

The Maine Forester



1952

THE
MAINE FORESTER

ANNUAL EDITION

APRIL 1952

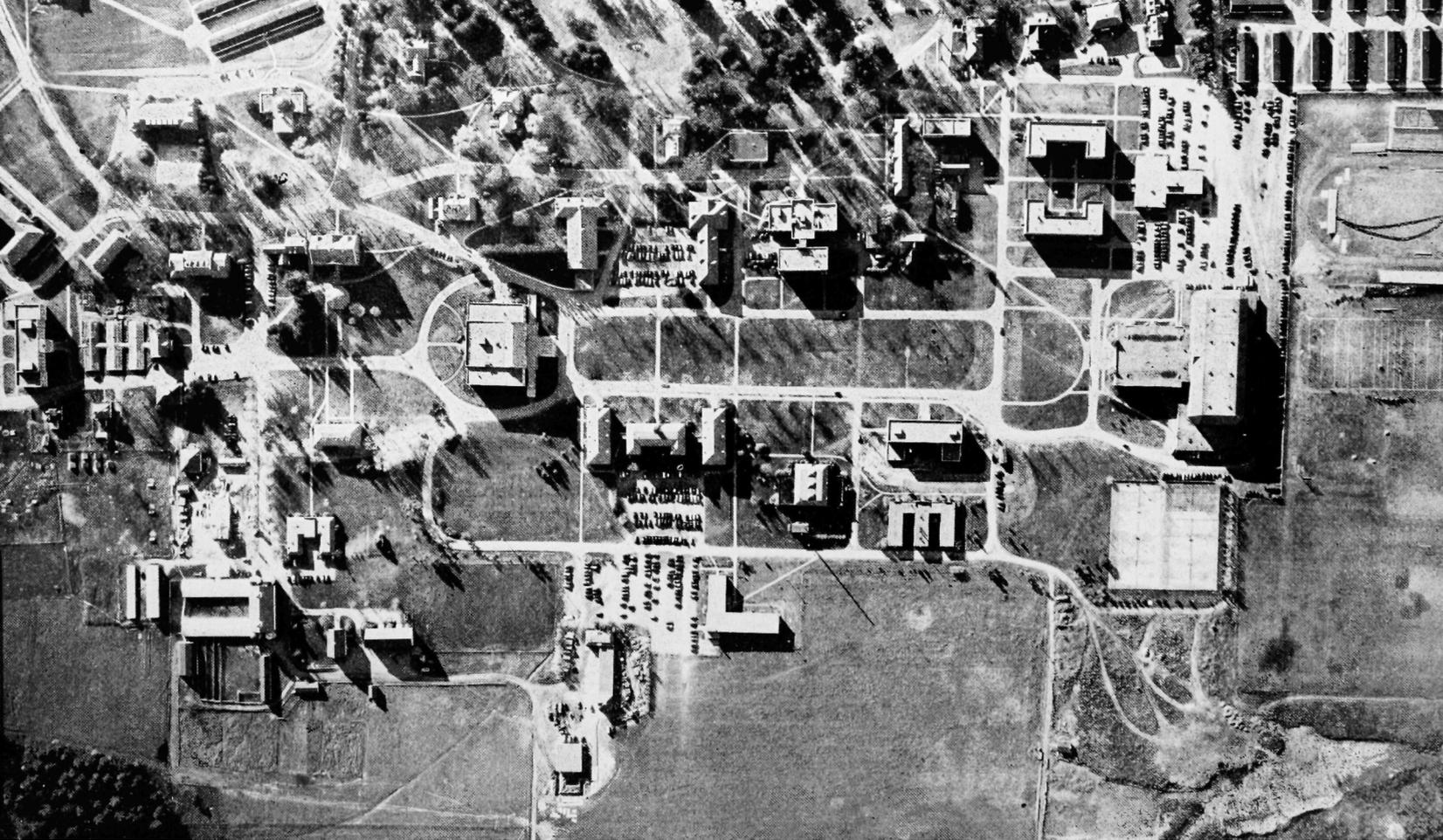


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FORESTRY CLUB

University of Maine

Orono, Maine



Airphoto of University of Maine Campus by James W. Sewall Co., Consulting Foresters, Old Town



Dedication

This 1952 edition of *THE MAINE FORESTER* is dedicated to Associate Professor Frank K. Beyer for his interest and guidance in making the last three issues a success.

Table of Contents

DEDICATION	3
MAINE FORESTER STAFF	5
THE EDITOR'S PAGE	6
OUR CAMPUS	
The Faculty	8
In Remembrance of Samuel N. Spring	11
A Passing View	12
Xi Sigma Pi	15
Forestry Rifle Club	16
The Pickerel Pond Cabin	17
Woodsmen's Weekend	20
The Class of 1952	22
Home Stretchers	27
Fenagle Factors	28
Class of '54	30
Class of '55	32
SUMMER CAMP	
Junior Forestry Camp	36
DEPARTMENTAL AFFAIRS	39
TECHNICAL NOTES	42
TECHNICAL	
The Penobscot Experimental Forest	44
Hot-Shot Fire Crew	48
A Biometric and Economic Study of a Muskrat Marsh	50
NEWS OF THE ALUMNI	54
IN MEMORIAM	
Darryl V. Beisel	81



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PROF. FRANK K. BEYER

The Editor's Page

There are very few written records of the early life of THE MAINE FORESTER, but from an interview with Professor Gregory Baker of the Department, I have found out the following:

The first Edition was published during the spring of 1923 with Gregory Baker as Editor, Carl McKechnie and Wilbur Christopherson as Associate Editors, F. Gilbert Hills as Art Editor, and Julian H. Merrill, Jr., as Business Manager.

That issue was dedicated to Professor John M. Brisco, Head of the Department of Forestry at that time. It was in many ways similar to the present MAINE FORESTER, embracing the various activities of the foresters on the campus. The next issue, similar to the first, appeared in 1927.

During the early 30's THE MAINE FORESTER consisted of mimeographed newsletters with class notes, alumni letters, and foresters' campus activities included. From 1937 through 1941 the FORESTER again appeared in magazine form.

The first issue after World War II, as many of you will remember, appeared during the spring of 1950, and was followed a year later by that of 1951.

By this time it has generally been agreed upon to keep the magazine in the present 6x9 inch form, consisting of from 75 to 100 or more pages. This would aid in the binding of the issues into volumes which would be available as lasting records of the students' and the Department's activities.

This issue of THE MAINE FORESTER is intended to serve as a yearbook for the Class of 1952; to give the undergraduate the opportunity to become familiar with his various organizations, his faculty, his fellow students; to provide the alumnus with a knowledge of his classmates' work, achievements, and current addresses.

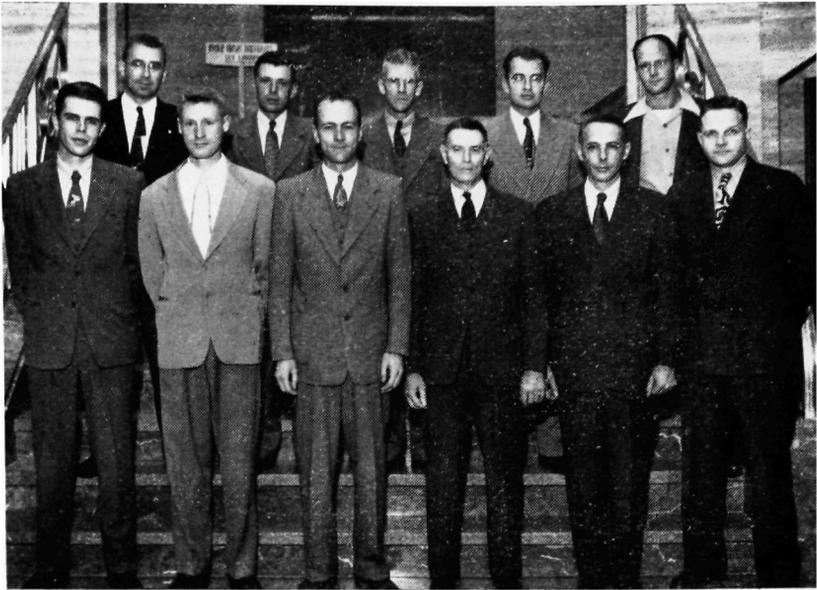
I speak for the Staff of THE MAINE FORESTER of 1952, in expressing sincere appreciation to the students, faculty, and alumni for the cooperation that has made the publication of this issue a pleasure.

We are deeply indebted to our advertisers who have made the publication of this magazine possible. We sincerely hope that our readers will patronize the businesses represented.

--WESLEY L. MARPLE



Our Campus



*1st row: Heyers, Quick, Randall, Ashman, Beyer, Plummer
2nd row: Young, Coulter, Baker, Chapman, Taylor*

The Faculty

ROBERT I. ASHMAN—A. B., Cornell University, 1913; M. F., Yale, 1929; Instructor in public schools in Puerto Rico, Alabama, and New York, 1915-18; Instructor in private military schools in Kentucky, Florida, and New York, 1919-26; Yale School of Forestry, 1927-28; Superintendent State Park, Ohio, 1929; Forester, G. N. Paper Co., 1929-30; University of Maine Extension Service, Maine Forest Service, and Price Analyst with lumber branch of OPA, Washington, D. C., 1943-46; Professor and Head of Department of Forestry, University of Maine, 1946; Forester, Agricultural Experiment Station; Member of Graduate Faculty.

GREGORY BAKER—B. S., Maine, 1924; M. F., Yale, 1939; Finch, Pruyn & Co., Inc., Glens Falls, N. Y., 1924-29; Supervisor woods and small mill operations for Diamond Match Co. in Maine, 1929-33; Manager, Provincial Wood Products Co., Ltd., St. John, N. B.,

1933-34; Berst-Forster-Dixfield Co., 1935; Instructor, University of Maine, 1935-40; Assoc. Forester, Agricultural Experiment Station; Professor, University of Maine, 1951.

HOWARD L. MENDALL—B. S., Maine, 1931; M. A., Maine, 1934; Assistant in Zoology, 1934-35; Chief Wildlife Technician, U. S. Resettlement Administration, 1936; Assistant Leader, Maine Cooperative Wildlife Research Unit and Assistant Professor of Game Management, 1937-42; Leader, Maine Cooperative Wildlife Research Unit and Associate Professor of Game Management, 1942; Professor of Game Management, 1951.

ARTHUR G. RANDALL—B. S., Yale, 1933; M. F., Yale, 1934; Field Assistant, U. S. F. S., Kane, Pa., 1934; Junior Forester, U. S. F. S., Allegheny Forest Experiment Station, Lebanon, N. J. and Philadelphia, Pa., 1934-35; T. S. I. Foreman in CCC camps in Black Hills, S. D., and attended Ranger training camp, Pactola, S. D.; on furlough from U. S. F. S., taught one semester at Colorado State College, Fort Collins; Returned to U. S. F. S., served as assistant on Boulder District of Roosevelt National Forest; Project Ranger on Laramie River tie sales; District Ranger on Washakie, Roosevelt, White River, and Harney Nat'l Forests; Instructor, University of Maine, 1946; Assistant Professor, 1948.

HENRY A. PLUMMER—B. S., Maine, 1930; M. F., Yale 1950; Forestry and Woods operations, Finch, Pruyn & Co., Inc., Glens Falls and Newcomb, N. Y., 1930-34; New York State Conservation Department—CCC, 1934-42; U. S. Civil Service Commission, New York City, 1942-45; Instructor, University of Maine, 1946-50; Supervisor, State Forest Nursery, 1950; Assistant Professor, University of Maine, 1951.

FRANK K. BEYER—B. S., Cornell University, 1929; M. S. in Forest Products, University of Wisconsin, 1930; Assistant Track coach, Cornell, 1931; Junior Forester, Southern Forest Experiment Station, 1931-33; Instructor in Forestry, Cornell, 1933-35; Project Forester, Resettlement Administration, New York State, 1935-36; Assistant Professor of Forestry, Ohio State University, 1936-41; Technologist, Forest Products Laboratory, Madison, Wisconsin, 1941-47; Associate Professor. University of Maine, 1947; Assistant Forester, Agricultural Experiment Station, University of Maine.

HAROLD E. YOUNG—B. S., Maine, 1937; M. F., Duke University, 1946; Ph.D., Duke, 1948; U. S. F. S., 1937-40; Employed by Duke Power Co. during summer of 1941; Served in U. S. Army, 1942-46; Assistant to instructor, Duke University, during summers of 1946 and 1947; Instructor, University of Maine, 1948; Assistant Professor, University of Maine, 1949.

GORDON L. CHAPMAN—B. S., Maine, 1939; M. S., Vermont, 1941; Ph.D., Yale University, 1950; Yale School of Forestry, 1941-42; U. S. Geological Survey, Alaskan Branch, 1942-45; Yale School of Forestry, 1945-48; Instructor, University of Maine, 1948-49; Assistant Professor, University of Maine, 1949.

MALCOLM W. COULTER—B. S., Connecticut, 1942; M. S., University of Maine, 1948; Field Assistant, Connecticut State Board of Fisheries and Game, summer of 1941; Technical Assistant, Vermont Fish and Game Service, summer of 1942; Armed Forces, 1942-45; Project Leader, Vermont Fur-bearer Survey, Vermont Fish and Game Service, 1948; Assistant Leader, Maine Cooperative Wildlife Research Unit and Instructor in Game Management, University of Maine, 1948.

HORACE F. QUICK—B. S., (Fy) Penn State, 1937; M. S. F., (Wildlife Management), University of Michigan, 1940; Research Collaborator; Mammal Control Agent—Fish & Wildlife Service, 1937-45; Assistant Professor of Forestry and Wildlife Management, Colorado A. & M. College, 1946-47; Research Associate, Arctic Institute and Office of Naval Research, 1948; Research Associate, University of Michigan, 1949-50; Candidate for Ph.D., University of Michigan; Assistant Professor of Game Management, University of Maine, 1950; Biologist, Department Inland Fish & Game, 1951.

ROBERT B. HEYERS—B. S. in Wildlife, Purdue University, 1950; Field work at Bear River Migratory Bird Refuge; In charge of the care of Experimental Quail at Purdue University, 1949; Served as a Photographer's Mate 2/c with Photo Squadron in the Marianas 20 months. Wildlife Cooperative Research Unit Assistant, 1950-52.

In Remembrance of Samuel N. Spring

Samuel Newton Spring, first professor of forestry and head of the Department of Forestry at the University of Maine (1903-1905), died at Atlanta, Ga. on February 3. He would have reached his 77th birthday two days later.

Born in Sioux City, Iowa, on February 5, 1875, he subsequently attended Yale University, receiving the A. B. degree in 1898 and, after employment as a student assistant in the Bureau of Forestry (now the U. S. Forest Service), the M. F. degree in 1903.

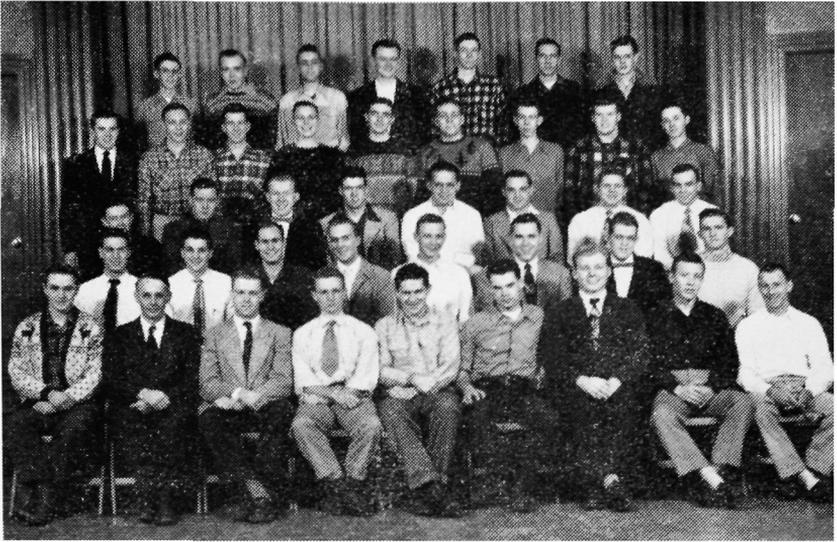
During the period 1903-1905, he was professor of forestry and head of the Department of Forestry at the University of Maine, from which position he resigned to return to the Forest Service as chief of the Office of Forest Extension. Appointed in 1909 as forester for the Connecticut Agricultural Experiment Station and state forester, he also served as lecturer at the Yale School of Forestry.

Called to the forestry faculty as professor of silviculture at Cornell in 1912, he continued at the university for two decades except for brief periods as a visiting professor at Yale in 1917 and at the University of Missouri in 1919.

In 1932 he was named assistant dean of the New York State College of Forestry at Syracuse, and in February 1933 he was appointed dean, succeeding the late Hugh P. Baker who had been elected president of Massachusetts State College. Dean Spring continued as head of the college until 1944, when on his retirement Syracuse University conferred upon him the honorary degree of doctor of laws.

Dean Spring was a writer of ability and, though not prolific in output, he contributed numerous articles and bulletins to the literature of forestry: He was co-author of the book "Forestry," a study of economic problems in forestry in the United States, published in 1929.

Admitted to membership in the Society of American Foresters in 1904, Dean Spring was elected a Fellow in 1939. Always active in Society affairs, he served as chairman of the New York Section in 1928-30, and as a member of the Council for three terms during the period 1934-37. He was also a former director of the American Forestry Association.



A Passing View

Throughout the past year the Forestry Club has been extremely active under the inspired leadership of John K. McBride. The other officers for the past year were Gordon Webber, vice president (left school to enter the service); Arthur Burner, secretary; Peter Mount, treasurer; and Wesley Marple, program chairman. One of the objectives of these officers was to attempt to bring the club out-of-doors and this has been accomplished in two ways.

Firstly, the club has continued its construction of the cabin at Pickerel Pond and hopes to complete it this winter. Each weekend groups of students traveled from school to the pond where they worked together to erect a cabin for weekend outings, ice-fishing parties, and hunting trips. Prominent in its construction were Art Burner, Dick Cutting, "Shep" Shepley, Dick Brothwell, North "Woody" Woodhead, and a host of others. One could write all afternoon about the cabin but it is very adequately covered in another portion of this magazine.

Secondly, the club has started (we hope) an annual Foresters' Field Day to be held at Pickerel Pond in February. This field day is set up to arouse more interest within the Forestry Department and to help all of the foresters to get to know each other better. As it

stands now, there will be one or more six-man teams from each class to participate in various woods competition. Swede Nelson, who is in charge of the Woodsmen's Weekend (an intercollegiate competition in the spring) has suggested the following contests: (1) felling and limbing; (2) bucksawing; (3) crosscut sawing; (4) ice fishing; (5) snowshoe relay racing; (6) fire building. At this first field day there will be a meal prepared and a general celebration for the official opening of the cabin.

The programs of the Forestry Club have been interesting and varied. Wesley Marple, who has done a commendable job, started off the year with the annual first meeting on the University Forest. Even though old man weather wasn't too friendly, many people showed up to hear the officers of the various forestry organizations introduced and to have the faculty informally introduced. Following the first meeting, we moved indoors where we saw movies of summer camp; listened to a very interesting talk from Marvin Chitty, a forester employed by the Penobscot Development Company, and had many other equally interesting meetings.

Each fall the College of Agriculture sponsors an annual Farmers' Fair, for which each department in the college puts on an exhibit. For the past few years the foresters have been constructing a log structure, so this year the idea was conceived to change the exhibit. Under the direction of the president of the club, a typical field camp of a cruising party was set up. On Friday afternoon, November 11, a group of willing foresters like Charley Thoits, Don Webster, Frank Gossett, Don Collins, Art Burner, John K. McBride, and others gathered boughs and poles from the forest and erected a tent enclosed within a birch pole fence. Trees, leaves, pine needles, and boughs were scattered throughout the area to create a woodsy atmosphere. The general effect when it was completed was pleasing to the eye and drew many plaudits from the crowds the next day. The tent contained cruising equipment and the camping equipment that one would expect to find in a woods camp. The wildlifers, under the direction of Professor Quick and Don Collins, set up an interesting exhibit displaying the banding of ducks, fisheries research equipment, traps, and furs.

Just before Christmas vacation, a Christmas tree cutting project was started to bolster the treasury of the Forestry Club. Notices were issued through the faculty bulletin and campus newspaper that the Forestry Club would receive orders up until a certain date. Then, a

group of students on one cold Friday afternoon went along with Roger Taylor to the University Forest and cut the trees. It was immediately seen that the trees should have been cut on a warmer day as they couldn't be bundled without injury; that a uniform method of cutting the bases and measuring the heights should have been used. Nevertheless, the venture was financially a success. Much valuable information was obtained which can be passed on to each succeeding class that wishes to make a little money in a comparatively easy manner.

In conclusion I would say that the Forestry Club has had a very successful year and the outlook for the future has been considerably brightened by the club's present situation.

—PETER MOUNT





1st row: McLennan, Ashman, Crafts, Connolly

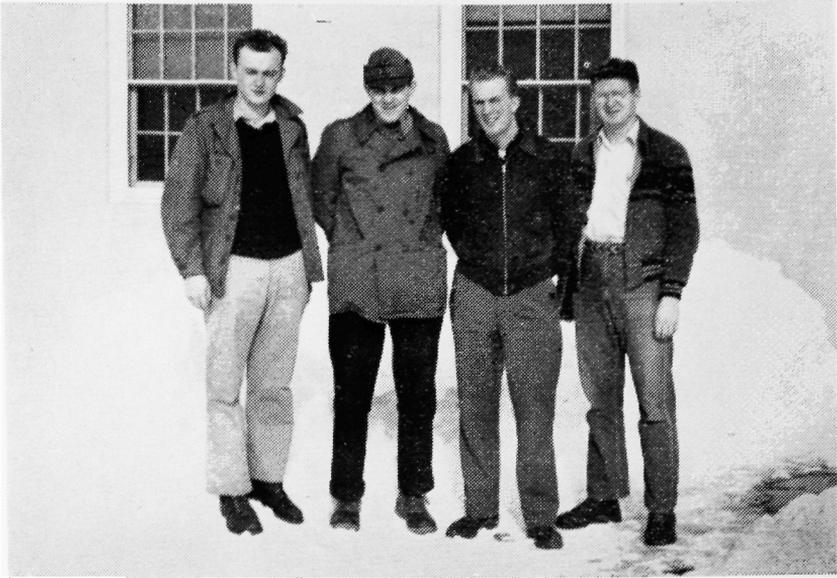
2nd row: Beyer, Wave, McBride, Young

Xi Sigma Pi

Xi Sigma Pi, the honorary forestry fraternity, was founded in 1908, at the University of Washington. In 1917, the Gamma Chapter was established at the University of Maine. The fraternity is national in scope and has sixteen active and one inactive chapters.

As the constitution of Xi Sigma Pi states, the objects of the organization are threefold. First, to secure and maintain high standards of scholarship in forestry education. Second, to work for the upbuilding of the profession of forestry. Third, to promote fraternal relations among earnest workers engaged in forest activities. To further these aims as well as to promote better student-faculty relations, Xi Sigma Pi sponsored a series of informal gatherings where freshman students

(Continued on Page 41)



Schirrmann, McBride, White, Robbins

Forestry Rifle Club

The Forester's Rifle Club, an institution since 1946, gives to interested Forestry and Wildlife students the opportunity to practice and compete in the art of target shooting.

This year the practice of firing matches one night a week was discontinued in favor of allowing the foresters to fire during regular daily range hours. Challenges have been sent out for postal matches with 14 forestry rifle clubs at state colleges throughout the country. No matches have been fired at this writing, but we hope to uphold the good records made in past years.

Club organization for 1951-1952 is as follows:

<i>President</i>	HANS SCHIRRMANN
<i>Vice President</i>	NORM SCHLAACK
<i>Secretary-Treasurer</i>	WALLY ROBBINS
<i>Coach</i>	SERGEANT EASTWOOD
<i>Faculty Adviser</i>	PROFESSOR H. A. PLUMMER

By ALDEN WHITE



The Pickerel Pond Cabin

It was about three years ago when the idea of having a Forestry Club Cabin first occurred to the club members, and the idea remained in the embryonic stage for a considerable period of time. When at last things began to move, arrangements made were far from satisfactory, mainly because the site first chosen had to revert to its former owners—which, for several good reasons, has been the best thing that could have happened. In springtime, the spot where the cabin would have rested appears to be part of the lake, and the cabin's major occupants would probably have been fish or beaver, and most important, our present site at Pickerel Pond would never have been discovered.

Pickerel Pond lies about fourteen miles north of the campus, in Alton Township. With the exception of the larger and rather commercialized Pushaw Lake, it's the only fair-sized body of water, excluding the river, within twenty miles of school. In other words,

it's the nearest available suitable lake. Our cabin is the only vestige of civilization on the whole lake. The site has all of the desirable qualities of wilderness lakes and ponds in the far back-country and yet is but slightly more than a half-hour from the campus.

The lake covers approximately 200 acres, and is surrounded by black and red spruce, balsam fir, white pine, and hemlock characteristic of much of this region. Our campsite is located at the northern end of the lake, on a piece of high ground on which a goodly number of ancient hemlock and a few balsam fir and white birch trees are growing. The outlet, Ten Mile Brook, is a few yards to the west. The brook is supposed to provide some trout-fishing from the lake to its mouth, where it empties into Birch Stream.

Pickerel Pond may be reached by following Route 155 for about twelve miles north of Gilman Falls Corners, and then heading westward through the fields opposite a group of farm buildings. Cars are left at the edge of these fields; the remaining half-mile or so is necessarily negotiated on foot.

Some of the best deer-hunting in this region is to be found in the Pickerel Pond country. There are numerous signs of deer, grouse, rabbits, squirrels, and so forth, to be seen all around the cabin-site throughout the year. The lake itself is a popular resting place or home for an abundance of water-loving birds and mammals. It's not at all uncommon, incidentally, to scare up a grouse or two along the trail while walking in, or perhaps hear or see a deer crashing through the brush, running for cover.

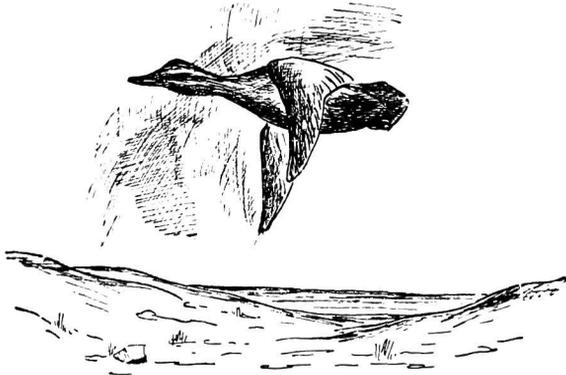
Serious labor began in the fall of 1950—and incidentally few of us realize the amount of work entailed in such an undertaking. First, ground had to be cleared and leveled for the cabin. Then spruce logs of six inches or more diameter breast-high were marked to be cut. After the cutting, limbing, and bucking, the logs—about fifty of them—were hauled out of the woods, mostly on the far side of the pond, and across the ice to the cabin-site. The services of a more or less cooperative horse were obtained for this operation; as it would have been next to impossible to accomplish the task utilizing none other than human labor. With equine power, it took little more than a day to deposit the logs in a ready pile at the chosen site.

June arrived soon after the walls began to rise, and operations ceased until the following September. At this writing (December, 1951), the walls have been completed, including the tedious job of

chinking with sphagnum; the roof is on and has been covered with roofing; the floor has been laid; the door is ready to be put on; windows have been procured and will be installed in the near future; and work has begun on the installation of bunks—and there will be an adequate number to take care of all the Maine Foresters who may choose to spend a weekend at Pickerel Pond, whether it be for the fall hunting, the year-round fishing, canoeing, hiking, good company, or for the many intangibles that the site so adequately has to offer.

We're extremely fortunate to be able to take advantage of all that the Forestry Club cabin and its splendid site can provide. It's entirely reasonable to assume that all of us will do so. We'd be foolish, or anyway peculiar, if we didn't.

—ARTHUR M. BURNER



Woodsmen's Weekend

On May fifth and sixth last spring a group of confident foresters took to the hills. That is, they took to the White Mountains enroute to Hanover, New Hampshire, for the fifth annual Woodsmen's Weekend. This past spring, ten schools from New York, New England, and Canada, congregated at Hanover for an intercollegiate competition in woods skills, canoeing, and fishing.

Captained by Lennart Nils "Swede" Nelson, a group of fifteen "Maine-iacs" arrived in Hanover on Friday afternoon. Tents were set up and a meal was provided for the two teams by the able managers, Will Getchell and Art Burner. That evening, square dancing was enjoyed by all in one of the local churches.

After a breakfast of scrambled (?) eggs, the events got under way. Close competition for the top spot, between Dartmouth, Middlebury, and Maine, made the felling, bucking, splitting, pulpwood-throwing, and other contests, slip by in record time. Following a noon meal, the teams were at it again in fire building, packboard racing, and canoeing. It seems that no team knew how to tie a packboard properly, so many spills and laughs were had by all. Thanks to some excellent coaching by Professor Quick, Maine held its own in the canoeing events.

That evening we all visited a new and luxurious "cabin" that the Dartmouth Outing Club was about to dedicate. A trip through the hills lugging an ample supply of liquid refreshment brought us to the cabin where an enjoyable evening was spent.

The next morning the fishing events were held, but as usual, wind hampered everyone. At noon when the final standings were computed, the competing teams were ranked in the following order: Dartmouth, Middlebury, Maine, Kimball Union Academy, Williams, McGill, Paul Smiths, Norwich.

Team Members From Maine

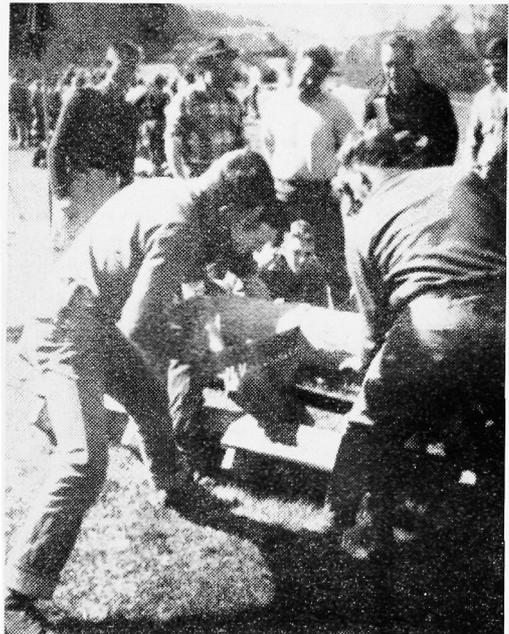
FIRST TEAM: "Swede" Nelson, Art Partridge, Dick Pinkham, Steve Mitchell, Hank Dillenbeck, Peter Mount

SECOND TEAM: Dick Cutting, Don Lockhart, Al Coolidge, Carl Thomas, Bob Ford, Bob Hampson

Will Getchell, Manager; Art Burner, Manager; Edie Curtis, Mascot



Water
Boiling
Contest



Crosscut
Sawing
Contest



Denton C. Aldrow
West Valley, N. Y.
Wildlife



Frank S. Beal
Phillips
Forestry

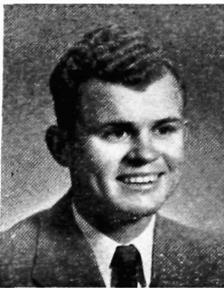


Clare F. Beams
W. Hartford, Conn.
Forestry

19

SENIORS

52



Paul R. Bodurtha
Worcester, Mass.
Wildlife



James W. Buchanan, Jr.
Guilford
Forestry



William F. Buck
Clinton, Mass.
Forestry



Richard A. Connolly
South Portland
Forestry



Herbert L. Crafts
Sangerville
Forestry



Norman D. Erickson
Worcester, Mass.
Wildlife

19

SENIORS

52



William G. Gove
South Bristol
Forestry



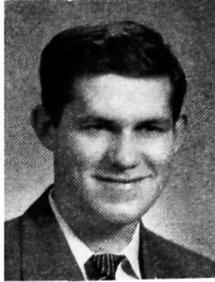
Alvin E. Ingalls
Ellsworth
Forestry



Girard F. Laurin
Darien, Conn.
Forestry



Wesley L. Marple
Liberty
Forestry



John K. McBride
Gloucester, Mass.
Forestry



Bruce H. McLennan
West Hartford, Conn.
Forestry

19

SENIORS

52



Peter R. Mount
Bridgeport, Conn.
Forestry



Lennart N. Nelson
Maplewood
Forestry



Dodd J. Ouellette
Brunswick
Forestry



Ward A. Reynolds
Portland
Forestry



Walter G. Rockwell
West Hartford, Conn.
Forestry



Llewellyn E. Rose
Livermore Falls
Forestry

19

SENIORS

52



Clifford L. Swenson
Belmont, Mass.
Forestry



David R. Tibbetts
Pittsfield
Wildlife



Herbert E. Wave
Farmington
Forestry

SENIORS '52



Francis D. Wentworth
Dexter
Forestry

Donald D. Collins
Farmington
Wildlife

Harold D. Moir, Jr.
Magnolia, Mass.
Forestry



Home Stretchers

To the remaining few in the class of '52, it doesn't seem possible that we are about to cross the finish line. Seemingly, it was only yesterday when one hundred and thirty potential foresters and wild-lifers crouched at the starting line. At the end of the first lap, little more than a half of the sturdy harriers remained; the rest having been either attracted by greener pastures or decided that they were in the wrong race. In the second lap (thought by many to have been the roughest of all) loomed the hazards of physics, surveying, and dendrology which meant running all night. However, by this time the harriers were well armed with new study techniques, self confidence, and old prelims; and, as a result, twenty eight tired runners settled down on Indian Township for what they thought would be a long summer's nap before going into the fourth and last lap. At this point the anticipated nap blew up into shower of activities so violent that even the number two lead hound got leave of absence until a group of more tractable harriers could be entered. By day the lead hound pressed the racers over a series of obstacles which included plane tables, culverts, hovels, dead hemlock trees, and even cement mixers; while by night they could be seen on "picnics" which might be staged at numerous locations such as the old Novilla, Milltown, St. Andrews, Long Lake Campgrounds, Peter Dana Point, and Carter's. Even so, the summer proved fruitful and the forester harriers gained a "professional" touch which comes with practical experience only.

The class of '52 is not without its share of characters. Looking around, one may see Pete "Skin" Mount, Bill "Catskull" Gove, Swede "Ballentine" Nelson, Al "Noisey" Ingalls, and Ed "Oats" Moreshead. In addition to these we lost Fran "Deerslayer" Prue and "Hen" Le-Clair to the services. We wish them the best of luck and we hope that they will return and place their names on the long list of Maine Foresters.

As the class goes into the last straight-away of the fourth lap, there appear 28 names on the scoreboard. The harriers are stepping up the pace for they know the finish line is close—the day, June 15, 1952, and the hour, 2:30 p.m. At this time they will depart, having finished a long hard race, and will proceed to display their courage, leadership, and stamina in a manner that is in keeping with that of the traditional Maine Forester.

—HERBERT L. CRAFTS



Fenagle Factors

The fall of 1951 marks the halfway point for us of the class of '53. No more are we the timid freshmen or the optimistic sophomores. We are now the worldly juniors!! That we have survived the scholastic obstacle course for this long a time; despite chemistry, physics, and forest products, is a source of wonder to us, and in some instances, to our professors. There are only 46 of us left of the original 77; for the Army, other departments, and tests have taken their toll from our class.

It can't be said that we haven't been around. Many of our class returned to the wild and woolly West last summer to work for the U. S. Forest Service, while a number of others went out for their first time. But, don't get the idea that we are all a bunch of cowboys. A few of us "homebodies" spent the summer in the East doing anything and everything, from attending civil summer camp to loading pulpwood on and off barges.

The other day Prof. Beyer asked me what our class did outside the classroom. I started to tell him that all we did was eat, sleep, study, drink, and chase coeds, but, for once, I thought the better of

it and told him that a large percentage of the Woodsmen's Weekend team was from our class, and that many of us were working on the Forestry Club cabin, the "Maine Forester", and other Forestry Club activities.

This year we really started majoring in forestry, what with Drs. Young and Chapman introducing us as to how trees get to be timber, and how to measure them by what John Jewett calls a fenagle factor process. Dr. Structemeyer is really giving us the dirt in forest soils, while Prof. Hyland's course in wood "cryptography" is getting us.

It hasn't been all work or all play for us this last year. We've had our ups and downs such as the time John Jewett conked Dr. Young with a limb in mensuration lab., or the time Clayton Grant's car got run over and wrecked by a herd of horses late one night down in Veazie. There have been rumors that Partridge and Parkhurst are actually enjoying themselves in that geology class with 23 girls. Parkhurst is now one of the married men of the class. But Partridge, we thought, with a certain girl's departure from Orono last spring, would return and be one of the boys again, but no, he still continues to dress up and look respectable. The only thing left of his former self is that brand of tobacco he burns with such fervor.

Bill Penoyer and Bob Everhart became proud fathers last spring, thereby proving, I suppose, that our class is capable of accomplishing about anything if it has the material to work with.

I can't finish this article until I say something about the "ranch". This elite establishment inhabited by some of our class and run (some say it crawls) by "Foreman Dave". One of the fellows down there says it is the cheapest way to starve to death that he knows of, but I've had some pretty good "feeds" there.

This about covers the actions of the class of '53 for the last year; I'll stop now and release you from our tale of woe!

—BILL GETCHELL



Class of '54

When September 1951 rolled around, the “remnants” of the freshman class of 1950 returned again to the University of Maine campus to pursue the elusive B.S. Degree in Forestry and Wildlife Conservation. During the last third of the year, our numbers have been decreased somewhat for various reasons, such as a greeting card from the gentleman with a red, white, and blue suit, or a desire to change to another field of study. A few of the boys who left school to help Uncle Sam out are Dick Neal, USAF; “Stew” Atkinson, USN; Johnny Cerstvik, USN; Tom Mallory, USMC; “small but Oh my” Johnny Hamilton, USNAC. For the ones remaining in forestry another year of hard work lies ahead, filled with many never-to-be-forgotten experiences.

During the summer, the class of 1954 was spread widely over the United States. Many of the boys took note of the old saying “go West young man” and worked for the U. S. Forest Service in California, Oregon, Washington, and Montana in various capacities; returning with more than cold hard cash in their pockets, namely, valuable experience and good efficiency reports. Others not so travel-minded remained close to home and took jobs which pertained more

to their interests, such as game management and specific branches of forestry available. Just a few of the boys who went west were Bob Toth, Jack Wood, John Ludwig, John Standeven, Chuck Furlong, John Hunter, and Carl Seaward. "Big" Jim Horsfal, Charlie Saboites, and Art Scheffler were three fellows who took pulpwood cutting, and logging jobs in New England.

In the field of athletics, the class of 1954 was well represented on the varsity football team by Beal and Furlong. Also, we were represented by Toth, Stender and Schlaack who are members of the varsity. ROTC, and Forestry Club Rifle Teams.

In the short time that we have been here, the class of '54 has given a good account of itself, and will continue to do so during the coming two years.

—NORMAN SCHLAACK





Class of '55

On August 29, 1951, 28 members of the Class of '55 who were to constitute the two-week freshman summer session at Princeton, arrived on schedule. That is to say, all except the stragglers who were left in Calais. The camp began the next morning with the ring of the never-to-be-forgotten "gut hammer". This was compensated for, however, by the good "chow" received during the camp session.

The first day we spent getting acquainted with Indian Township guided by Professors Beyer and Plummer. The remaining two weeks were filled with many activities. Trips were made to Pocomoonshine Fire Tower, Nason's Mill, and the Eastern Pulpwood Company's camp. Our trip to the Eastern Pulpwood Company was very worthwhile as we were rewarded with pastry by their friendly cook.

We picked up valuable information from Warden Ralph Bagley who spent a day with us. Warden Bagley spoke on fire control in Maine and demonstrated the use of a fire pump, and the repairing of telephone lines. We will all long remember building fire lines. There were plenty of blisters and mosquito bites as souvenirs.

Except for the broken hearts "Mahbubli" left in Princeton, Bill Brown's high dive off "Old Satch", and Brothwell's leg carving, injuries were minor, thanks to the careful watch of our instructors.

The fun ended September 12 with a 3 mile jaunt through all types of brush and swamps. Many of the boys were left limp after this one, but recovered to break camp the next day to start for Orono and the beginning of our first year on the campus.

At Orono, after a week of lectures, tests, and registration lines, we settled down to figure out how to stay in school and still take part in club meetings, sports, social activities, bull-sessions, "educational" trips to Old Town, and midnight dormitory "whing-dings".

With our first year little more than half gone, many of the Class of '55 have made names for themselves: in football, Ken Woodsum, "Muscles" Ludwig, Brad Hall, Dex Early, Dick Vaux, and Al Bengier; in track, Tom Shea, "Chiefie" Rogers, Fred Huntress, and Bob Wing.

In the pursuit of things called "girls" notable successes are reported—and doubted; except in the cases of "Hack" Hatstaat, who settled for one, and "Mahbubli" Gilson, who plays the field.

We outnumber all other forestry classes in the Forestry Club and have contributed our share in the construction of the cabin and in other activities. We are also active in the Maine Outing Club.

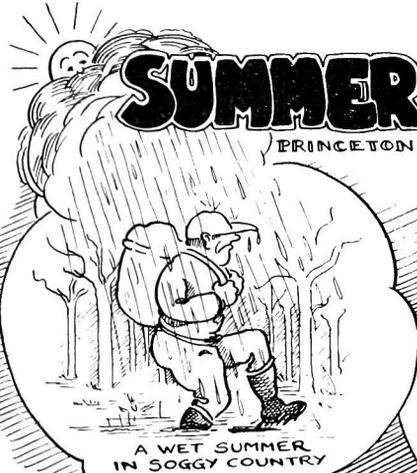
With the first semester's exams past and clear sailing ahead '55 now stands ready to take over the running of the University from the weary upper classes.

By BILL BROWN & BRUCE CORWIN

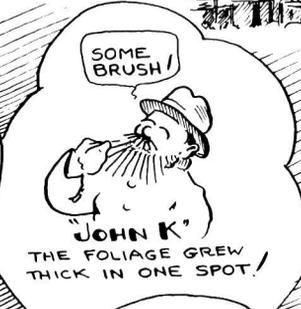


SUMMER CAMP

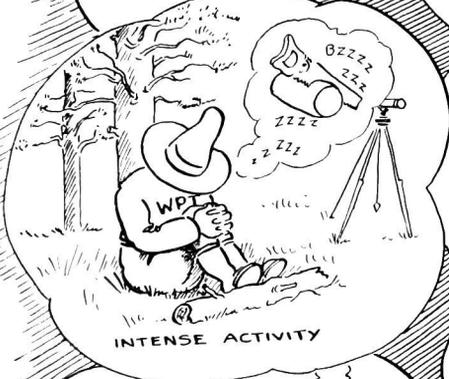
PRINCETON, MAINE 1951



A WET SUMMER
IN SOGGY COUNTRY



"JOHN K"
THE FOLIAGE GREW
THICK IN ONE SPOT!



INTENSE ACTIVITY



"DAILY RATIONS"



THE FORESTRY TRUCK



A LOT OF EXCELLENT
BASEBALL DURING THE SUMMER.

WOUNT

Junior Forestry Camp

From the "pellicle" show with Paul Bodurtha and Peter Mount, to the "bosque" with Professor Sanger, one would say that the Space Cadets, class of '52, have been "around town," and not to a Sunday school picnic. When Pete and Paul left summer camp they vowed to take post-graduate courses in carnival barking. They were especially interested in furthering their studies in the technology of gardenias. Funny thing about carnivals; they attract the old as well as the young. Our good professors: Randall, and Quick were most obliging, and oriented Professor Sanger to the American way of life, especially on how to attend a carnival.

Well, summer camp has come, and gone, and we are much the wiser for it. We probably won't set the world on fire with our scientific discoveries when we leave school, but we will take with us a great deal of courage; the kind of courage required to recruit a baseball team out of 26 leg weary potential foresters. We say 26, but that is not counting friend Gifford who preferred to save his energies to beat us into the chow hall. It seems that he liked the top of the milk for his crunchy wunchies. Our ball team fared very well indeed, although we lost a few more games than we won. We looked good in all but one game, and "Swede" pitched that one. The Indians were after our coiffures, and in five minutes the score was 8-0 in their favor. Straighter, and slower balls you've never seen. The catcher never saw them either. Needless to say that "Swede" was farmed out, but quick. "Dizzy" Rockwell came in to put the fire out, but alas! the damage had been done. "Dizzy" managed to keep the score in the double bracket, but lost 9 lbs. doing so. The Indians had our perukes; "Swede" went to Mulholland's to drown his shame; Rockwell went to the nearest photographer; coach Plummer left for New York, and didn't return till after the baseball season was over. We did have a good pitcher in camp, the moody kind, you know. When he felt like pitching he was hotter than a government mink coat, but when Wentworth didn't feel like pitching, he would merely cut himself with his axe. He has the prettiest scars too!

And then there was "Oats" Moreshead. After 9 weeks of summer camp, he decided that his oats just couldn't grow without his presence, so he left to take care of his grain, but he's paying for his dereliction now, and if you go out to the university forest most any afternoon, you will hear "Oats" bellowing "hazel 4 inches; alder 9 inches; dogwood 7 inches."

Well, all wasn't play and no work. There was plenty of work, and learning to be done. After the formal greetings were over, our three wardens ventured to orient us to the ways and means of the forestry profession. Telephone pole climbing was the order of the day. This chore, we found more difficult than appears on the surface. An unofficial speed contest developed between Plummer's crew, and Randall's charges. Mr. Plummer's crew found themselves on the short end of victory until one of our men ascertained that the other crew had a pole that was 6 ft. shorter than ours, and that they were only going half way up, except Tarzan Gove who could climb any pole in two strides. Fire-line digging was next on the agenda. Thanks to our good friend Bud Laurin, whose chore it was to establish the line using the cook's best XXX flour, who made the "fire" so huge that we got to know the boundaries of Indiantown on our first day out.

Then there was cruising. Some called it wading, because in some places on the town the words were synonymous. The pseudo-foresters (wildlifers) cruised in canoes, but most of us cruised on foot. Again we found out that cruising was not to be learned in a single day, as it involved more than just being able to read a caliper, and an Abney level. Our knowledge of dendrology came in quite handy. Anyway the cruises came out fairly well. There were many errors, and in some cases the percentage was unnecessarily high, until some of us decided to check cruise the check cruisers, and found that the check cruisers had been check cruising the wrong cruisers. Involves a great deal of cruising doesn't it?

Contour map making was next on the list. Professor Beyer forgave us our many blunders and errors, until he ran out of Wing cigarettes and from then on, more accurate and better looking contour maps were never made on Indiantown. Incidentally, who put rocks in Professor Randall's hub caps? Naughty! Naughty! We all knew that Bob Pidacks was training earnestly for his coming cross-country competition with the U. S. Olympic ski team, but we still have to learn what Bob Umberger was training for, making like Tarzan, pedaling bicycles backwards, and log rolling in the St. Croix River. Perhaps he was to be Pidacks' understudy. Anyway, at this writing Pidacks is working very hard at Sun Valley for his coming ski meet. Win, lose, or draw, we know that Bob will be in there all the way to bring glory to the university and to the school of forestry, and it goes without saying that the whole school is pulling for him.

The boys did very well with their pulpwood cutting in the eve-

nings; in fact they broke all existing records, and established new ones. They also broke all of the power saws, and cant hooks that we had in camp. The boys were quite hungry for a little extra cash, and every evening, rain or shine, one could hear, "Timber-r-r!" or, "Down the Mountayne!" Thanks to our two experienced cowpokes, Randall and Quick, and the efforts of the other Jimmy Nautrys', they managed to keep old "Satch" geehawing, and whoagidupping, during the whole logging operation. The whole camp was proud of the boys' achievements, and the fact that they all made money enough to pay off their debts to the rest of us who preferred to study in the evenings.

I wish that I could put in a dig for cabin No. 8, but those Paul Bunyans were so quiet, and well behaved that they deserved the "Good Foresters, and Scholastic Achievements Award". Unfortunately cabin No. 9 shaded them out. And then there was the day that we walked 4 miles to see something new in hemlock poisoning, but when we reached those bodacious conifers, they were more alive than most of us, but then it was a nice day out. Our two cement engineers, Moir and Ingalls looked good on the end of a long handled shovel, but they moved faster on 16mm film. I wonder who the camera man was?

Well, this could go on and on, because there is no end to such an experience as going to summer camp. We worked hard, played hard, and learned a great deal. All agreed that 10 weeks of actual field training is hardly enough time to practice all of the things that we have learned from books. In the years to come, as we join the other foresters before us trying to better the field of forestry, we'll look back on summer camp as one of the important steps in our preparations in becoming foresters. We missed a few of our friends at camp this summer, because they had to attend R.O.T.C. camps. They will find that their good friends remembered them, and they will find a tremendous amount of cruising left for them, as well as timber marking, cement mixing, and line painting. Good luck friends.

Summer camp was an experience, and a pleasure that we will remember for a long time to come. Almost every one put on extra pounds, felt happier, and increased bonds of friendship. All questions were answered with perhaps, one exception. Professor Randall is still trying to find out who hoisted his laundry up the flag pole. In all fairness to the others of the class of '52, whoever pulled this shady act should confess before June. Don't you agree fellows?

—DODD OUELLETTE

Departmental Affairs



Departmental Affairs

Our Department started the fall semester with an enrollment of 209 students, including a Freshman Class of 77. Our student body is fifth among the accredited schools in the United States and our Freshman enrollment fourth. Last year losses among the Freshmen at the end of the first semester were very heavy because of greater uncertainty as to the requirements of the military. This year Freshman morale is much higher and there have been few withdrawals. Out-of-state registration continues to be high—especially in Wildlife Conservation.

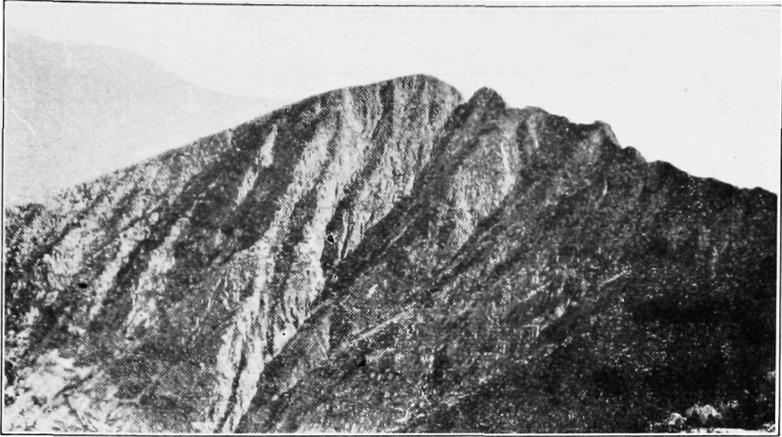
There have been no changes in our Department Staff since last year. However, there have been some changes in the allocation of time to various projects. Professors Baker and Beyer, who are on half-time with the Maine Agricultural Experiment Station, will study the marketing of products from small woodlands. Dr. Chapman will be employed one-fourth of the year by the Experiment Station and will continue the white pine study initiated by James D. Curtis. Professor Plummer is employed for two months of each academic year by the Maine Forest Service as supervisor of the State Forest Nursery. Professor Quick will continue half-time with the State Department of Inland Fisheries and Game as director of the work of their research unit stationed on the campus.

The only change in the curriculum this year is a three-hour requirement in accounting which was formerly given as an elective.

The Department has been issuing a series of Technical Notes prepared by members of the staff and advanced students. These are already going to many alumni and we should be glad to place any interested foresters on our mailing list. A complete list of the notes issued to date appears on page 42.

As stated in the 1951 Forester, the Department will have completed fifty years of service in the fall of 1953. It is planned to celebrate this fiftieth anniversary with a reunion of forestry alumni and a meeting which will be of interest to foresters, forest land owners, and forest industrialists. Greg Baker is chairman of an Anniversary Committee composed of the Maine graduates in our Department. The committee will make all necessary arrangements for the Anniversary Celebration and as plans develop you will be kept informed. In the meantime, please send us your suggestions so that we can make this affair the best ever.

—R. I. ASHMAN



Rugged Beauty Of Maine

Xi Sigma Pi

(Continued from Page 15)

and Xi Sigma Pi members met at a faculty member's house. This gave faculty and students a chance to meet and become better acquainted. It is anticipated that in the future these meetings will be continued and possibly extended to include upperclassmen.

Xi Sigma Pi student members are: Herbert Crafts, William Gove, Richard Connolly, Peter Mount, John McBride, Herbert Wave, and Bruce McLennan.

By JOHN K. MCBRIDE

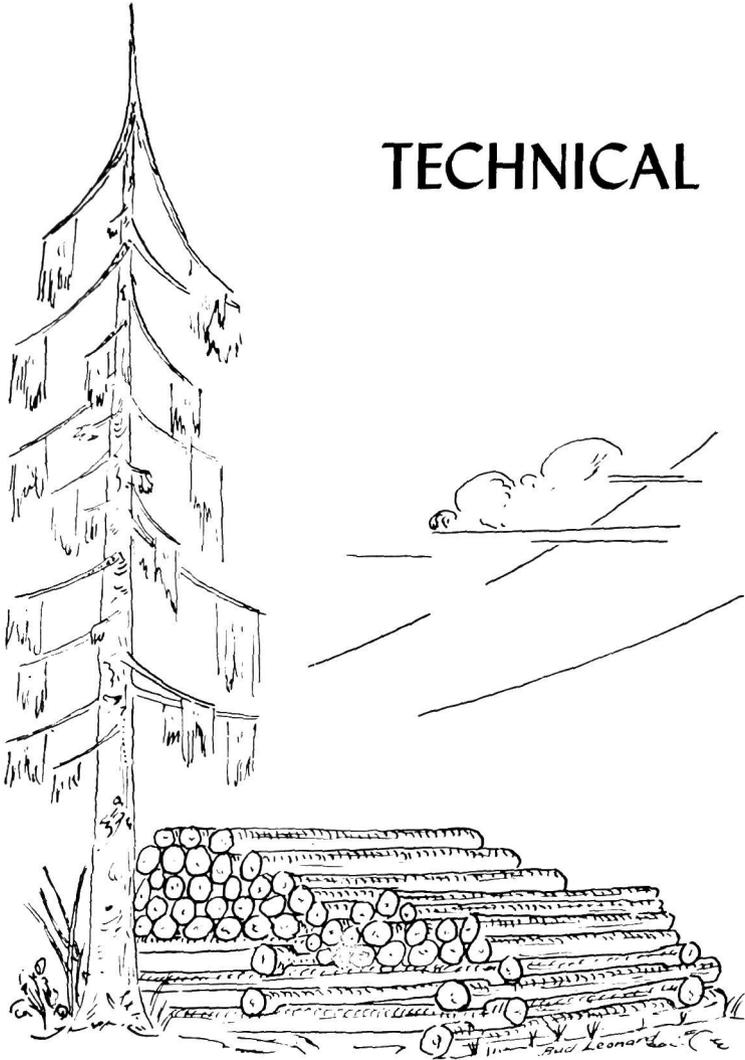
Technical Notes

TECHNICAL NOTES*

- Tech. Note No.* 1 A Preliminary Investigation of the Conformity of Girard Form Class Volume Tables to Various Species in Maine—1950
- Tech. Note No.* 2 Physical Properties of Forest Soils as Related to the Site Index of White Pine—A Progress Report—1950
- Tech. Note No.* 3 Porcupine Damage in a Mixed Scotch and Red Pine Plantation—1950
- Tech. Note No.* 4 Pulpwood Marking Rules—1950
- Tech. Note No.* 5 Cost of Selective Marking for Pulpwood—1950
- Tech. Note No.* 6 Calculating the Annual Cut in Uneven-aged Pulpwood Stands—1951
- Tech. Note No.* 7 A Field Check of the Existing White Pine-Soil Site Index Equation—1951
- Tech. Note No.* 8 The Effect of Log Storage Time on Development of Brown Stain in Northern White Pine—1951
- Tech. Note No.* 9 Influence of Silvicultural Practice and Species on the Solid Wood Contents of Peeled, Stacked Pulpwood—1951
- Tech. Note No.* 10 Nine Years of Bud Pruning in a Red Pine Plantation—1951
- Tech. Note No.* 11 One Hundred Years of Lumbering in the State of Maine—1952
- Tech. Note No.* 12 Some Financial Aspects of Managing Forests for Pulpwood Production in Maine—1952
- Tech. Note No.* 13 Site Index for Spruce-Fir Stands Based on Age at Breast Height and Total Height—1952
- Tech. Note No.* 14 Increased Yield from Thinning in a Natural White Pine Stand—1952
- Tech. Note No.* 15 Pruning Time Study for Spruce and White Pine in Uneven-aged, Natural Stands—1952

*Available on request from the Department of Forestry.

TECHNICAL



Contents

- “The Penobscot Experimental Forest” —EDWIN L. GIDDINGS
- “The Hot-Shot Fire Crew” —ARTHUR G. RANDALL
- “A Biometric and Economic Study of a Muskrat Marsh”
—D. D. COLLINS AND N. D. ERICKSON

The Penobscot Experimental Forest

By EDWIN L. GIDDINGS

Forester, Penobscot Purchasing Company

Nowadays when it is such a popular pastime to lambaste the Federal Government for its numerous shortcomings, it is a bit novel to find nine land-owning companies, mostly paper companies, asking a Federal Bureau to pick out a piece of land, any piece of land that it would like, then buying the land and leasing it to the Federal Government for ninety-nine years for practically nothing. Yet that is what the Hollingsworth & Whitney Company, the International Paper Company, the S. D. Warren Company, the Great Northern Paper Company, the St. Regis Paper Company, the Eastern Corporation, the Dead River Company, the Oxford Paper Company and the Penobscot Chemical Fibre Company have done recently. The situation that prompted this move was the need of all landowners for some long-term research work in timberland management in the spruce-fir hardwood forests of Northern New England, especially northern Maine.

The nine companies just mentioned, own something over five million acres of timberland in northern New England. Various ones have carried on investigations of cutting practices, marking, growth rates, hazard reduction, and innumerable other experiments over a period of many years. Austin Cary worked for a number of these companies years ago and his findings and recommendations are still used extensively. His "Woodsmen's Manual" is still the bible for the forester.

Until the last few years, when the Northeastern Forest Experiment Station established its Penobscot Research Center at Bangor, there had been no real focal point in Northern Maine for the research work, and no organization which could assure the sustained effort necessary for long-range investigations. The Bangor Center has produced a goodly number of useful management "tools" in the last few years and has laid the ground-work for many more to come. The need for a piece of timberland that could be used for demonstrations, and as a field laboratory where experiments could be carefully controlled, became increasingly apparent. A year ago, the nine companies mentioned agreed to buy 3,800 acres of land near Bangor

and lease it to the Experiment Station for 99 years for use as such an experimental and demonstration area.

The tract of land that the Experiment Station picked out for the companies to buy is only a few miles from Bangor and is directly across the Penobscot River from the former I. P. mill in Orono, the land being in the towns of Bradley and Eddington. It is called the Penobscot Experimental Forest. The land is certainly typical of much of the timberland in Maine in that it has been subjected to its full share of fire, insect attack, and heavy cutting, and yet it still has some reasonably good stands of timber on which investigations can proceed. Probably no one has yet doubted that the findings in timber management on that forest would be widely applicable in Maine. Certainly it is not a "park" or a hand-picked, high-quality model.

In addition to buying the land, the companies set up a fund of \$10,000.00 to build access roads in the forest to open it up. This money has built a few miles of gravel road and some other roads have been bulldozed for use during the winter months with money contributed in part by the Forest Service. Excellent markets for timber products are available around the forest with pulp mills, hardwood and softwood sawmills, veneer plants, turneries, and barrel factories, all within a few miles.

Acting as agent for the companies is a three-man Operating Committee which keeps the owners informed of progress on the forest, receives stumpage sale funds, keeps the taxes paid, and confers regularly with the Director of the Experiment Station on the programs and policies of the work being done.

The role of the U. S. Forest Service is to design and carry out the experiments in forest management work deemed most desirable for the area. The companies in no way try to prescribe what or how they shall be conducted and interfere in no way with the personnel. The Forest Service has recently completed a "Problem Analysis" for the spruce-fir region in which the forest situation was sized up, and from that has evolved a plan for experiments that can be carried out on the Forest. The Forest Service pays the salaries of the two full-time investigators on the forest and also provides their equipment and necessary buildings and office space. Also provided are the many specialists who contribute to the designing and carrying out of the program.

Three major projects have been undertaken so far. The first consists of a series of four ten-acre plots on which different intensi-

ties of cutting are conducted. On these it is possible to see demonstrated, on a relatively small area, the results of stripping the land, cutting to various diameter limits—about a 30-year cutting cycle, doing a “good” job of marking—about a 20-year cutting cycle, and finally, doing as polished a silvicultural job as can be designed—about a 5-year cutting cycle.

The second project is an elaboration of the first in which “pilot-plant” experiments are being conducted on the three best levels of cutting. Commercial operations involving some 40 acres each are designed to produce “cost-and-return” data for the various cutting methods. Arguments have been waged over these methods for years and innumerable examples of the merits of each system are available, but seldom are the records of a demonstration sufficiently detailed to convince the critics of the method. Now the companies should get enough detail to answer at least some of their questions, and determine the policy appropriate for their particular holdings. And, incidentally, this experiment is producing the stumpage to pay the taxes for this year.

A 40-acre “farm woodlot” demonstration has been started. On this, the wood is cut in a manner similar to that in which a farmer might cut his woodlot. The dead and dying trees are cut each year; a little fuel wood, lumber, pulpwood, and fence-post stock is removed periodically. An effort is made at each cutting to build up the growing stock. Detailed financial records make it possible to determine the return to the farmer in terms of wages for the work involved. After a few years of operating in this woodlot the companies will have another concrete example of “how-to-do-it” for the farmers who supply so much of the pulpwood.

On one end of the forest where the stands are in what appears to be very poor condition, a study will soon be launched to find out what steps can economically be taken to rehabilitate the area. The present stands are made up of a collection of small trees of low quality species with very few usable trees present. They are largely the result of repeated heavy cuts. The problem is to devise means for getting this land back into the production of quality material faster than by just letting nature take its course. It is possible that some method or combination of methods of weeding, thinning, or similar practices, can be developed that will prove to be practical on the acres of similarly depleted land scattered throughout the region. The dividends to be derived from this would probably be in the form of an increased growth rate on higher quality species.

There are many other projects under consideration that will be started in due time, and there will be by-products from the experiments already begun. Especially useful will be additional data on forest soils, site qualities, and rates of growth. Why do the companies want this type of information? As it becomes economically feasible to work the lands more intensively, detailed and formal timber management plans are called for, and these are beginning to appear for some holdings.

A higher level of management calls for more detailed information on the growing of the crops, especially on the matter of where and how these crops grow best. Rates of growth are especially important when scheduling harvesting operations, as each manager wants to be able to predict when the next cut will be possible. In several small studies on this general subject the Forestry Department of the University of Maine and the Maine Agricultural Experiment Station are cooperating.

There is no pressure from management of the companies to prove anything in a hurry on this forest. They all went into the project because they honestly and sincerely wanted to find out how their timberland business might be better operated, and to protect and sustain their supplies of wood. They are anxious to be shown, anything that will improve and sustain that wood supply. If people only knew how much is being done by these companies individually and cooperatively to improve the situation, they surely would be fascinated. It looks, at times, as though these companies have fully as much to learn about public relations as they have about timberland management. The Penobscot Experimental Forest is only one project among many going on in the northern forests, but it is bound to help both the timber supply and our public relations.

Thus we have started at long last an experimental forest in the spruce-fir and hardwood country with an experienced research organization to run it with able and competent foresters on the staff. The organization is so set that it should be able to weather the economic storms and sustain the investigations over a long period. Individual companies have turned over areas for experimental forests to the U. S. Forest Service in many parts of the country over a long period of years, but this is the first time that land has been deliberately purchased by a group of companies especially for the use of the U. S. Forest Service. It is a reassuring demonstration of cooperation, with government and private initiative each contributing to a project that should improve appreciably the welfare of the spruce-fir region.



By Cobb

Hot-Shot Fire Crew

By ARTHUR G. RANDALL

Assistant Professor of Forestry, University of Maine

Taking its place among the outstanding activities of Maine foresters is the work of a voluntary forest fire-fighting group, known as "Hot-Shots". This crew is now starting its second season, which it is hoped will be even more successful than last year. The crew is an outgrowth of experiences on the Black Woods and Bar Harbor fires in 1947 and the Greenfield fire in 1950. The excellent record made by students on those fires showed the advantages of organization and training; or to put an old saying in fire-fighters' terms, an ounce of presuppression may be worth several ounces of suppression.

The name "Hot-Shots" implies a crew possessed of the ability, skill and training to handle the most difficult sectors of a fire and to give demonstrations of fire fighting methods. Such crews have been

set up by the Forest Service and other organizations and have uniformly given an excellent account of themselves. The purposes for which the crew has been set up here are (1) to increase the forestry graduate's knowledge of fire fighting methods and equipment through practice and work on actual fires, (2) to provide effective assistance in emergencies affecting the State's forests, and (3) to reduce the likelihood of injuries through training.

Time given to practice and demonstration is entirely voluntary. For work on actual fires, State law provides that fire fighters shall be paid an hourly rate. Men who worked on the Greenfield fire were paid for both travel and work time, not of course for time resting or sleeping at the fire camp. The crew will go to a fire only in response to a call from the Maine Forest Service to the University Forestry Department. The "Hot-Shots" will be dispatched first when a call for assistance is received. In case large reinforcements were needed, they would serve as strawbosses and overhead for the expanded organization. Strawbosses with sufficient experience and training will be capable of acting as sector bosses.

Last spring 75 students were enrolled, of whom 50 received some training. The final meeting on May 16 was considered very successful. A total of 33 students and faculty turned out to suppress a theoretical 5-acre fire. A control line was built with hand tools around three sides and tied into a road on the fourth side. It was backed up by a pumper squad, which laid 1,100 feet of hose. Radios loaned by the ROTC were utilized for communication. A fire camp was set up, which served coffee and doughnuts donated by the Bookstore. Flashlights and lanterns were brought into use, as darkness descended before the fire was out and all men dismissed.

Adequate equipment for 75 men is kept in several red-painted boxes which can be quickly loaded on trucks. One portable power pumper is on hand with 1,400 feet of hose. Most of the equipment is owned by the University, but some hose and other articles have been provided by the Maine Forest Service. It is hoped eventually to have safety helmets like the "hard hat" shown in the accompanying picture. At present, crewmen wear red hats, the Maine Forester shoulder patch, levis, and heavy shoes or boots.

This spring a full program is in prospect through the interest of people outside the University. The Penobscot County Conservation Association has extended an invitation to put on a series of demonstrations at the Bangor Sportsmen's Show. Requests have also been received from Waldo County Volunteer Firemen's Association and Maine Federation of Fire Fighters.

A Biometric and Economic Study Of a Muskrat Marsh

D. D. COLLINS AND N. D. ERICKSON

Introduction

A project was undertaken in September, 1951, to study the population dynamics of a natural muskrat marsh and the effects of trapping pressure on the population. Information was also derived, concerning the economics of the fur resource of the marsh as an annual income and as an invested principal.

The marsh is situated in Old Town, Maine, between the northern end of Mud Pond and Pushaw Stream. It is approximately one mile long and one-quarter mile wide, or 160 acres.

Pre-trapping Population Estimates

A census of the area was conducted prior to the trapping season by taking a house-count. The count was made on foot and by canoe. There were 17 large and 9 small houses in the area. Using information presented in Wildlife Leaflet No. 306, wherein it is stated that one house represents five muskrats, a theoretical population of 130 muskrats existed in the marsh.

Simultaneous with taking the house-count, note was made of other population indices. Feeding platforms were found to be large, numerous, and heavily used. In many instances the platforms were 10 to 12 feet long. In places they were continuous along the channel bank. Two small local "eat-outs" were found. Trails and runways were abundant along the entire channel length. Such prevalence of sign indicated a large and concentrated population of muskrats.

The general appearance of the area in regards to food and cover, and sign seemed to indicate the population estimate computed by the house-count method was reasonably accurate. The summer of 1951 was a good breeding season and trappers were expected to find muskrats plentiful.

Harvest

An attempt was made to age and sex all muskrats taken from the marsh. A cooperating trapper kindly saved ten carcasses for the

study. Seventy-five muskrats were taken from the area in 12 days of trapping. No data is present for two of the muskrats taken, so further considerations involving age and sex will be based on 73 specimen, and other discussions will be based on 75 specimen.

Table I—Sex and Age Composition of 73 Muskrats Trapped

	Immature Males	Immature Females	Adult Males	Adult Females
Number	34	20	10	9
% (Approx.)	47	27	14	12

Table I shows the breakdown of the catch by sex and age. Males composed 61 per cent and females 39 per cent of the catch.

The average number of traps set per day was between 65 and 75. At no time were there less than 50 traps out.

Wring-offs numbered 13 and were listed according to whether they were front- or hind-foot losses. From these records and the recapture of only one animal with a missing foot, the minimum number of animals represented is four and the maximum is 13. This raises the total population determined by trapping to a minimum of 79, or a maximum of 88.

Residual Population Estimate

The muskrat population immediately preceding the trapping season has been estimated by the house-count method to be 130 animals. Trapping pressure removed 75 animals. We can only assume that the sex ratio of the remaining animals is comparable to the ratio indicated by the trapped specimens. Therefore the remaining muskrats are 33 males and 22 females, derived as follows:

	Total	Muskrats per acre
Pre-trapping population	130	0.81
Trapping harvest	75	0.46
Residual population	55	0.35
Sex ratio of the catch—1.51 males to 1 female		
Residual males	33	
Residual females	22	

Placental scar counts give an index to productivity. Mortality factors reduce productivity. A measure of summer mortality can be obtained from the placental scar counts with the aid of other data.

Scars on the uteri of adult females were counted to determine the average and total number of young produced. The average of the 9 females was 15.6; the total was 141.

The mortality rate of the young from birth to the trapping season can be expressed by the following computation:

Ratio of young to adult females (determined by placental scar-count)	15.6 : 1
Ratio of young to adult females at harvest	6 : 1
Mortality of young from birth to harvest	9.6
Summer mortality rate of immature animals	61%

On the basis of available data, a residual population of 22 females could produce 132 muskrats in one season. It does not account for winter loss of the potential breeding population.

While complete population data was not obtained, it seems reasonable to conclude that the residual population can be expected to sustain the harvest.

Marketing

Bids were obtained on the furs from three separate fur buyers to furnish a comparison of methods used by buyers, prices, and the seasonal affect on prices.

Table II—Fur Buyers' Bids

Buyer	Date	Bid*	Average price per pelt
1	12/ 2/51	\$133.90	\$1.85
2	12/ 2/51	129.90	1.80
3	12/23/51	106.90	1.46

*Includes \$20 for mink pelt from buyers 1, 2, and \$18 from buyer 3.

Buyer No. 1 had purchased such a large number of furs during the season that he was able to quote a flat price per pelt—without inspection. Buyer No. 2 graded the pelts on quality and size and quoted a value on each grade. Buyer No. 3 used a grading system such as No. 2 used. The price buyer No. 3 offered was lower partly because of late market conditions and partly because his offers were generally lower throughout the whole season.

Income and Investment

The income realized from muskrats alone amounted to \$88.90. Investments of this trapping project are listed below:

Traps lost plus depreciation*	\$ 4.80
Stretchers (depreciated)	.54
Licenses at \$5.00 each	10.00
Car expenses	5.00
Postage	1.24

	\$21.58

*Depreciated at 10% per year

Profit and Wages

Net profit obtained in this project amounted to \$85.32. When trapping is done as a spare time proposition (as in the authors' case) the income above expenses may be considered clear profit.

However, conversion of profit to an hourly wage basis produces a less attractive return of \$.76 per hour for 111 hours of actual work.

Capital Evaluation

Income received from the sale of the muskrat pelts may be likened to the return on a principal. In either case the value of the principal may be found by using the standard formula:

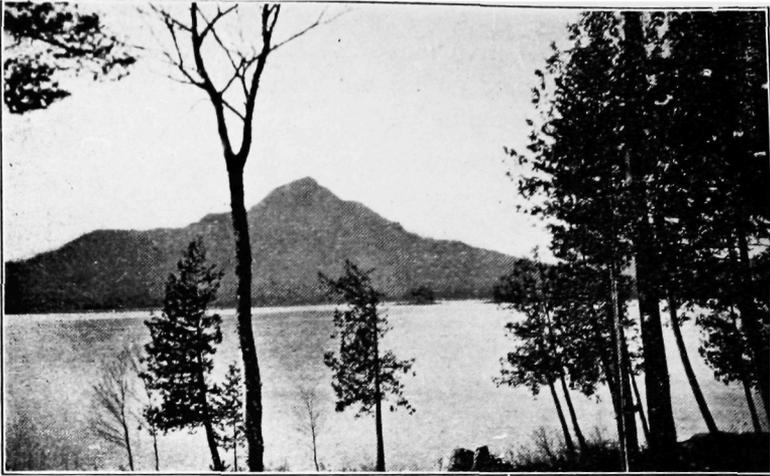
$$\text{Capital equals } \frac{\$85.32 \text{ or } \$2,100}{0.04}$$

Considered on the basis of the data above, the marsh can be evaluated at approximately \$13 per acre.

Summary

In this study trapping pressure did not reduce the population below a breeding potential capable of restoring the fall population level.

Although a profit was realized, it could have been increased by more than \$25 had the furs been sold earlier in the season.



News
Of
The
Alumni

1909

George D. Carlisle is the new secretary of the Eastern Maine Forest Forum.

1920

Bob Averill is a member of the firm of Prentiss & Carlisle in Bangor, Maine, and is living at 118 Royal Rd., Bangor, Maine.

1923

William M. Foss visited the Campus last spring.

1924

Gregory Baker is now a full Professor in the Forestry Department at the University of Maine.

1925

Jim Davis is employed by the Dead River Company of Bangor.

1926

Maurice H. (Mossie) Burr, although principally engaged in engineering work, has maintained his interest in forestry and comes up from Northeast Harbor to attend the monthly meetings of the Maine Forest Forum.

1927

Tommy Dickson spent several weeks in the hospital this winter because of an injury to his spine, but is back on the job now. Tommy, Jr. is a member of the Class of 1953 and studying forestry at the University of Maine.

E. G. Kelso is working in the Timberlands Department with the Hollingsworth and Whitney Company, Waterville, Maine. He is Chief Forester, North.

1929

Lyman A. Davis is employed by the C. M. P. Co. as Transmission Engineer. He also owns and operates an apple orchard at Monson, Maine. His address is 9 Green Street, Augusta, Maine.



Spruce and Fir Pulpwood landed on Truck Road at Red River Operation destined for Mills of Great Northern Paper Company, Largest Newsprint Manufacturer in the United States.

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SPRUCE WOOD DEPARTMENT

1930

Henry Plummer is now an assistant Professor in the Forestry Department at the University of Maine.

1931

Horace F. Flynn has gone back into the Army as a Colonel.

1932

Allen W. Bratton, Prof. Ashman and Gordon Chapman had a short chat last summer on the road north of Paul Smith's, New York. Allen is still working on the New York State taxation study and at the same time keeping his consulting business going.

1933

Harold J. (Weasel) Barrett has been working in the field of forest influences for the Northeastern Forest Experiment Station, Upper Darby, Pennsylvania.

John I. Bankus is serving as a Colonel with the U. S. Army in Germany.

1935

C. O. Totman—"Clayt" Totman—called at the office in January. He is now a full Colonel in the U. S. M. C. and has been transferred from Quantico to Norfolk. While at Quantico Clayt thoroughly enjoyed himself managing the large government reservation for forestry and wildlife.

1937

W. Robert Dinneen is in charge of the Farm Forestry work with headquarters at Bridgton. His address is 93 S. High Street, Bridgton, Maine. Bob visits the Department Office quite frequently. He is busily training three new Farm Foresters. Several members of the Faculty visited some of Bob's selectively logged areas in western Maine last summer.

Raynor Brown has gradually acquired a large acreage of timber land in the vicinity of North Waterford, and Albany, Maine. He is doing an excellent job in forest management and integrated logging, using his own crews.

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TERRILL WHITEND PULPWOOD SAWS

Ralph A. Beisel has left the Soil Conservation Service to return to his old home in Lehighton, Pennsylvania.

1938

Richard F. (Dick) Burgess completed work for his Master's Degree in Botany at the University of Maine in May, 1951, and is now studying for his Ph.D. at the University of Minnesota.

1939

Gordon Chapman has recently co-authored several notes in the series of Technical Notes being issued by the Department. See page 42.

George Doe is doing well as a dentist at Kezar Falls.

Jay S. Gashwiler (M.S. '39) is the Assistant Regional Biologist, Fish & Wildlife Service; his address being 1343 Allen Park Drive, Salt Lake City, Utah.

1941

Everett B. (Jake) Chamberlain is still employed by the Delaware Fish and Game Commission. Jake was present with fourteen other alumni at the regional game conference in Washington last February, 1951. His address is Box 45, Wyoming, Del.

1942

R. H. (Bob) Dyer is working for the Forster Manufacturing Company of Strong, Maine.

Victor Glider is working as Forester with the New York Conservation Department at Norwich, New York. His address is Box 27, Sherburne, New York.

Arthur G. Axtell is Forester on the Rockefeller Estate, New York. His address is Tahawus, New York.

Dick Cranch and Mrs. Cranch are the proud parents of a daughter, Roberta Lee, born on December 6, 1951. Almost a Christmas present.

1943

Herschel Abbott is doing graduate work at the Harvard Forest, Petersham, Mass.

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1944

Charles P. Brown (M.S. 1944) is beginning his eighth year in game research in New York, and sends his regards to his friends in Forestry.

1946

Norwood W. Olmsted is in charge of wood procurement for Finch-Pruyn, and his address is 75 Main Street So., Glens Falls, N. Y.

1947

Will Johns is on leave of absence from the Pennsylvania Game News to serve again in the Army.

Freddy Baird is still stationed in Boothbay Harbor. He is doing research work on scallops.

Richard A. Hale is operating a portable mill business in Lisbon Falls, Maine.

Art Davis writes from Washington, D. C. "After my year of special training I was offered a good deal in D. C., so now I'm on the way of being a case-hardened bureaucrat. My work is in the Fish and Wildlife Service, Branch of Refuges Section of Land Management. Forestry is one of the special uses we deal with as well as trapping, haying, grazing, farming, etc. We also formulate regulations, executive orders, etc., and deal with land acquisition and all special uses including rights-of-way, oil and gas, minerals, etc." Art is living with his wife and three children at 819 West Ave., Silver Spring, Maryland.

1948

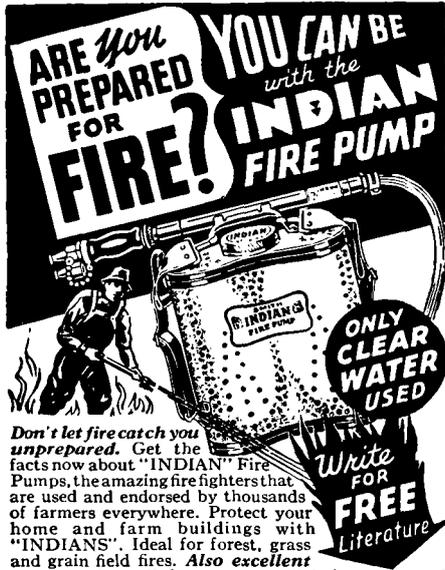
H. S. Ripley has left the Eastern Pulpwood Company to work for the New England Forestry Foundation. "Rip" is now living at Newport, N. H.

R. M. (Bob) Moulton is operating a gas station. His address is 189 State Street, Bangor, Maine.

Barker W. Hopkins is with the Soil Conservation Service, R.F.D. 3, Belmont, N. Y.

1949

Stan Tyler writes from Fort Hood, Texas: "was walkin' through the Florida scrub one day when I put my foot into a bear trap, but



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instead of a log on the other end of the chain, there sat the draft board. Well, I guess I can consider myself very lucky for not taking the 'slow boat to China' as yet." Stan's address is Pfc. S. W. Tyler, 12375106, Co. B, 4th Medium Tank Bn., Fort Hood, Texas.

Phil Archibald sold his store at Monticello last year and is now doing graduate work in forest management at the University of Michigan School of Natural Resources, Ann Arbor.

Robert T. Adams has recently been transferred from the U. S. Fish & Wildlife Service to "Forester" in the Timber Management Agency of the U. S. Bureau of Land Management. His address is 1245 N. 29th Street, Billings, Mont.

Gerardus C. DeRoth (M.S. 1949) is at the University of Michigan, Ann Arbor, with the Department of Zoology as a teacher.

Robert J. Buck, when last heard from, was back in the Army.

W. S. (Sid) Howe is now stationed at the University on research for the Department of Inland Fisheries and Game.

Marvin Chitty addressed the Forestry Club at the University this fall on the subject of Forest Management by the Penobscot Development Company of Great Works by whom Marvin is employed.

Clarke Church of the Hawkins Lumber and Warehouse Company, Boston, Mass., is a frequent caller at the office when he is traveling in Maine.

Fred B. Knight is Forest Entomologist at the Forest Insect Laboratory, 233 Forestry Bldg., Colorado A. & M., Fort Collins, Colo.

1950

Bill (W. G.) Adams is working as a Farm Forester in the area around Augusta where he has his headquarters. Bill and Carol have a son, William John, born January 15, 1952.

Dick Arsenault is working for the Maine Forest Service as a Farm Forester. His address is 341 Lower Main Street, Sanford, Maine. He says that he likes his job very well.

Ed Chase has left his position with the Bartlett Tree Expert Company and is now employed by the Great Northern Paper Company, Bangor, Maine.

J. P. Loranger of the Diamond Match Company has moved to Whitneyville where his organization is handling the lumber produced by the mill formerly owned and operated by L. D. Crane.

W. F. (Win) Hibbard is working as lumber inspector with the Oval Dish Company, Tupper Lake, New York.

Walt Buckley has just returned from a tour of duty with the Field Medical Service of the U. S. Marines.

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Forrest Nelson completed requirements for his Master's degree at Penn State early in the summer and is now employed by Prentiss and Carlisle in Bangor.

R. E. Niskamen is working as a Farm Forester with headquarters at Island Falls, Maine.

Fred Dean is completing graduate work in Wildlife Conservation at the University of Maine.

Jim Babb has been called back into the Submarine Service and hopes to get a commission.

Allan W. Burgess is working for the Atlantic Lumber Company.

G. C. Merchant is working as Forester on the Phillips Brook Experimental Area for the International Paper Company. His address is West Milan, New Hampshire.

John Boynton has been working for the U. S. Gypsum Company of Lisbon Falls, Maine, since soon after his graduation.

Edwin W. Forsyth has recently returned from Alaska where he was doing mapping work for the U. S. G. S. and is now working for the same organization in the Continental United States.

Robert W. (Bob) Fuller is a Graduate Assistant with the Co-operative Wildlife Research Unit, Utah State Agricultural College, College Hill, Logan, Utah.

Leo D. Lamond—Leo finished his M. F. Degree at Duke University School of Forestry in June 1951.

Stephen Orach—Steve finished up at Penn State for his M. F. in June '51. He is now working as a State of Maine Farm Forester for York and Cumberland County.

Arnold J. (Busch) Buschena—after a summer spent as Custodian of the Dolly Copp Campground on the White Mountain National Forest and a year in the woods of New Hampshire with the Brown Company, has deserted the snows of the North for the sands, palmettos, and pines of Florida. When last heard from, he was living in St. Petersburg.

1951

Robert Pidacks writes from Lovlia, Norway, "At this time we are training at Lovlia which is a lodge owned by Skiforenigen an organization for the furtherance of skiing in Norway". Bob says that he finds it quite fascinating there and that he is learning a bit of Norwegian. He is on the U. S. Olympic X-Country Ski Team, Olympic Village, Oslo, Norway.

Stuart M. Turner is working for Eastern Pulpwood Company, Calais, Maine.

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O. K. Tripp is with the U. S. Forest Service studying the effects of frost on forest land, in Central Maine.

L. S. "Zack" Taylor is a graduate student at Penn State.

Richard L. Sawyer is on active duty as a 2nd Lieutenant with the U. S. Army.

Dwight B. H. Smith, Jr. is with the Army Mapping Service. His address is 5014 Elm St., Apt. 4, Bethesda 14, Maryland.

H. E. Kilbreth, Jr. is working for his uncle, W. D. Matthews Woodworking Machinery Co., Auburn, Maine. "Hal" is a frequent visitor here at the University. He has recently completed construction of a new home in Turner, Maine.

Clinton E. Tripp is working for the U. S. Forest Service, Forest Hill, California.

R. A. Tuttle is working for Gordon Aimsworth Ex-'31, who was featured in an article for the Saturday Evening Post, "The Country Surveyor", a year or two ago.

Harmon Thurston is now employed by the International Paper Company, Rumford, Maine.

Ken True is with the J. B. Deering Lumber Company, Biddeford, Maine.

Bob Umburger is with the Maine Forest Service, Bangor, Maine. Bob was in a few days ago and said that he liked his job very well.

A. C. Willis is with the Maine Forest Service, working in the Augusta office.

R. W. Wright is a scaler for the St. Regis Paper Company.

Howard A. Roberts has been doing reconnaissance work for the Bureau of Entomology and Plant Quarantine. His address is Office of B. R. C., 2288 Fulton St., Berkeley 4, California.

George LaBonte is working as a Forest Entomologist with the Maine Forest Service.

Abbott Ladd is a Forester employed by the Great Northern Paper Company.

Vaughan McCowan is a graduate student at the University of Michigan, School of Natural Resources.

Fred McCleary is working for the New England Forestry Foundation at Damariscotta, Maine.

W. W. D. "Bill" Melcher has his headquarters in Bingham while working with the S. D. Warren Company.

Harold Clark Nelson is now in the U. S. Army.

Eben Osgood is in the Army.

Bill Philbrick recently reported for Army training at Fort Belvoir, Virginia.

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L. F. Keenan is employed by the Army Mapping Service in Washington, D. C.

Elwin Edward Macomber is a Farm Forester with headquarters in Bangor.

Warren Alieff is with the Illinois State Highway Commission.

Fred Bigney is with the Great Northern Paper Company and working out of Greenville.

Vernon Bond is a 2nd Lieutenant in the Army.

Bob Bradford is a forester with the Eastern Pulpwood Company.

John Curran is working with Sears, Roebuck & Company.

Malcolm Durward is a biologist with the Massachusetts Department of Conservation.

Edwin R. Grove, Jr., is with the Maine Forest Service. His address is Central Street, Winthrop, Maine.



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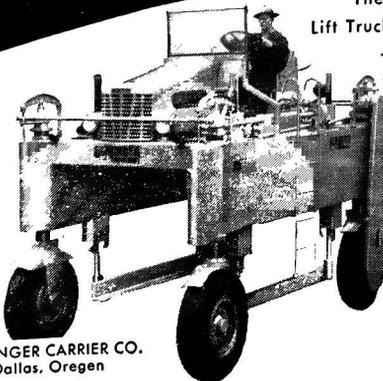
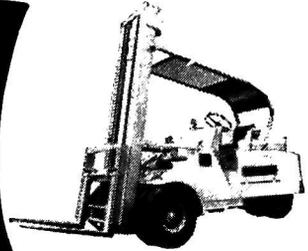
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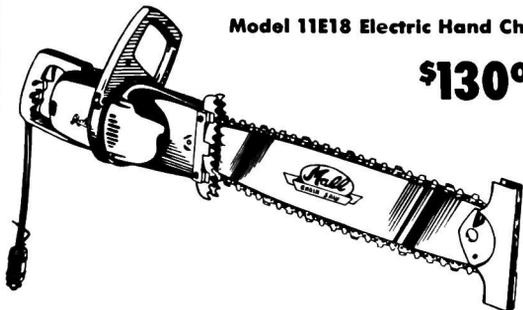
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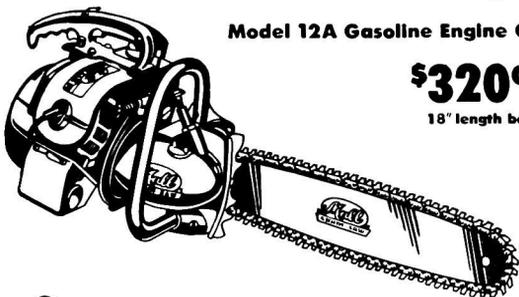


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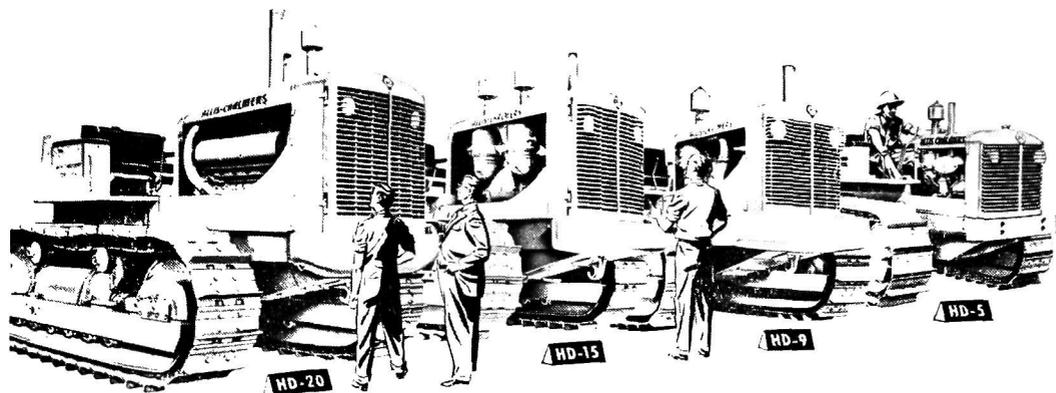
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Darryl V. Beisel

1927-1951

On April 5, 1951, Darryl V. Beisel, Class of 1950, lost his life in an accident while engaged in a logging operation near St. Arvielri on the Canadian border while employed by the International Logging Company. His loss is deeply felt by his many friends on the faculty, among his classmates and associates. All who knew him respected his ability, admired his personality, and valued his friendship.

The profession of forestry has lost a member of great promise, and we have lost a friend.

Darryl's father, who lives in Lehighton, Pennsylvania, has written the Department offering his textbooks to be used by some needy forestry student.

Darryl was the nephew of Ralph Beisel, now working as an engineer in Lehighton, Pa., who graduated in Forestry with the class of 1937.