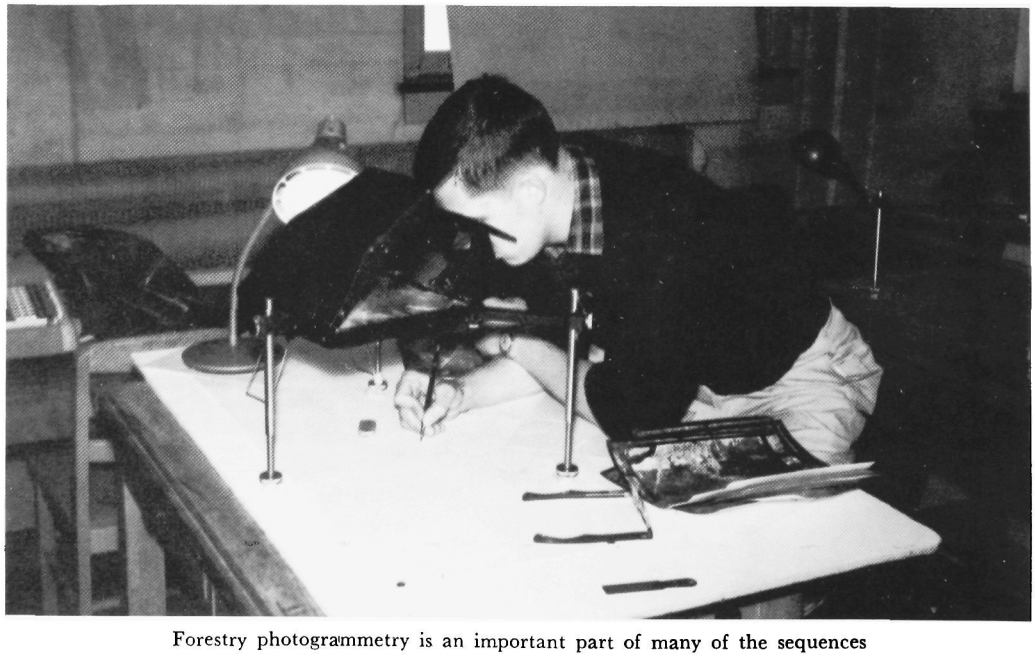
UNDERCLASSMEN

CLASS OF 1964

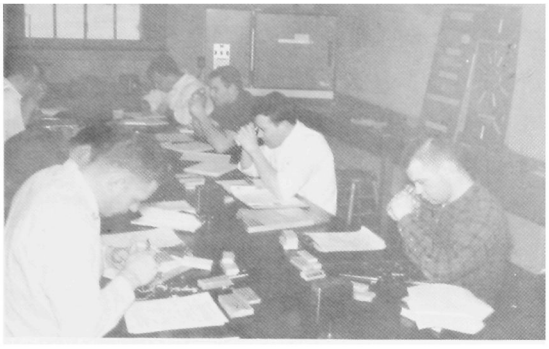
by BART HARVEY

When the junior class returned to school last fall, the split between the sequences of forestry and wildlife became quite evident. This was due to the diversity of the courses required for each of the various sequences. Added to this was the relatively large number of electives from which we were allowed to pick to gain our required credit hours. As a result, everyone sort of went their own way, with the majority remaining in the management and utilization sequences of forestry.

All of us were together in Silvics, one of the basic important forestry courses offered. Along with classroom discussion, we did intensive field work in the University Forest. Each crew, composed of two men, was assigned an area of ten acres to map and measure. The accumulated data was to serve as the basis of the silvics report. Some of the reports were as much as forty type-written pages in length. Although considerable field and office work was required, much satisfac-



Forestry photogrammetry is an important part of many of the sequences

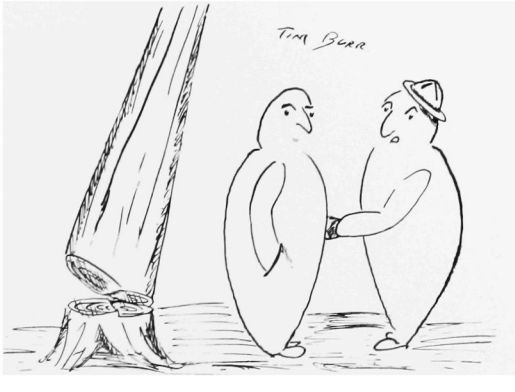


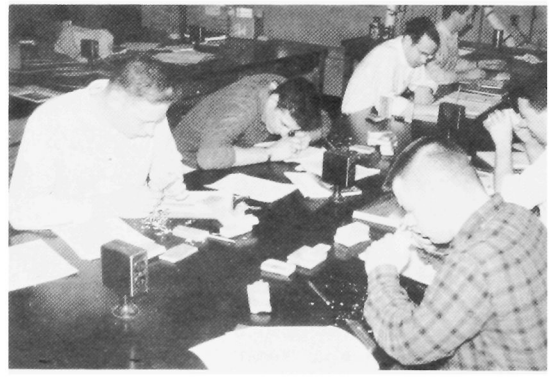
tion was gained from doing the work and writing the report. We also took Technical Composition, which at first appeared as though it would take us, but turned out to be quite an interesting and useful course. Along with these courses, most of us took fire control, and discovered that we didn't know as much about fire control as we thought we did. Plant anatomy was required for those in utilization. In this course, under the watchful eye of Professor Hyland, we learned the fine points of internal wood structure. For those in management, plant physiology and forest soils were required. In plant physiology the functions and chemistry of the various plant organs were studied in detail. Forest soils encompassed the study of the physical and chemical composition of the soil. Required for those of us in the wildlife management sequence, were mamology and invertebrate zoology.

This fall, for the first time, we had a chance to take some more specialized elective courses. These ranged from art to advanced entomology. Some of the other courses we took to fulfill our requirements included such diverse subjects as: music, anthropology, English literature, forest insect ecology, and many others.

The first semester of the junior year was undoubtedly the most difficult one to that point, but wasn't expected to be easy in the first place. On the other hand, it was the most rewarding semester as well.

This spring, the basic courses in the forestry sequences include forest management, logging, and silviculture. These courses cover fields that are an important part of modern forestry. As did silvics during the fall semester, silviculture includes classroom lecture and field work in the University Forest. The field work consists of marking, cutting, and thinning a Jack Pine plantation in the Forest. For some, the thinning provided the first actual crack at tree felling, whereas for others, it was old hat. This winter we are also becoming quite proficient at snow shoveling. In logging, all the finer points of the logging operation and why they are important to forestry are discussed. In management, we are studying the many aspects of economics and finance that must be considered if a forest is to produce a continuous crop of wood at a profit. Also, most of us are taking photogrammetry. Here we are learning how to prepare maps for use in forestry from aerial photographs. We will also be studying how to





interpret aerial photographs later on in the course. Under the supervision of Dr. Young in the photogrammetry lab, we will all have completed an inked map of Marsh Island and all the intermediate projects, by the end of the semester. Those in the utilization sequence are learning how to whittle and cut their fingers in wood identification lab, as well as learning how to identify the commercially important lumber species. For those in the management sequence, forest planting is a required course. Included in this course are the studies of seed germination, viability, and planning of planting operations.

This semester we also had time for a number of electives. Many chose to take current world problems in fulfillment of

the history and government requirement. For those in the utilization sequence, photogrammetry was a popular elective, and many decided to join the managers in Dr. Young's favorite course. Some of the other electives being taken this semester are sociology, farm power, art, forest influences, and meteorology.

Required for the wildlifers this semester are ichthyology and invertebrate zoology.

The men in the pulp and paper course of study were also required to take calculus and quantitative analysis besides the other required forestry courses. This adds up to just as tough a curriculum for them.

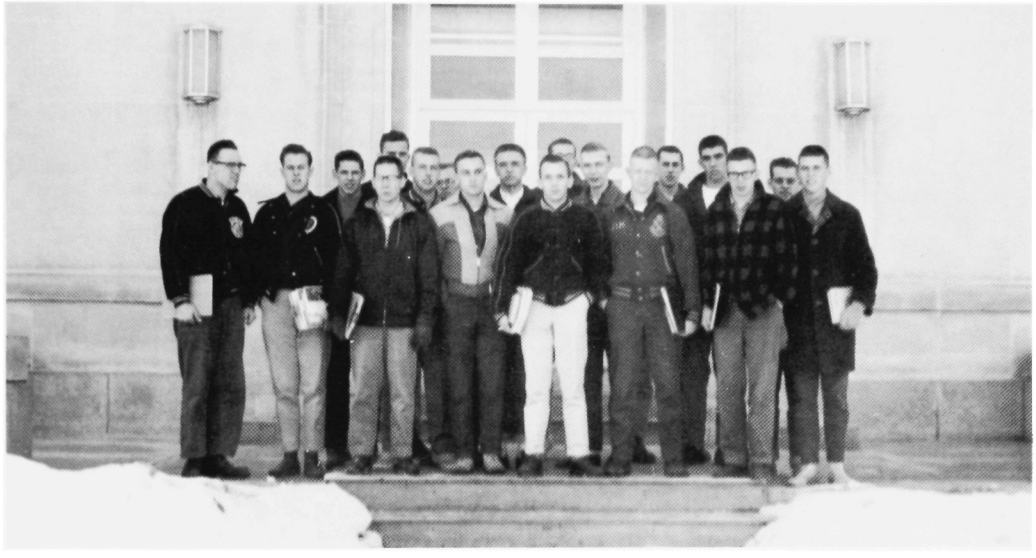
At the end of the spring semester, we will all be going on either of two spring trips. One is for the men in the utilization sequence, and the other is for those in the management curriculum. The utilization trip takes in many logging operations and wood using mills in northern Maine and Canada. The management trip extends to selected managed forests in southern

Maine, New Hampshire, and Massachusetts. After these trips, everyone except those in the Wildlife science sequence will head over to Princeton, Maine for eight weeks of Summer Camp. Here we will learn some of the practical aspects of forestry, and gain an invaluable background in fieldwork experience and techniques.

The junior year is actually the first year that the major aspects of forestry are brought to focus through the courses that are given, both the electives and the required courses. These courses have shown us that forestry is not an isolated field in itself, but must be considered in the light of other fields such as sociology, business, government, and technology.

CLASS OF 1965

by DOUG BEST *and* DOUG MONTEITH



Well, here we are again slaving away at the old textbooks. After an enjoyable summer of work it seemed "sorta" good to get back to college life. However, after another semester and a half of work the old yearning to get back to the woods returns.

This past summer was a burial ground for a few, but to many of us it was that long cherished moment when we could rough it and live life as it was meant to be lived. The jobs in which we were employed varied from fire prevention and insect control in the West, to duck banding and TSI in the East. The pay scale, although not excessive was enough to make the more thrifty a little wealthier while many of us, however, felt a definite crimp in our wallets. Yes there are a few rumors circulating that some of the fellows are even thinking of changing their majors to Business.

Since the Forester as well as the Wildlifer of today must be a well-rounded individual, he must not only concentrate on those courses which are directly related to his major but must also develop a familiarity with the basic sciences, the humanities, and the arts. The ability to apply this diversity of knowledge gives the student at the University of Maine a greater pool of information which will enable him to cope with the complex situations which will present themselves in the future. At present we are taking many basic courses such as economics, speech and physics. Coupled with these are a few applied courses. These include forest entomology, mensuration and dendrology for the forester and general entomology, wildlife escology and plant taxonomy for the wildlife student.

Things are by no means dull here on campus for the wildlifer. Many a young "lifer" gets his first taste of things to come in wildlife ecology where he deals with North American game and habitat. The value of this course will not only be practical to the wildlife student in his future studies, but will also prove to be an invaluable aid to the outdoorsman—especially the hunter, for detailed discussions are given about many of the familiar species such as the Ruffed Grouse. Topics of general interest are also brought up from time to time. These deal with anything from homing to the operation of Maine's Department of Inland Fish and Game. Most wildlifers will agree that this is a worthwhile two credit course. Or maybe entomology is more to his liking. When he catches his first silverfish in midwinter he thinks he is going great guns and will be able to complete his collection ahead of time, but by the time summer vacation is rapidly approaching, there is a good chance that you'll see your best buddies chasing after a Lepidoptera that you have all but cornered and claimed as your own. Yes feelings flair but a long-handled net

is usually enough to ward off your intruder. If not, a little ethyl acetate out of your killing jar had ought to do the trick.

It is somewhat startling to the budding young dendrologist or plant taxonomist to discover that instead of there being a single species of oak there are over thirty-five and they all seem so much alike. One often hears the expression "losing the forest for the trees". The dendrologist here at Maine, it is said, wouldn't mind losing a few trees from the forest.

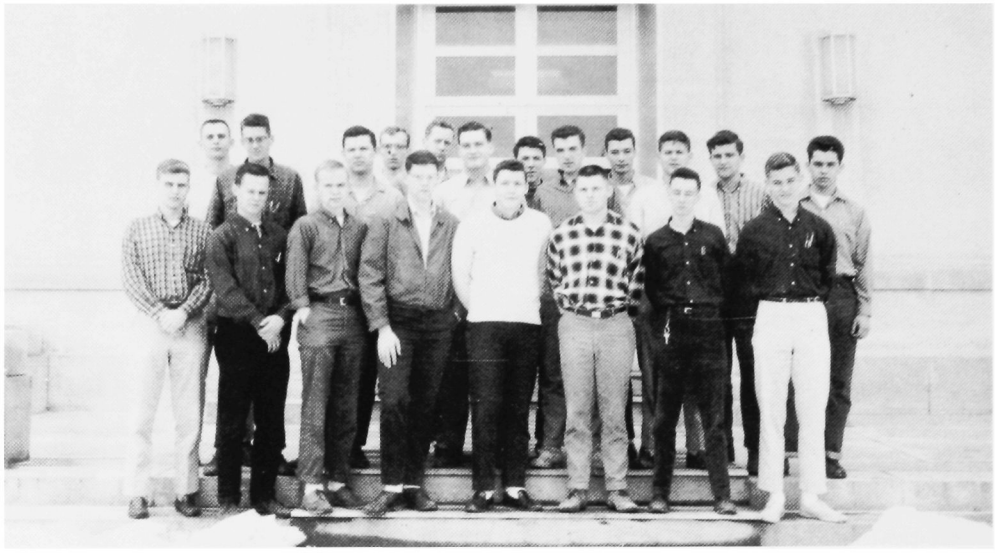
However, if the problem is simply that of determining the standard deviation of the sample sum for a skewed population, mensuration will be your guiding light. Or if you are scaling pulpwood where the woodcutters like to stack the bolts on top of stumps (for esthetic value?) Fy 5 will enable the novice forester to scale accurately.

The importance of the core courses should not be underestimated. For instance, a speech course is of inestimable value to the professional Forester or Wildlifer because, throughout his career he will be required to express himself and his ideas to others and even to sell these ideas to the layman. Economics and physics are some of the other courses which we are studying this year. These courses help to lay the groundwork upon which the study of more advanced forestry and wildlife courses are laid. Without many of the basic courses we take in the process of becoming educated professional men we would be technicians, lacking the broadmindedness and adaptiveness required in our profession.

We are anxiously anticipating taking the courses that lay ahead of us and, in particular, learning more about Forestry and Wildlife. We have heard a great deal from the upperclassmen about what they are studying and this helps to develop our interest in our future here at the University. Thus, with our hopes and destinies in our hands we look to the future.

CLASS OF 1966

by DAVE ABELL



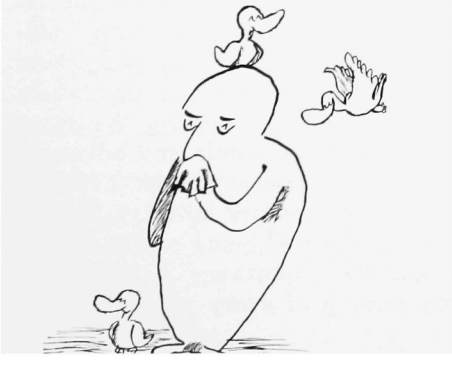
In the fall of 1962, the freshman class entered the University of Maine. Many of the freshmen were enrolled in the School of Forestry, and the new "foresters" had a great deal to learn about forestry and about how the School of Forestry operates at the University of Maine.

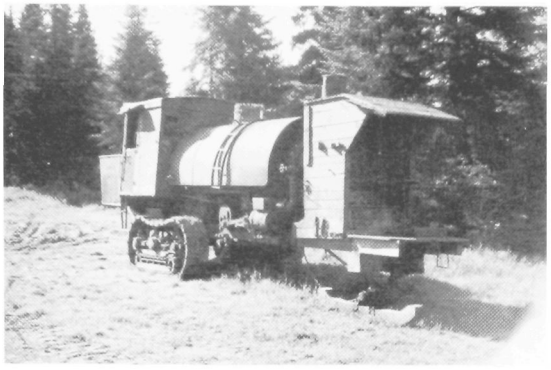
I imagine that every freshman enrolled in forestry had his own opinions about what forestry offered. We all knew that there was a great deal of science connected with forestry, but I wonder how many of us realized that science is only one part of the entire forestry picture. We certainly did have a great deal to learn, and we started right in during Freshman Orientation, becoming familiar with the School of Forestry. We met our advisors, who were very helpful in acquainting us with all phases of the campus life we were to encounter during the year. They impressed upon us the importance of good study habits and gave us some hints that might help us to adjust to our new life. Most important, we were shown around the School of Forestry, and we met many

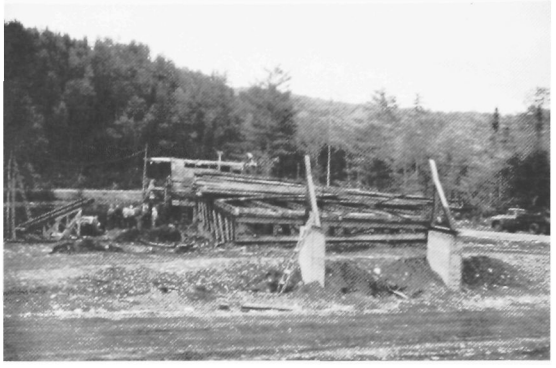
of our future professors. We not only saw the buildings we would be studying in, but we visited the University Forest, and learned the part that it would play in our future studies. A number of our future professors gave talks on the phases of forestry with which they were individually concerned, so that by the end of orientation week, we were well acquainted with the Forestry School, and the courses we would be taking during the first semester and the semesters to follow.

One of the first things we learned was that the forestry curriculum provides a broader education than any other curriculum in college. Because of the broad scope of professional forestry, a student enrolled in the School of Forestry must have a broad, but complete education. We in the forestry curriculum must have not only had biological and physical sciences, but courses such as English Composition, Technical Composition, Speech, Literature, Engineering Graphics, Economics, and Surveying. A list of the required courses for a forestry major covers almost every subject major offered here at the University of Maine. For this reason, we found ourselves taking courses that seemed to have no values to our future work. In the fall semester we had only one course that delt directly with forestry. All our other courses seemed to be indirectly related to our major.

The most important courses we took in the fall semester included General Chemistry, English Composition, Engineering Graphics, College Algebra, Botany or Zoology, and Introduction to Forestry. In Chemistry laboratory we learned a considerable amount about experimental procedures and the importance of exact measurements. An understanding of General Chemistry is of great importance to the forester, for chemistry is a definite part of soil analysis, wood pulp production, and debarking techniques, just to name a few. The trained forester may be involved with any one of, or all of, these fields. One of the most important things a forester does, is to inform the public about his work in forestry. Often this is done by use of pamphlets, thus the need for English Composition. Engineering Graphics, or technical drawing, gives the student the knowledge and skill necessary to make drawings with precision instruments. Technical drawings are often needed as a supplement to scientific reports, and the forester does many things that require reports of a scientific nature. College Algebra provides the student with a basis for scientific calculations. The forester is constantly working with equations and figures, and without a knowledge of math, he is lost. Botany and Zoology give the student a basis in biological sciences which he will use when he studies, in more detail, the biological influences exerted on and by our forests. Finally, an introduction to forestry gives the student his first insight in the opportunities for a person majoring in Forestry. We learned the importance of measurements in forestry, and how a forester uses these measurements. We have also learned that many experiments in for-







In the first year the Forester compares old methods with the new methods

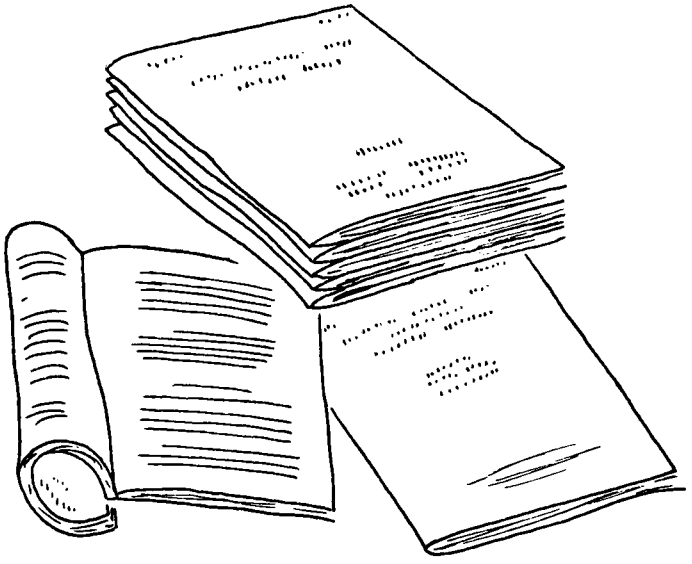
estry require an enormous amount of statistics and tabulations.

Most important, we learned that a forester must deal with people, because in getting the maximum return from our dwindling forests, the public is directly involved. People own forest lands, and they must be taught how to properly manage their lands in the most productive way available. People use the forest lands of the United States, and they must be taught the importance of conserving these lands. People are involved in the growing, selling, and buying of forest products, and the forester must deal with the people in all of these phases of forestry. By no means is forestry easy, but the United States needs trained foresters and would not be as wealthy a nation without the application of the principles of modern forestry.

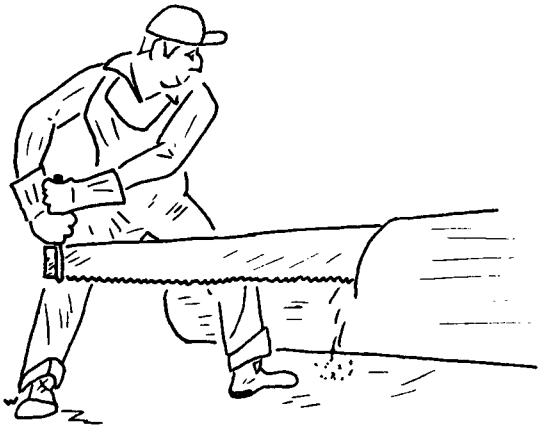
Besides classes, extracurricular activities are offered to the student to broaden his understanding of the field of forestry. In forestry club, we have learned about forestry practices in different parts of the country and the world, and have been kept informed on new methods of utilization, cutting practices, and many other pertinent topics. Special speakers, movies, and lectures by several of the faculty members have given us, the future foresters, a very comprehensive view of modern forestry. Another activity sponsored by the Forestry department, the "Hot Shot" fire fighting instruction, gave many of us training in forest fire fighting, and the instruction we received gave us an idea of the importance of having trained men available to fight one of the forest's greatest enemies.

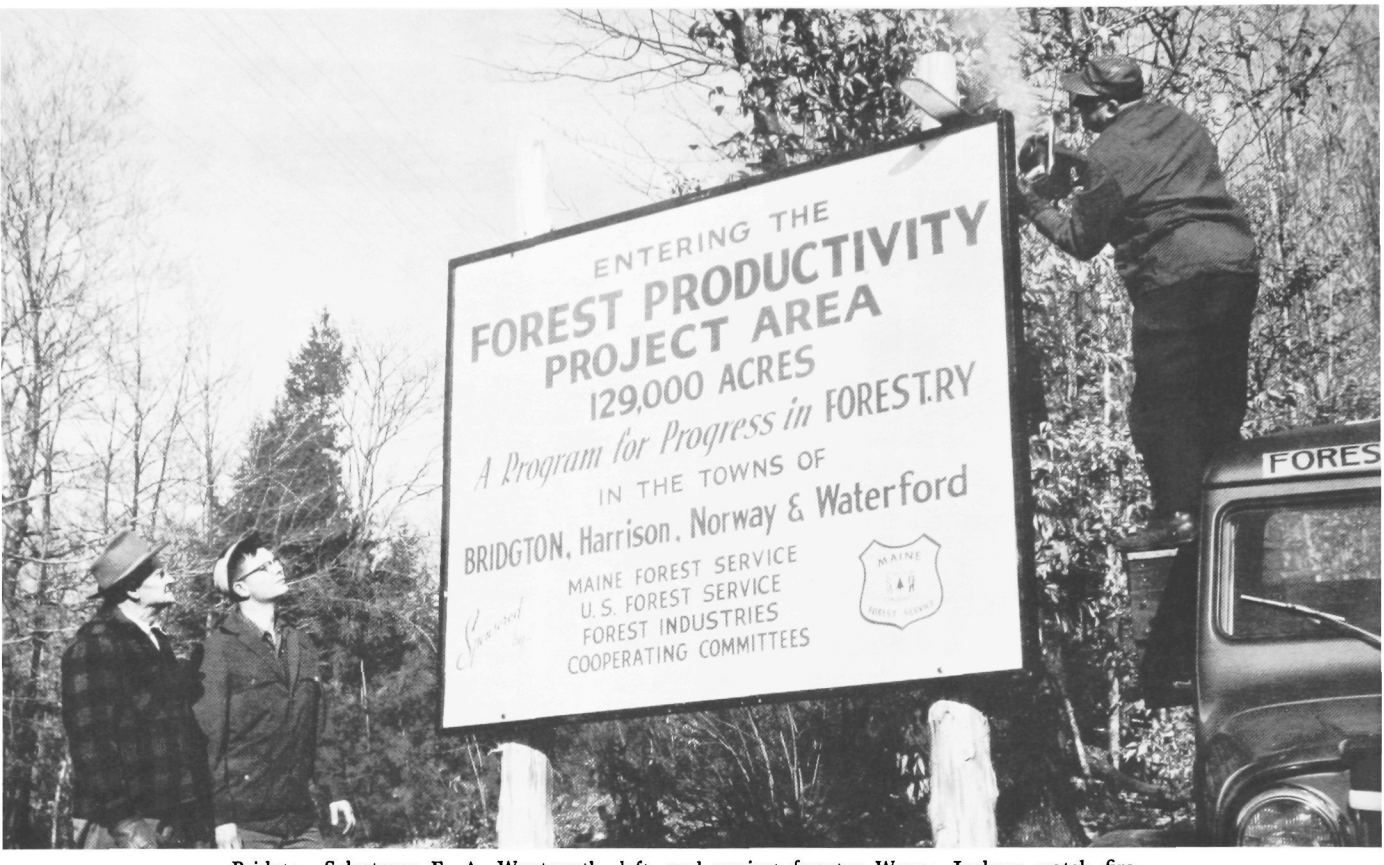
In the second semester we are learning the different methods applied in forest and wildlife management. As each semester arrives, we expect to understand a little more about forestry. This summer, many of the students from the School of Forestry will be employed all over the country in the various phases of forestry. This summer employment will help us understand even more about forestry.

We all look forward to next year and the years to come. The number of opportunities open to a graduate in forestry is enormous. Forestry is actually an agricultural industry. Management of forests, scientific research, manufacturing raw materials of the forest, selling of forest products, and publicizing the forestry industry, are only a few areas where graduate foresters are employed. Most of all, with the increasing population, we must conserve our forests as best as we can. As the population increases, we are challenged to provide the rising population with forest products without drastically depleting our forest resource. We must employ the most up-to-date and advanced methods to meet this challenge. Forestry as a science, as an entire industry, is very important to the well-being of the United States, and its importance is increasing with the passing of every year.



ARTICLES





Bridgton Selectman E. A. Wentworth, left, and project forester Wayne Jackson watch fire warden Wilbur Libby trim one of the supporting posts of a new Project roadside sign.

THE FOREST UNIT PRODUCTIVITY PROJECT

WAYNE L. JACKSON, Unit Leader
Forest Management Division
Maine Forest Service

In the past, few of the estimated 77,000 small woodlots in Maine have had forest management practices applied to them. Yet, the small woodlots in Maine are depended upon to produce approximately one-half of the state's annual timber harvest. If these woodlots are to continue to meet existing and predicted needs for wood fibre, foresters feel that optimum timber yield per acre must be strived for.

This was the primary reason for the creation of the Forest Unit Productivity Project in June of 1960. Under the cooperative sponsorship of the Maine Forest Service, the U. S. Forest Service and local citizens, the project is a pilot study on ways of increasing timber quality and net growth on woodlot ownerships in the four southwestern Maine towns of Bridgton, Harrison, Norway and Waterford.

To initiate the project, a steering committee was formed representing forest landowners, mill and logging operators, bankers, county commissioners, Soil Conservation Districts, the clergy, Fish and Game Associations, and town selectmen. Ex-officio members were appointed from governmental agencies. The steering committee discussed data collected by the unit forester. It was found that the population in the unit area is 8,201, a 4.8% decrease since the 1950 census; there are 100,000 plus acres of forest land with nearly 1,000,000 cords of wood, an average of 9.7 cords per acre in the project;

32% of the land is owned by non-residents; 17 wood-using mills in the project employ 638 people and has a gross value of forest products to the communities of $6,000,000; over 300 acres had been planted to trees since 1916 with 2,600 acres needing planting; there are 11 tree farmers with 11,309 acres; there are 50 cooperators of the Agricultural Conservation Program; in the past 9 years 62 fires had burnt 302 acres; $4,850 had been appropriated for white pine blister rust control over a ten year period.

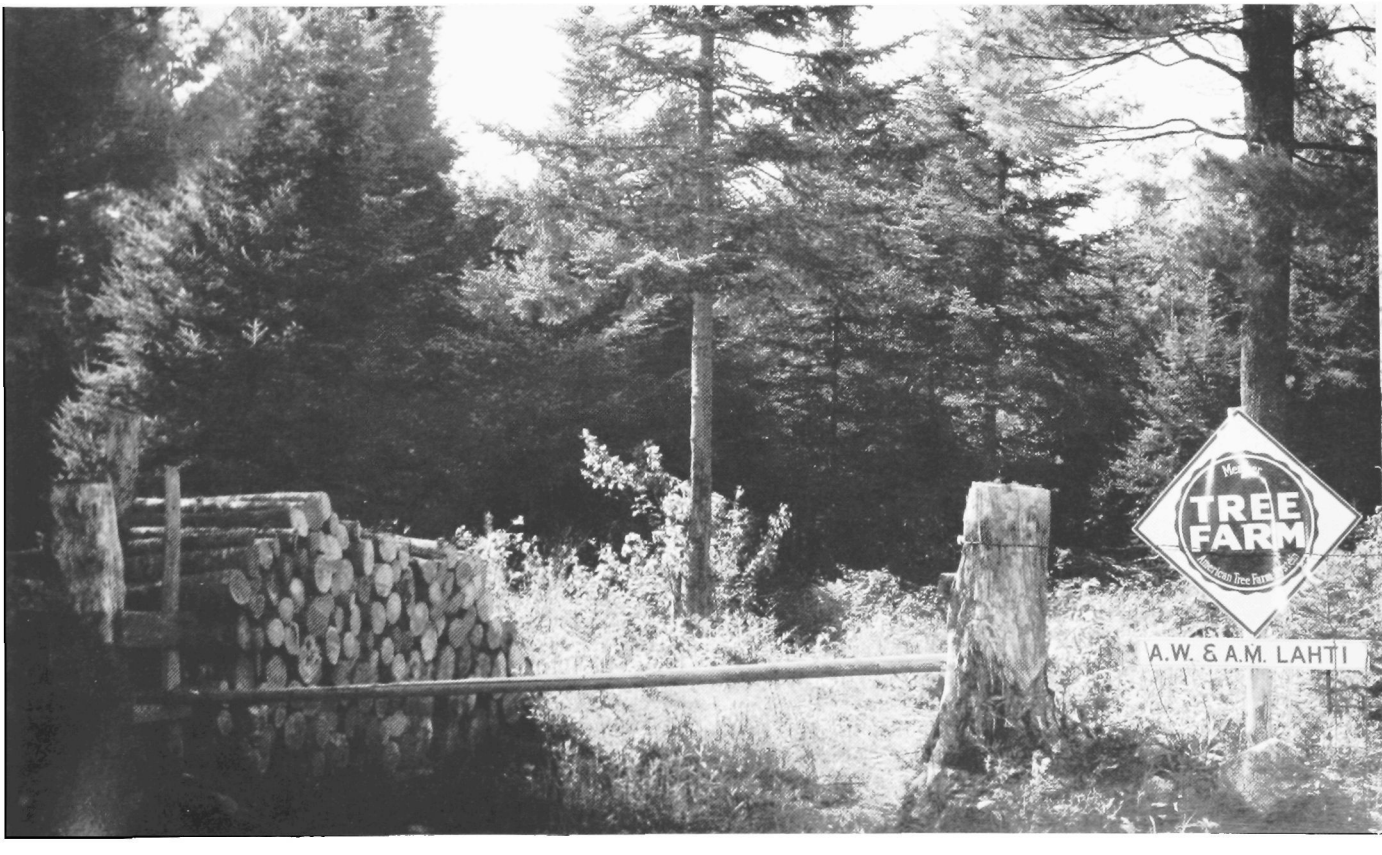
The main steering committee was divided into 10 sub-committees to discuss tree planting, town forests, timber stand improvement, publicity, landowners, forest finance, tree farm, and forest laws. This participation by local citizens has awakened an interest in the forest landowner, resulting in more frequent requests for forest management assistance.

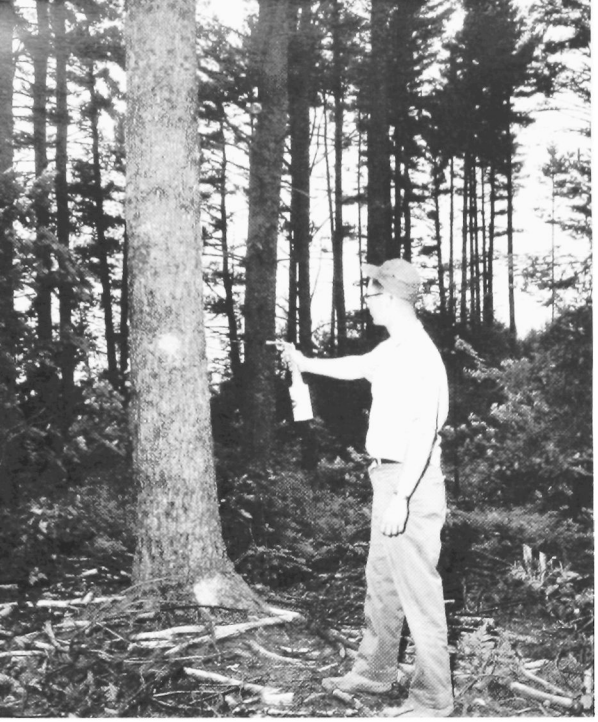
From July of 1962 to the present, a concentrated effort on service forestry work has been emphasized. This has included an acceleration of tree planting, weeding, thinning, pruning, and improvement cuttings. Local crews have done tree planting, weeding, and pruning operations for landowners who could not do the needed work themselves. Such operations have usually been done under the Agricultural Conservation Program which provides incentive payments for improving forest land; usually 75% of the total cost. The number of acres pruned in 1962 increased 80% over 1961, mainly due to the work done by these crews and more assistance from the Agricultural Conservation Program.

The unit forester has broadcast a radio program entitled "Forester's Tracks" each Friday during 1962 and 1963. Names of cooperators and the type work they are doing in the project are mentioned once each month. The other three programs consist of giving forestry information, trends, and news items.

Eight large wooden signs, six by eight feet in size, have been erected on all main

This scene illustrates three ingredients of a managed woodlot; a pulpwood harvest, a vigorous young stand of trees and a Tree Farm sign.





Project forester Wayne Jackson selectively marks trees for cutting.

service forestry work. Prior to the F.U.P.P. assignment, the unit forester had 44 towns. To date, the work load has been similar to that on the 44 towns as regards requests for assistance, marking, etc.

By working a compact area, the forester can better intensify forest management. More practices such as weeding, thinning, pruning, tree planting, white pine weevil control, improvement cuttings, and aerial spraying can be accomplished on each woodlot. Since a large percentage of woodlot owners appear reluctant to inquire about management assistance from foresters, more intensified forestry and a higher interest on the part of the landowner can be stimulated by "knocking on a few doors" to explain available services.

roads entering the project. The signs describe the project and serve to designate the unit boundary. A brochure describing the project was prepared in 1962 by the Information and Education Division of the Maine Forest Service. Copies were distributed to all landowners within the project area.

The town reports of Bridgton, Harrison, Norway, and Waterford contained an article on the Forest Unit Productivity Project with a picture of a well-managed forest. Thus, each landowner in the project area should be familiar with the study. The two local newspapers have given good coverage of the project.

It appears that four towns with 100,000 acres of forest land and over 1,000 woodlot owners contain sufficient area to warrant a full-time forester doing regular

The pruning of crop trees is one phase of timber stand improvement being carried out in the Project area.

Many idle acres of abandoned agricultural land in the Project area are being reforested by machine planting.

The project has been in existence for two and one half years. The unit forester has given forest management assistance to 360 landowners. Over 10,000 acres have been examined and recommendations given on good forest management. Nearly 4,700 cords of wood and 2,000,000 board feet of sawlogs have been marked for selective cutting on over 1,200 acres. Timber stand improvement work has been done on 700 acres. Over 225 acres have been planted to trees and more than 260 acres have been pruned to insure quality white pine for the future.

Scheduled continuation of the Forest Unit Productivity Project will permit an evaluation of accomplishments, market trends, landowner attitudes, and committee success in a small forestry unit.

The town forest of Harrison, Maine, shows an excellent residual stand of white pine following a selective harvesting operation.

THE NEW THRESHOLD FOR FORESTRY RESEARCH

by

HONORABLE CLIFFORD G. MCINTIRE
Member of Congress, 2nd Dist., Maine

HONORABLE CLIFFORD G. MCINTIRE

New doors will open for forestry research as graduate study in the sciences basic to forestry expands under Public Law 87-788, the McIntire-Stennis Bill. This legislation was enacted into law by the last Congress, providing, for the first time, specific appropriations for forestry research conducted at the various publicly-supported schools of forestry throughout the country.

Our Maine forestry industry and School of Forestry will find this new law serving as a foundation for the most productive programs of forestry research our State has ever known.

Public Law 87-788 represents a culmination of six years of work and effort on the part of people dedicated to forest interests. Over this span of time numerous conferences were conducted, with representatives of the Land Grant Colleges, the private industry, State forestry officials and the United State Forest Service joining together to present their ideas on a suitable forestry research program.

Out of this cooperative effort evolved the program embodied in Public Law 87-788, an approach directed toward coordinating this new-type of research effort with the already existing cooperative programs of forestry research.

Many forest authorities are confident that this Act providing for stimulated forestry research will prove as significant to the progress of forestry in the United States as have the historic legislative landmarks known as the Weeks Act, the Clarke-McNary Act, and McSweeney-McNary Act.

Functionally, this Act authorizes the Congress to appropriate "such sums as the Congress may from time to time decide to be necessary " to promote research in forestry at:

(1) land-grant colleges or agricultural experiment stations, and
(2) other state-supported colleges and universities offering graduate training in the sciences basic to forestry and having a forestry school.

The University of Maine—being a Land Grant College and having a School of Forestry—is eligible for participation under the terms of this new law.

Section 5 of this authority provides as follows: "Apportionments among participating States and administrative expenses in connection with the program shall be determined by the Secretary after consultation with a national advisory board of not less than seven officials of the forestry schools of the State-certified eligible colleges and universities chosen by a majority of such schools. In making such apportionments consideration shall be given to pertinent factors including, but not limited to, areas of non-Federal commercial forest land and volume of timber cut annually from growing stock."

Funds for matching Federal allocation may come from public or private sources, thereby creating a very close bond between public interests and the private forestry industry at the State level. In

addition, all functioning elements of the Act are provided a relationship with the Federal Government through a provision of the law which directs the Secretary of Agriculture to appoint an advisory committee. This committee would have equal representation from Federal-State agencies concerned with developing and utilizing the nation's forest resources and the forest industries. The advisory committee will be required to give close attention to the various programs of forestry research that are developed under the new law.

It is to be recognized, of course, that a broad range of research has been in process over many years at various levels of our society.

In fiscal 1960 the United States Forest Service's budget for forestry research constituted 14% of the total research budget of the United States Department of Agriculture.

In a like manner, private forest industry spent $60 million on forestry in fiscal 1962 and, in the same year, Forest Associations throughout the country used over $2 million in this research field.

Our forestry schools have also been active in the field of forestry research. In fiscal 1962 the forest research budgets of the educational institutions with forestry schools constituted 8% of the total expenditure of the various agencies performing forestry research.

Public Law 87-788 broadens the base of forestry research by accelerating the research work that is being carried out in the various forestry schools throughout the United States. This legislation is designed to lend vitality and dynamics to this forestry research force that has been functioning at considerably less than optimum capacity.

The legislative work required for the institution of such a research program has now been completed, and now we stand on a threshold that leads into the area of full accomplishment. The groundwork for administration of the Act is already being laid, for the Secretary of Agriculture is presently acting through the office of the cooperative State and Experiment Station Service to set up the advisory committees and to establish administrative programs for each of the eligible states.

It is hoped that an initial appropriation of $3 million will be provided by the Congress, for this sum of money would permit this new forestry research effort to get off to a very good start.

The precise apportionment for each State still remains to be established, but it seems reasonable to assume that for each $1 million appropriated at the Federal level, our State of Maine could receive between $35 thousand and $50 thousand. When this money is matched, the sum might amount to somewhere between $70 thousand and $100 thousand.

This money would be used by the School of Forestry at our University of Maine for research on forestry matters vital to our Maine forest product industry, reaching into various phases of forest management, forest product marketing, forestry economics, and forest product studies.

As a result of this new legislation, we also can expect a strengthened program of graduate study in the Maine School of Forestry. Doors of opportunity will swing open to students qualified to meet the increasing needs of, and demands for, highly trained persons in professional, industrial, and academic forestry fields.

As this program of research expands, it will be essential that adequate facilities be made available at the University of Maine. A new forestry building already has been programmed, and as plans go forward in this area serious attention should be given to coordinating the program that will be developing under Public Law 87-788 along with the forestry program of the University.

Such coordination would prove a vital ingredient for planning into the future on the development of a strong forestry industry in Maine, an industry that would be supported by a dynamic program of research and study at our Maine School of Forestry.

Unquestionably Maine has a great future as a forest State. Even today forest products hold first place in product value of industry, as well as in product resources for the future.

Our Maine School of Forestry will play a highly important part in speeding Maine along the way to heightened forestry attainments, and because of this, our School of Forestry should rank as one of the best in the country.

I feel confident that Public Law 87-788 will contribute materially to the advancement of Maine forestry. This is, indeed, a just reward, for much of the credit for this legislative achievement rests with those from Maine who moved forward to give this measure their vigorous support.

GEORGIA-PACIFIC CORPORATION A NEW NEIGHBOR IN MAINE

by

VERNOR SCHENCK

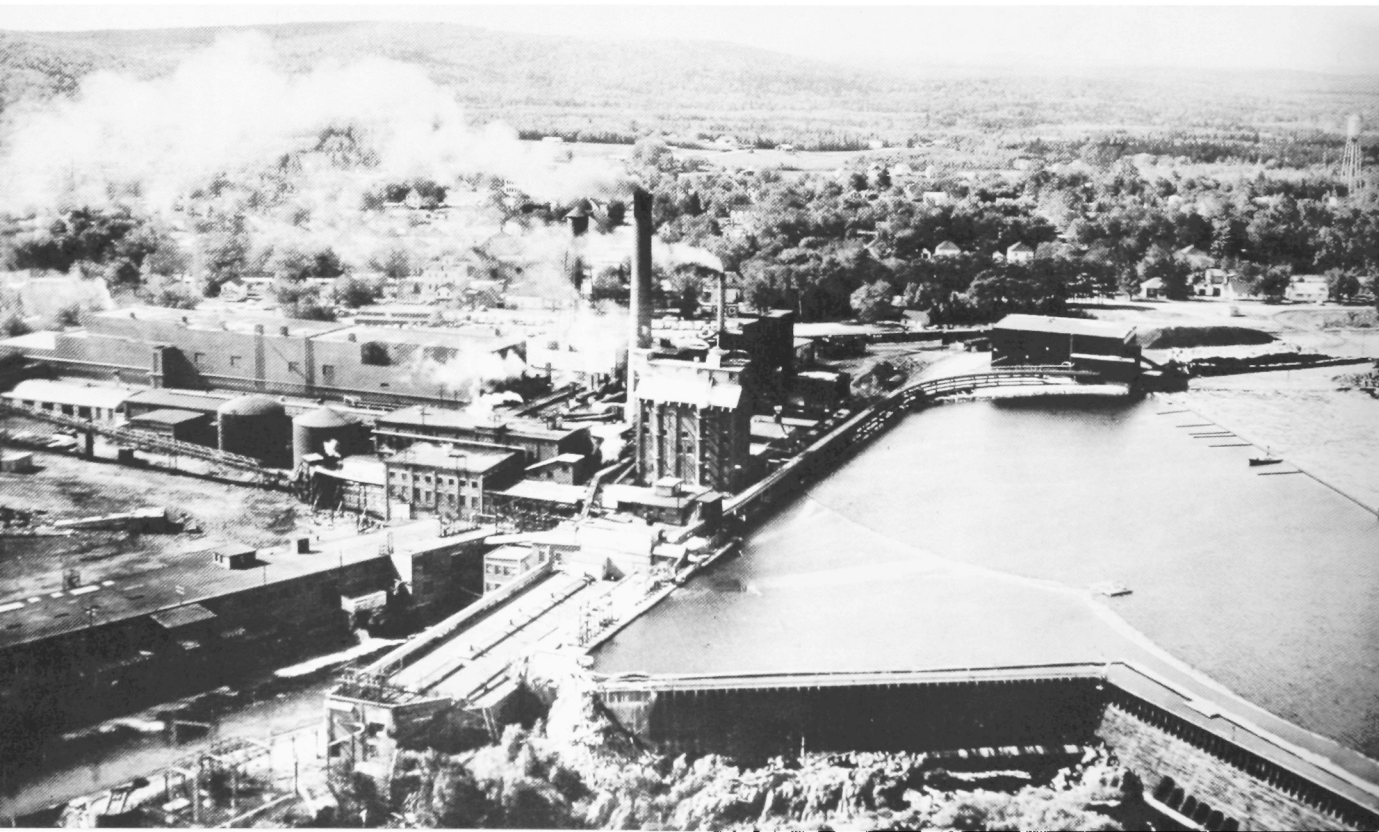
Public Affairs Manager
Georgia-Pacific Corporation

Georgia-Pacific Corporation, though one of the larger forest products companies in the nation, is a new name to Maine. It has just completed a pooling of interest with the St. Croix Paper Company, which has its principal mills at Woodland, Washington County, Maine.

The appearance of a new neighbor on the scene always brings questions "Who is he?" "Is he a good neighbor?" "Does he think the way we do?" So let's see how this new neighbor has been accepted in other neighborhoods.

To start, let's look at this neighbor's experience. Georgia-Pacific was founded in 1927 in Augusta, Ga., under the name Georgia Hardwood Lumber Company. It was a wholesaler and exporter. By the end of World War II the company owned six southern lumber mills. In 1947 it purchased a plywood mill in Washington State and bought another at Savannah, Georgia. Today it is the nation's largest plywood producer of both softwood and hardwood plywoods. The Bellingham, Washington purchase was the real start of the national organization. During the 1950's the company built up timber reserves on the west coast in Oregon and California, including one of the finest redwood forests. The rest was substantially Douglas fir and Ponderosa and sugar pine. In the late 1950's the company worked to acquire existing mills and to build new installations in order to bring about integration of manufacturing facilities and

This mill is Georgia-Pacific's St. Croix Paper Division's major operation, at Woodland, Maine. From it comes newsprint for many of the east's best known newspapers as well as groundwood specialty products.



maximum utilization of the forest resource.

The early 1960's found the company again expanding in the east, as well as the west. The Ritter Lumber Company of Roanoke, Virginia which held metallurgical coal and natural gas as well as mills and Appalachian timber was purchased. The Crossett Company, Crossett, Arkansas, with substantial plants and yellow pine forests (and natural gas in Louisiana) was also purchased. Thus, these acquisitions, along with a steady building program, have begun to reveal a forest products concern with an excellent line of products, good and well-managed resources and a great desire to integrate to the best advantage while making best use of the raw materials. Today Georgia-Pacific has 72 operating plants in 17 states. These produce hardwood and softwood plywoods, kraft pulp, paper and containerboard, corrugated containers, paper bags and sacks, bleached foodboard and specialty paper items, newsprint and ground-wood paper products, tissue and waxed paper products, hardboard, particleboard, chemicals and lumber. Coal and natural gas rights are sold to lessees. Two plants are under construction and others are currently on the drawing board.

To help assure orderly marketing of its over 200 products Georgia-Pacific maintains company-owned distribution centers in all major United States markets and supplements them with 51 sales offices of various types. Overseas sales are arranged through agents in 40 free-world trade areas.

What about the timber resource behind the plants and sales facilities? In the United States Georgia-Pacific owns over two million acres of timberlands. The bulk of the 18 billion board feet represented in this acreage is in the west, where board footage per acre will run eight to 10 times higher than the average for an acre in the midwest or east. The company also has harvesting rights to two billion board feet, mostly Philippine mahogany, on the island of Mindanao, Republic of the Philippines.

The proper management of timberlands

Aerial view of a portion of the 619,000 acres of timberlands owned by the St. Croix Paper division of Georgia-Pacific Corporation. Species are principally spruce, fir and hemlock.

Looking like a big silver blanket, pulpwood covers the St. Croix River in one of the holding areas. Later this pulpwood will feed into the mill at Woodland, Maine.

In a woods operation a shovel puts pulpwood aboard a truck for its trip to the mill at Woodland, Maine.

is of primary interest to the company and, the company pronounces, will continue to be so with the St. Croix Paper timberlands in Maine and New Brunswick, Canada. The management of the northeastern lands will have a great deal of similarity to other areas. On Douglas fir timberlands the company clear-cuts, then cleans up the land and reseeds or replants immediately. Redwood and pine timberlands in the west are managed on the same selective logging principle as eastern timberlands and reseeding is natural. Large mature or over-mature trees are harvested to make room for younger trees, which in turn, grow faster and better as they receive more room and light. On all lands it is the company's intent to operate on a sustained yield basis. It is also the policy to purchase logs or timber from other sources when it appears advantageous to do so.

Indicative of Georgia-Pacific's thinking are three timber management elements underway on some of its western lands. These are pruning, thinning and seed orchards. Experiments are being made with pruning of fir trees to a height of 50 feet to secure higher quality logs for plywood use. Thinning in cycles of from five to seven years in fir forests can bring more and better wood to the land owner if it is done properly. It is estimated that lands used this way will not only produce wood and wood fibre during the period to maturity but will also provide as much wood at final harvest as would have been available under "let alone" circumstances. The seed orchard established by G-P grafts scions from superior trees to healthy, young trees. The company took the first seeds from this "orchard" this year and hopes to develop trees which will grow up to twice as fast as the present rate. Georgia-Pacific is already experiencing 40% to 50% faster growth by use of fertilizer pellets with seedlings.

The recent years have brought Georgia-Pacific's entry to the paper business. It built its first mill, a kraft paper mill, in 1958 at Toledo, Oregon. This mill was constructed adjacent to a large lumber mill and a plywood plant owned by the company. Its object was to help integrate the area and to turn the scrap wood from the lumber and plywood mills into a profitable product rather than to use it as fuel. This is typical of G-P manufacturing areas where one finds plywood and lumber operations teamed with paper or hardboard and chemical facilities as the company works to extract the ultimate from each tree. It is engaged in a research project in alliance with one of the nation's major chemical companies to produce chemicals from bark on a commercial basis, using a G-P system. It is also working to make food from sawdust and bark and has market studies underway for activated carbon made from bark and a filter fibre, also from wood waste.

From the single paper mill Georgia-Pacific has expanded. Two mills now produce kraft paper and containerboard, one makes corrugating medium and a fourth puts out bleached foodboard. The St. Croix pooling of interest adds newsprint and the Vanity Fair Paper mills acquisition brings in tissues and waxed paper. Converting plants take a part of these mills output. The company has seven corrugated packaging plants in the west and midwest plus three plants producing grocer and specialty paper bags in the west and south. It isn't a large paper company, but you might say, "It's doing better."

Some years ago the company's head office moved from Augusta, Georgia, to Portland, Oregon, and from this vantage point the company works to make the best use of wood and woodlands. The responsibility of owning so large a piece of the nation's only renewable resource is much with Georgia-Pacific. It's consideration of the public in relation to use of the lands and the protection of the fish and other aspects are well evidenced in the record of years past. Last year the company estimates better than 92,000 people used its lands for camping, fishing, hunting, hiking and just picnicking.

It's probably safe to assume that this neighbor is going to be all right and do as well or better by its "down east" friends as has its predecessor.

ORGANIZATIONS & ACTIVITIES

FORESTRY CLUB — 1962-1963

by

LEIGH E. HOAR, JR.

Over the past years the Maine Forestry Club has served to bring the students and faculty of the School of Forestry together once a month to meet on a common ground. It is at this time that non-academic decisions, which will affect the course of the forestry students in the future, are decided upon. Here also, friendships are developed which will last many students through the years ahead.

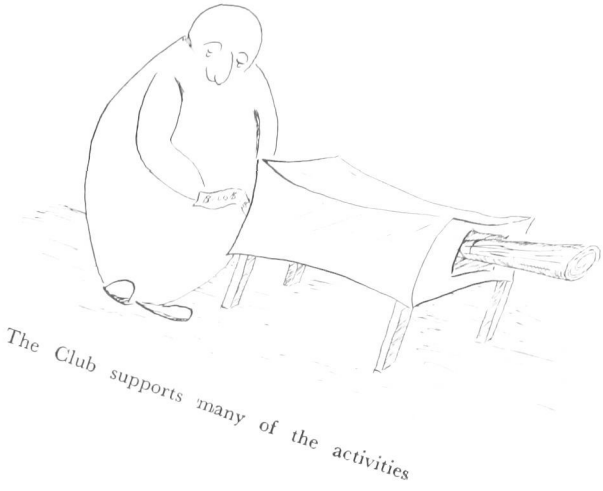
The past year has been no exception to the above. The freshmen attended in force and have become an integral part of the club, strangers no longer. The annual fall fireplace meeting went off on schedule, except for the late arrival of the coffee. Classroom formality disappeared and old acquaintances were renewed over a hot cup of coffee.

A variety of speakers were heard this fall, ranging from a travelogue of European Forestry through a view of public relations and forestry in the United States. Steve Powell brought Wildlife Refuge activities to Orono one evening in a joint meeting with the Forestry Wives' Club, much to the delight of all.

During this semester and next the Forestry Club will be directed by President, James Thomson; Douglas Monteith, Vice President; Walter Seaha, Secretary and Treasurer, Richard Thompson; with Professor Frank Beyer as Advisor.

If, during the coming year the Maine Forestry Club can "Foster better activities " and "Serve as a medium for exchange and discussion of ideas . . . " then we can ask no more. By establishing these tendencys in student foresters as a group, the Club will serve to promote better forestry in the future.

New officers



The Club supports many of the activities

Guest speaker chats with faculty

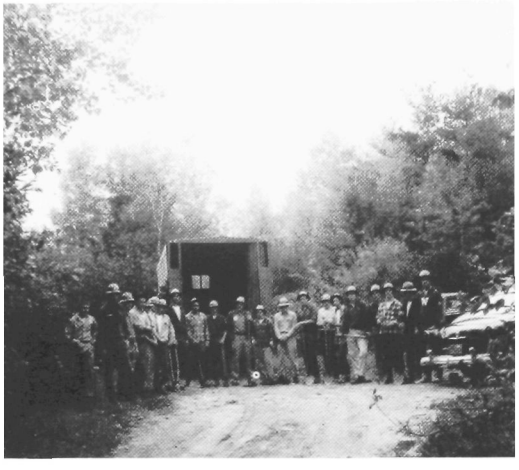
Coffee break

HOTSHOT FIRE CREW

1962-1963

by

LEIGH E. HOAR, JR.



The Hotshot Fire Crew exists today with the hope that tomorrow we will not have to do what was done yesterday. This in a few words, sums up the aims of the crew.

Weekly training sessions have occurred each Fall and Spring to train new men and polish the old hands. Under Professor Arthur Randall's tutelage the techniques have been carried on and improved upon in spite of a complete crew turn over each four years.

During these training periods the students not only learn how to do a variety of fire fighting jobs, but also learn how to train other men in the years ahead. With the spirit which develops in any volunteer crew the strange looking tools soon prove to be effective pieces of fire fighting equipment. When coordinated by teamwork; linebuilding, pumper operation, leadership and safety become second nature to the men.

It has been six years since the Hotshots were called into State service. It is hoped that there will never again be reason to use this crew, but if there should be, we feel sure that the Hotshots will prove just as able tomorrow as they did yesterday.

XI SIGMA PI

by

C. DAVID RICHARDSON

Xi Sigma Pi is the national honor forestry fraternity. It was founded at the University of Washington on November 24, 1908. The fraternity existed as a local honor society at the University of Washington until 1915 when a constitution was adopted which opened up a wider field. The original chapter at the University of Washington was designated as Alpha Chapter. In 1916 Beta Chapter was established at Michigan State University, and in 1917 Gamma Chapter was installed here at the University of Maine.

The fraternity today has 21 chapters throughout the United States, and is truly national in character.

The objectives of Xi Sigma Pi, as stated in the constitution are to secure and maintain a high standard of scholarship in forestry education, to work for the upbuilding of forestry, and to promote fraternal relations among earnest workers engaged in forestry activities. In keeping with this philosophy, new chapters have been added from time to time only after careful consideration for the general good of the fraternity.

The intention of Xi Sigma Pi is to honor the student who excels scholastically and who has a personality that would tend to make him successful in forestry work. The fraternity aims at stimulating scholarship in forestry and at bringing together in good fellowship those students who have shown exceptional ability. This policy has resulted in linking together students from various parts of the country with a common interest.

The fraternity stands for high scholarship and its members, both individually and collectively, encourage forestry activities at the institutions with which they are connected by active participation in the projects of their respective forestry clubs and by special chapter projects for encouraging the development of leadership in school activities.

This is carried out locally here at Gamma by several projects including our annual Christmas Tree Sale and the annual Forestry-Wildlife Supper.

In the weeks between Thanksgiving and Christmas, members of the fraternity cut trees on the University Forest under the supervision of Roger Taylor, the forest supervisor. These are then sold to local residents and faculty members.

Then in the spring semester, Gamma sponsors the Forestry-Wildlife Supper. Working in conjunction with the Forestry Club, the banquet brings together students, faculty, administration members, and leaders of local industries. In addition to a fine meal, a guest speaker is present to talk on some current topic of interest. This year, Austin Wilkins, Forest Commissioner of Maine, was the guest speaker. Also, awards are made to the outstanding students in their respective classes and the "Maine Forester" yearbook is presented.

WOODSMEN'S WEEKEND — 1962

by DICK RIDING

As Spring rolls around the foresters begin to prepare for Woodsmen's Weekend. Woodsmen's Weekend is an intercollegiate contest of various skills inherent in woods life. Included in the contests are fly casting and bait casting for accuracy, log rolling, pulp throwing, fire building, scoot loading, tree felling, crosscut sawing, bucksawing, speed chopping, splitting, packboard racing, canoe racing—both singles and doubles over an obstacle course, and canoe portage.

Last year eight foresters from the University of Maine got together and worked up a team for the competition held at Middlebury College, Middlebury, Vermont. Bob Whyland (captain), Roy Burton, Jim Collom, Ray Cullinane, Doug Monteith, Dick Riding, Ken Stratton, and Ernie Torok (cook) traveled to Vermont and brought back a sixth place for the University. There were thirteen teams in competition representing eight schools. Paul Smith's took first and fifth, Nichols second and third, Dartmouth fourth, and the University of Maine sixth. The other schools represented were Colby, Middlebury, West Point, and MacDonald.

The competition itself started on a murky Saturday morning with the fly casting and bait casting and then progressed through the day to the packboard race. Following all the other events of the day the packboard race turned out to be a test of endurance as it was set up over fences, wall, streams and through a section of swamp. The day was completed with a steak feed. The competitors then got together to discuss the contests of the day and have general social gatherings at a square dance and various camp fires. Woodsmen's Weekend offers a fine opportunity to meet and talk with other forestry students and their instructors.

Sunday morning saw the last of the contests with the canoe events. They were on still water. There was, however, a cold breeze whipping across the water chilling the participants and the spectators. Canoeing on still water in competition was quite a contrast from practicing on the raging Stillwater River here in Orono. The canoe portage was the event of the day as all competitors came back soaked to the waist as they had to cross a small stream and a drainage ditch on course. The weekend was over and the team headed home a little wet but happy as the weekend was well worth the trip. Despite the fact that it was wet all weekend, all those there had a good time and benefited from the experience of going to the contest.

This year the team is looking forward to having the Woodsmen's Weekend here at the University of Maine. Plans and work have been progressing ever since we got back from Middlebury, as the fire building bolts were put away to be dried and the equipment was cleaned, repaired, and sharpened in preparation for this spring's practice. Last year the team was hampered by poor bucksaw blades and two broken speed chopping axes—both axes were broken in competition. This year this faulty equipment has been repaired and it is hoped that we will be able to get some new saws and chopping axes so that we will be able to get more than one team into competition.

As we are preparing for the weekend it should be noted that there will be more teams in competition as the University of Connecticut is sending up a team, and the University of Massachusetts and the University of New Brunswick have also been invited. Whether they will be able to make it this year is in question but Woodsmen's Weekend is expanding. With the expansion of Woodsmen's Weekend it becomes a more and more important place for student foresters of the Northeast, and Eastern Canada to meet and talk.

Ray Cullinane and his assistants have been working hard to prepare for the contest this year. Soon things will be complete as the fire wood had been cut and the felling poles are ready to be set up and the saw logs are cut to length. All of us are looking forward to a good contest this year and in the years to come.

FORESTRY WIVES' CLUB

by NANCY HEATH

In 1963 the Forestry Wives' Club became charter members of the National Organization of Forestry Student Wives. This move should prove to be extremely helpful in broadening our prospective and giving us insight into the future.

The club membership during 1963 has consisted of approximately 18 active members and 17 honorary faculty wives. Our meetings on the 2nd Thursday of every month have been well attended.

Our programs are selected with the purpose of acquainting the wives with the field of forestry and pointing out their part in this vast field. However, one program is varied for general interest. A pot luck supper is given at the start of every year with its main purpose being social. In November, Mrs. Leeman Lord of Brewer demonstrated the many uses of driftwood in the home. For our January meeting we were pleased to have Stephan Powell, Inland Fisheries and Game biologist, who entertained our group (including husbands) and the Forestry club with colored movies accompanied by a colorful narrative. After having such an enthusiastic and enjoyable evening we feel the husbands should be included in more of our activities. Dave Field, a forestry student who spent a summer in the West, showed various colored slides with detailed descriptions at our February meeting. In March, Mrs. John Hankins presented an interesting program entitled, "The Lakes and Highlands of Scotland" In April it is planned for us to join our husbands and attend the Annual Forestry Supper. A game night with election of officers will bring our year to a close in May.

In the past the club officers have been elected for one semester only, this year they have remained through both semesters. Under this system they are able to understand and contribute more to the club. The officers are: President—Nancy Lou Heath; Vice President—Martha Kennedy; Secretary-Treasurer—Karen Hyer; Program Chairman—Ruth Gammon; Hostess Chairman—Beulah Lane; Faculty Advisor—Mrs. Al Nutting.

The Forestry Wives' Club is, and we hope will continue to be, an active club on campus. To remain active it takes new ideas, ambition, and a good deal of effort. Having become a small part of a large Organization entails more responsibility. To meet this responsibility we urge all active members to seek out new members and welcome them into our club. It is with regret that we bid our Senior wives farewell. May they leave the campus with a better understanding and outlook of their husband's chosen profession.

MAINE FORESTER — 1963

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ROBERT W. WHYLAND

Business Managers ..... DAVID RICHARDSON
ERNEST TOROK

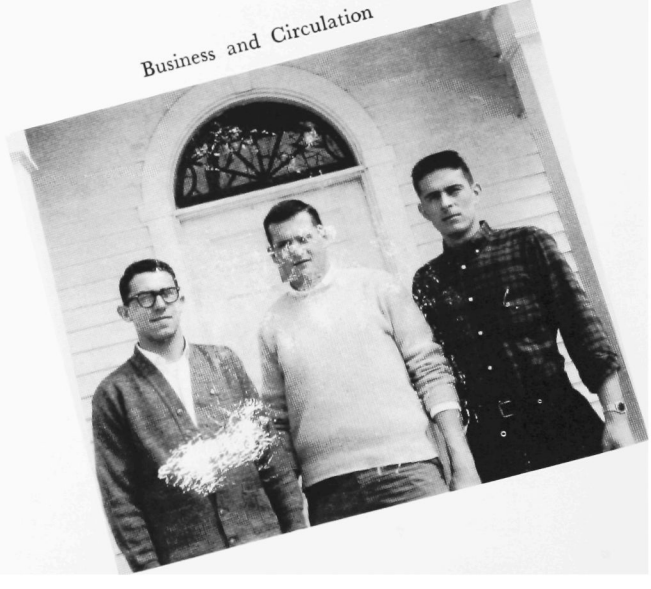
Art Editor ..... JOHN HESCOCK

Photography Editor ..... ALBERT LARSON

Circulation Manager ..... RICHARD STAIGER

It is impossible for us to list the rest of the persons who have made the publication of the MAINE FORESTER possible this year. We wish to thank all who have contributed to the 1963 edition.

Art and Photography



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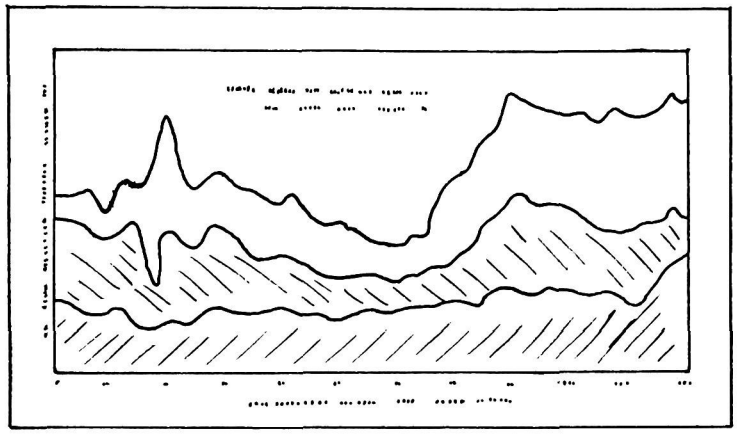

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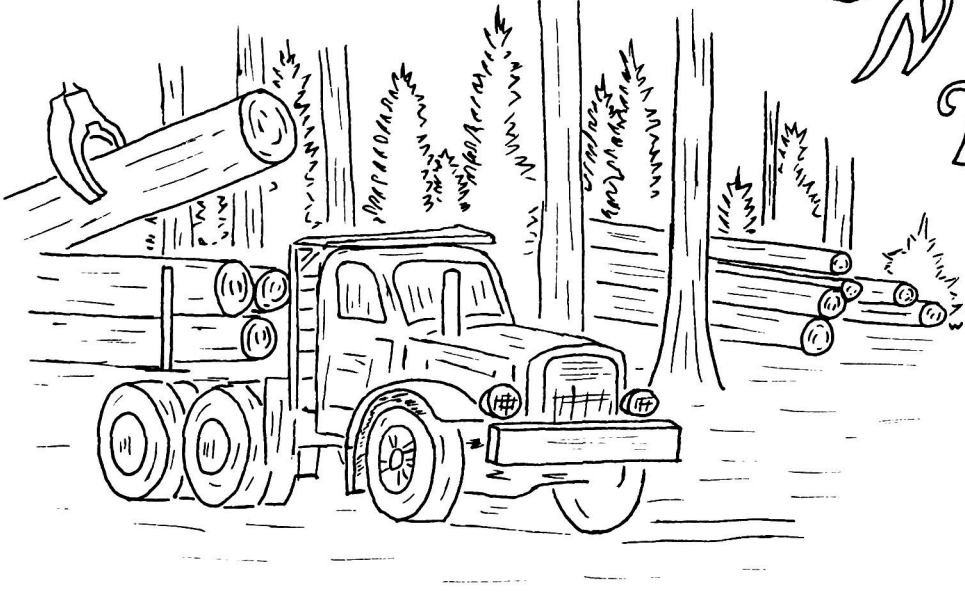

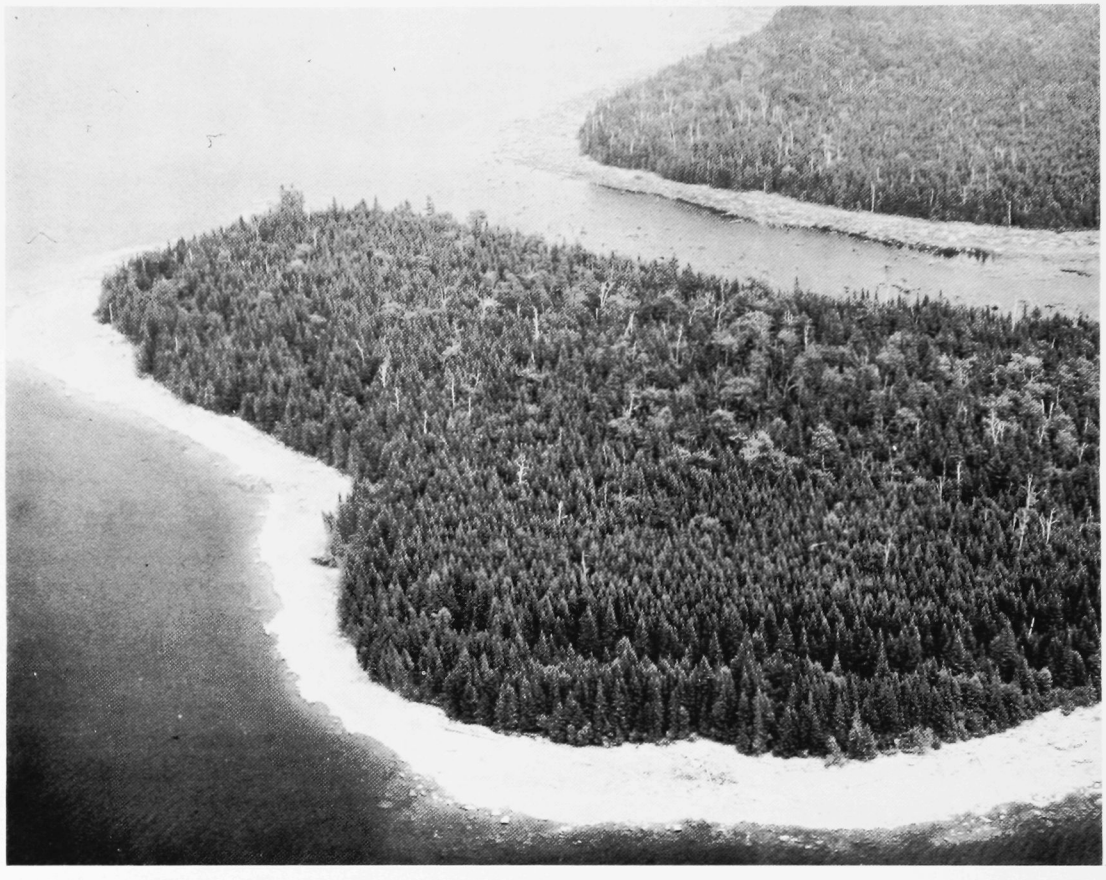

GOOD FORESTRY PAYS OFF

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