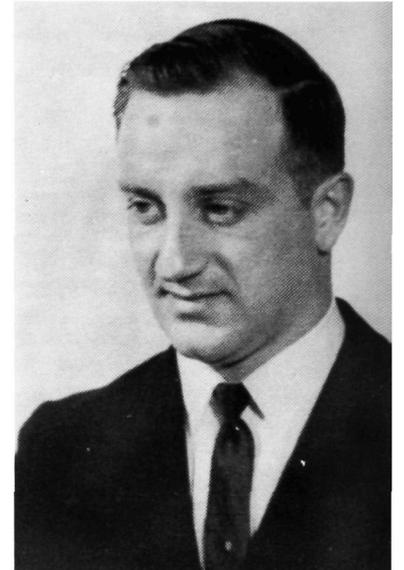
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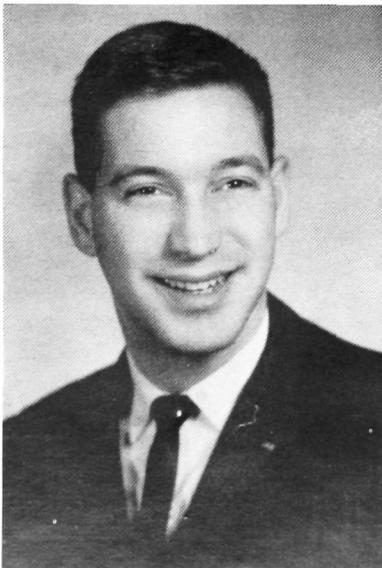
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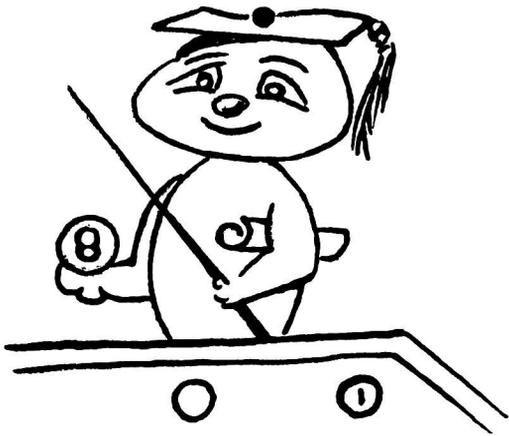


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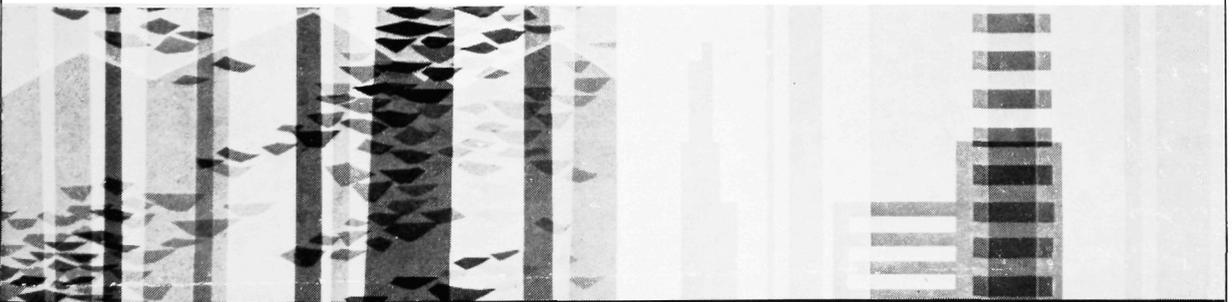
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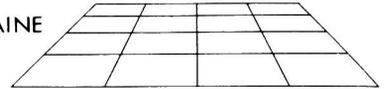
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## WILDLIFE CAMP – 1964

by JAMES CARNEGIE

May 31, 1964, was a bright sunny day at Princeton. Mosquitoes were humming around Camp Robert I. Ashman as if they knew that wildlife camp was about to begin. The crew which finally arrived consisted of Ken Beal, Errol Briggs, Steve Clark, Norm Dodge, Al Holmes, Jack Moroney, and the author. Upon arrival, we spent time in untangling mist nets with Dr. Schemnitz and in trying to keep Heidi out of the nets. After what seemed like hours of untying and cutting, the mist nets were made ready and set up at various positions around camp in order to carry out a bird-banding program.

On Monday, work and study began in earnest, and we journeyed to Musquash Stream where we set live traps for muskrat. We were determined that our class would make history with trapping success. (We weren't too successful with the muskrat, but we did trap a red squirrel). Our afternoon was spent at the site of the old summer camp where we set traps for a mouse population study in the area.

The next two mornings were spent checking the traps and ending our survey. On one of the next afternoons we journeyed to St. Andrews, New Brunswick for a tour of the Canadian Research Board Biological Station. Here we learned of the fishery research of Canada, much of which was concerned with the lobster. The next afternoon we were at Moosehorn National Wildlife Refuge participating in a waterfowl brood count. It was on this afternoon that some of us learned that the stream bottoms will not

support the weight of one man. Right, Dr. Schemnitz?

On Thursday we were joined by biologist Bill Peppard who gave us a guided tour of Washington County. We journeyed to dams and fishways and learned the principles of the different types of fishways. We also were shown some of the small waterfowl impoundments and marsh development areas.

Ed Ladd, of the branch of Predator and Rodent Control, brought his many traps to camp Friday morning. We were instructed in the art of setting traps and in the principles of predator and rodent control. In the afternoon the wildlifers received their first taste of the true voraciousness of the Princeton area mosquito. We returned to Moosehorn and beat the brush in trying to locate more broods of ducks. Although we did not find any ducks, we did locate a brood of rails and also the gathering grounds of the mosquito. That night we nursed our bites with an oral quiz posed by Dr. Schemnitz to end our week of summer camp.

All in all, wildlife week was a time for studying wildlife ecology in the field and learning the application of wildlife management principles which we had learned in the classroom. Of course, we also had the privilege of one table of camp inhabitants eating two tables full of Fay Beane's cooking. Yes, wildlife camp is a time of unparalleled food and a time to observe wildlife management techniques in action. And as June 5 ended, the wildlifers prepared for the onslaught of the foresters, who would soon join us for eight weeks of forestry camp.

# SUMMER CAMP – 1964

by NORMAN GUYAZ

On June 8, 1964 another session of the annual University of Maine forestry camp was begun at the relatively new location on the shores of Long Lake, Princeton, Maine: Camp Robert I. Ashman. Heading up the camp this year were Professors Randall, Plummer and Corcoran, with assistance being given by grad student, John Lane. Between this date and the closing of camp two months later, much was learned of field forestry practices, as the wood's-end aspects of forestry were emphasized at camp. In addition, a brief survey of the forest products industries was obtained through trips to local mills.



Work Saturdays, or else!

On the first day, a damp, misty, overcast time, the junior year forestry and wildlife students gathered outside for the first of many subsequent briefings. Camp essentials and a preview of things to come were explained. The first few days were spent reviewing the use of basic forestry equipment such as the chain tape, hand compass, D-tape, abney level, etc.

A major portion of the time spent at camp consisted of actually doing work on a project in the field or of a brief study of some phase of forestry, then writing a comprehensive report as a follow-up.

One such project consisted of visiting and surveying an area, drawing maps, estimating costs and writing a plan for development of recreation facilities in that specific area. Another project was the surveying or leveling exercise which consisted of ascertaining differences in elevation on an area of land and then drawing a topographic map describing the area. A third undertaking was that of making a plane table survey of an area, then mapping it.

Other exercises, which required a minimum of reporting, were a line-plot timber cruise, a laying out of logging roads, an exercise using Westveld's Yield tables, boundary line and road maintenance and others.

The largest accomplishment of the period was a cruise of a compartment (approximately a square mile) by two-man crews, an analysis of the compartment as to timber types and other information, with the eventual compiling of a management plan using information collected by all crews. The management plan consisted of an allowable annual cut, local volume tables, statistical analysis, cutting budget and other pertinent information, besides including reports on trips to various forestry-concerned operations. Also included in the plan was an occasional informative map.



So this is the ocean!



Noon break

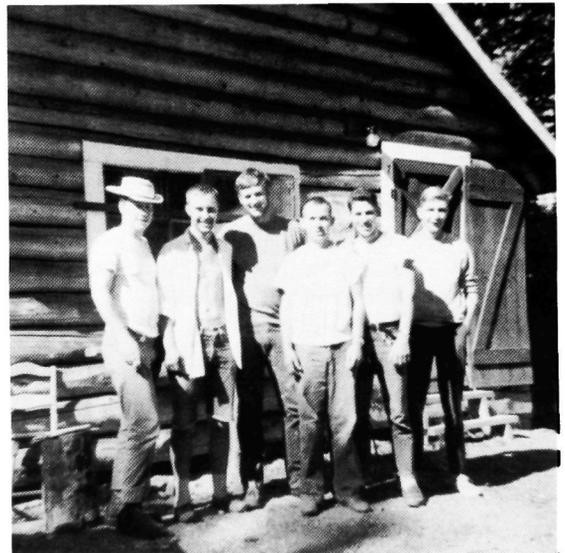
Most of the trips taken were of real interest to the students in the forest utilization phase, and reports were written analyzing and describing the operation.

One such trip was taken to St. Croix Paper Company logging operations in the Machias Lake region. Various types of skidding were compared and contrasted and the logging operation as a whole was evaluated. Another trip was to the St. Croix Pulp and Paper mill in Woodland where the whole operation was explained in detail. In addition, trips were taken to a hardwood sawmill and a local softwood mill, and also to wildlife and fisheries establishments in the area. District fire protection facilities were also visited in order to evaluate the future needs of the area insofar as equipment and personnel are concerned.

Not all of the time, mind you, was spent plowing through the underbrush and spruce bogs, flailing madly about one's head at mosquitoes, horse, black and deer (all species of flies) in order to obtain at all costs, such

vital information needed to prepare a management plan (not one forester ever succumbed to these harassments. Quite often —(but only after 4:30 on workdays) there were recreational facilities available such as the cool, clear water of Long Lake for swimming and canoeing, and the volleyball courts, horseshoe pits and the camp baseball team. The towns of Princeton, Woodland and Calais are not too far away, if one has adequate transportation.

On the last full day at this past year's annual session, the camp convention was held with games of skill (and a bit of luck) predominating. These were woodsmen's events, and regardless of the past difficulties in and out of the woods, most students developed a fine sense of camp spirit on the last day, and had a fine time participating. Officials from local and regional companies and agencies interested in the progress of forestry at the University of Maine were present on the final day and donated prizes to be presented to the contest winners. The day was concluded by a lobster banquet bringing the camp session to a close.

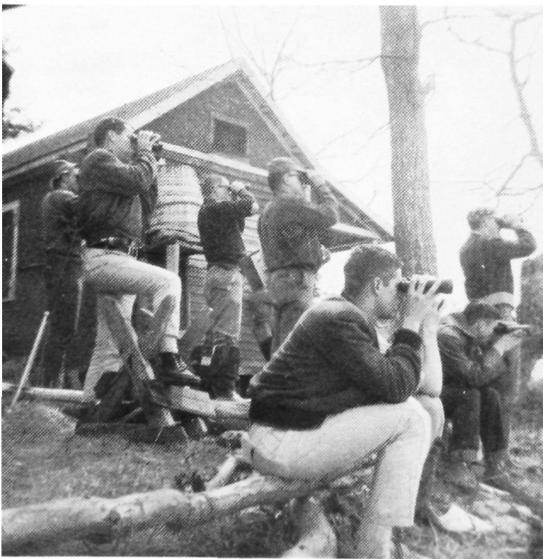


The wangytang trappers

# WHO SAID THAT?



"I thought you said it would hold."



"Where is she?"



"So, where are the deer?"



"You watch for him"



"Look at those muscles"



"It's better than cruising"



And they've even got the flush type



"And the mosquitoes stole my lunch"



"IF THE SKEETERS DON'T GET YUH, THE WATER WILL."

# THE UTILIZATION TRIP

by RUSSELL S. KINERSON, JR.

On a Monday morning early in June, Prof. Plummer assisted by Prof. Beyer, took the men in the Utilization Sequence and headed for Northern Maine and Western New Brunswick. During the six hectic but interesting days that followed we saw "everything" from logging museums to highly mechanized logging operations. To make our days even more rewarding we often ate in the lumber camps; beans for breakfast, after a good nights sleep in camp. One young forester is reported to have devoured five(?) steaks for lunch. (They were good!)

The following sequence of pictures is not intended to give complete coverage of the trip. It is hoped that they will bring out some of the important steps in harvesting the forest products and also show some new developments in this field.



This picture shows a modern logging camp of portable trailers. This is a great improvement from camps of the 1840's.

The picture on the right shows a big red spruce just starting to fall. (Note: the woods workers are now wearing safety hard hats on most jobs.)





The above two pictures illustrate contrasting methods of moving the raw product from the woods. The four-wheel drive tractor is capable of skidding two or three cords of wood tree length to the landing where it is bucked up.



Transportation to the mill is provided by water, truck, or rail. Shown above are railroad cars being loaded with pulpwood via a crane on a siding near the woods operation.



An interesting innovation in the field of forestry was seen on the Irving Company's operation in New Brunswick. Shown in action is a 50 ton "tree crusher" in the process of removing the dominant vegetation of a hardwood ridge. This monster is powered by three electric motors in the wheels which derive their power from a diesel generator. Irving's objective is to convert the hardwood ridges to spruce stands.



After the vegetation has been destroyed by the above process and the area left to the forces of nature over winter, the area is hand planted and given tender loving care to produce the results shown at the left.

# SILVICULTURE TRIP – 1964

by AXEL R. LARSON, JR.

Sunday morning May 31, 1964 was the commencement of a week long journey into southern and central New England to learn about the management and silvicultural problems facing foresters at schools, experimental forests, national forests, private industry, and small woodlot owners. Our instructor Dr. Ralph Griffin, instructor of silviculture loaded us up at 8:00 a.m. sharp and introduced us to our scenic-cruiser, air conditioned, Bangor and Aroostook bus and our free-wheeling driver Mr. Dana Stillman, a veteran of the 1959 campaign. The first order of business was to refund \$2.50 to those who had paid for lodging the first night, as we had been provided with free lodging at the Massabesic Experimental Forest.



"WAS IT AXILLARY FRUITS NOW  
POISONOUS OR WAS IT ...?"

Our trip took us first to Palermo, Maine where we met Professor Robert I. Ashman who guided us around some of his woodlots in the Hostile Valley area. Here we learned "Prof's." secret formula for his cuttings in his woodlots: "Oh, I just cut until it looks about the way I think it should." From Palermo we travelled through the Kennebeck valley to Prof's. house and tree farm around his house. After an interesting tour of his plantations and woodlots, we boarded the bus and headed to Alfred and the Massabesic Experimental Forest.

Monday morning we were introduced to Mr. Thomas McConkey the project leader and Mr. Ray Graber, the leading authority on direct seeding of White Pine. Mr. McConkey told us of the brief history of the forest and how it had been practically ruined in the fire of 1947. He showed us around the forest stopping at areas where arial spraying by helicopters was being done to release white pine using 2,4,5-T silvicide. Other things of interest were Ray's projects with direct seeding of white pine and the use of phosphated systemics preventing beetle damage to white pine cones.

Monday afternoon we headed west and stopped to meet Mr. Richard Arsenault (Maine '50) who works as a service forester for the State of Maine. He gave us a brief rundown of his work duties; then he took us on a brief tour of a woodlot that he was currently working on. It appeared that Dick had had better luck in his white pine reproduction plantings and releasings than the Experimental forest had had.

That evening, after supper in Concord, N. H., we ended up at the Harvard Forest Dormitories in Petersham, Mass. Our host Dr. Raup opened up the museum which shows the history of the area and some of its present problems. The next day we had an extensive tour of the forest, showing various methods of hardwood silviculture practiced and eventually coming to the end with the still debated question of a true climax forest. That evening was spent in intellectual discussion groups—one at Petersham and another in Athol.

The following morning we left Harvard in the pre-dawn glow of their lights and headed to Hillsborough, N.H. and the Fox State Experimental Forest. Here we met Dr. Baldwin face to face; that was the last we saw of him as he tore over the hills of the



forest explaining his various projects to a slightly winded band of followers which grew smaller at every stop. His main projects were plantations of European larch, spruce and red pine; it was here that we were introduced to *Fomes annosus* a fungus of roots in red pine plantations.

That afternoon was another state forester, Clayton Hatch, who took us on a slight tour of the Bear Brook State Forest. He explained to us that he had to sell enough timber to pay for the expenses of his district. The tour included an area of hardwoods which had been aerially sprayed to release white pine.

That evening, after our three hour dinner in Laconia where Dana got a free meal, we visited the Forestry Laboratory in Laconia. Here is where the research in forest pathology, forest soils and tree physiology is being carried out in the northeast. After the brief tour we headed north into the White Mountains.

Thursday morning we met Mr. Stanley Filip who guided us around the Bartlett Experimental Forest. Here we learned of the many silvicultural techniques involving northern hardwoods. White birch is the most valuable species and grows best in this general area. We were shown the various schemes used to regenerate birch successfully. On our way to see a stand that was being managed selectively, our bus driver forgot to turn wide enough on a left turn and instead of the techniques of forestry we practiced digging the bus out of the ditch. Following that we returned to the station and saw some small scale projects on various light exposures in the regeneration of white birch.

That afternoon Mr. Robert MacNeil assistant ranger of the Saco District along with Mr. Albert Childs (Maine '62) explained the set up of the National Forest system in the White Mountains; how they sell timber, protect the watersheds, and maintain Forest Service trail with some

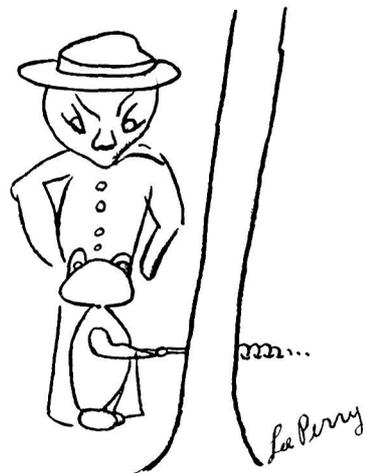
search and rescue work. We were taken around a logging show that was currently going on in the district.

Friday morning we left Jackson and headed up over the Kancamagus Highway; at the top we stopped and met Mr. Ken Sutherland, Ranger of the Pemigewasset District. He explained the district's make-up ecologically, then his administrative duties such as T.S.I. work, search and rescue, and the control of watershed. After that we headed to West Thornton and after a brief stop at a local logging museum we ended up at the Hubbard Brook Experimental Forest. For the remainder of the morning we were lectured on the principles of hydrology, watershed management practices and the research being done at the forest. In the afternoon we toured the forest and looked at weirs constructed on watersheds to measure waterflow which was being correlated to the type of forestry being practiced on the land above the weir. We also saw a weather station which was measuring the temperature and

air flow in the forest from floor to canopy. That evening we headed north to the end of the continent or Errol, N. H. where we had been provided floor space in the town hall.

Saturday morning we met Mr. Clifford Swenson (Maine '52) forester for Pingree Timberlands. After a shocking statement to most of us that Pingree was the second largest land owner in Maine, he began to take us on a tour of some of their recent cuttings, when "Skip" Curtis shocked us by asking if certain 16' cylindrical sticks of balsam fir were going to be made into logs. Other interesting points were his chemical thinnings in balsam fir thickets, as fir grows well in this part of the state without rot, and a stop at one of Brown Co.'s logging camps.

Saturday afternoon we silently sped home thinking of the stops and people we had met, contemplating a day of rest before a journey "down east" and eight weeks of actual practice of some of the things we had witnessed during the past week.



"But yuh said get the d. b. h."