

TREES ARE BOOKS

in the

YALE FOREST SCHOOL

Mr. Gifford Pinchot's Pennsylvania Estate the Training Ground for Students Who Seek to Solve the Mysteries of Dendrology.



SOME eleven miles from the railroad at Port Jervis and two miles from the little town of Milford, Pa., the Yale forest school has pitched its camp. Here for 10 healthy outdoor weeks those who, according to a campfire song,

Want to be a forester
And work for Gifford P.,
Assemble, from the snows of Oregon to the sunshine of California, to receive their first instruction in the profession of forestry.

The camp is situated on a high plateau which is part of the estate of Gifford Pinchot, chief forester of the United States, whose home, Gray Towers, lies half a mile away, across the gorge of the Sawkill. The camp proper has four simple one story buildings, and a stone cottage near Gray Towers, in which those who are taking the short course have their lectures.

These buildings are the mess hall, roofed, but open to the winds of heaven on the sides, with its accompanying kitchen; junior hall, where the surveying instruments are kept, and the lectures and recitations in surveying held; a small building which contains the office of the director of the camp, with a small working technical library, and supplies of callipers, tapes, hypsometers and other instruments pertaining to the profession of forestry, and last, but not least, the heart of the students, the clubhouse, a building with one large room and an immense fireplace, the walls hung with pictures of past classes and the colors of many colleges.

The students live in army tents, two to each canvas covering, pitched along the two streets, Fifth avenue and Broadway, which extend from the Flatiron building, a rather dudishly white tent, into the woods back of the clubhouse. The residences along these two famous thoroughfares are furnished with cots and blankets, washstand with washbowl, two chairs and a table. Luxury creeps in in the form of bookcases, improvised from fragments of packing boxes, and a straight limb swung from the ridge pole of the tent, on which a man may hang his other flannel shirt and khaki trousers. These two streets are the healthiest in the world, and trade never has and never will encroach on them.

On July 6, 1909, when the school opened, there were forest fires burning on the hills in several directions, and a call for volunteers to fight them was issued. The wise ones put on heavy hobnailed boots and left their coats behind; the uninitiated suffered for their ignorance. There can be no more pitiful sight than a man wearing his coat and smooth soled shoes trying to carry two pails of water up the side of a hill made glacial with pine needles.

Under the orders of the instructors and some senior students the fires were beaten out with hemlock boughs dipped in pails of water, then tiny but effective fire trenches were dug, and scientific back firing felled the hungry flame with its own weapons.

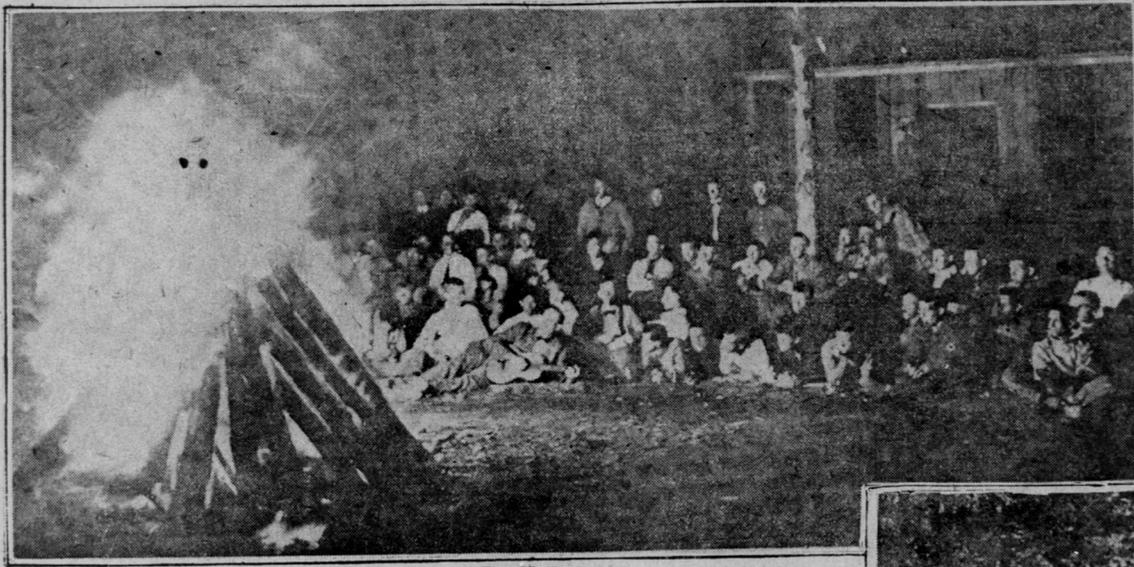
Many a Sore Muscle

When night came the fires were either out or under control, but there were sore muscles and blistered hands galore. The way beans and roast beef disappeared in the mess hall, however, banished all fears of internal injuries.

The next day the camp was formed into two divisions, one of which went to Junior hall, where it was given a short lecture on the fundamentals of surveying and then turned loose outdoors with tape, plumb bob and instruments to put into practice what it had just heard. The other division assembled in the clubhouse, where it listened for an hour and a half to a lecture on mensuration. They were told how by measuring an arbitrary distance from the foot of a tree, setting up a stick with a notch in it at a given distance from the ground, and lying down and squinting across this notch till they got it in line with the top of the tree they could find the length by the method of similar triangles.

They discovered that callipers were simply a piece of wood, with one fixed and one sliding limb, which placed on the trunk of a tree showed its diameter in inches on the piece of wood along which the limb slid, and that a hypsometer was an instrument which gave the height of trees in a more refined manner than the stick and notch method. After some information had been furnished as to the standard lengths into which logs are cut, they were divided into crews of three and four and sent into the woods with a small map to find how many logs might be cut from a certain area.

There are only three subjects in the regular curriculum of the summer school, all very practical. The surveying is all field work, the office work being done later in New Haven; mensuration, which covers the estimating, cruising and valuation of timber from every point of view, the study of log rules and volume tables, and ends with stem analysis, by means of which the age, contents and rate of growth of individual trees is determined. The timber is all felled, trimmed and cut by the students themselves. Dendrology, the third subject, teaches the scientific name



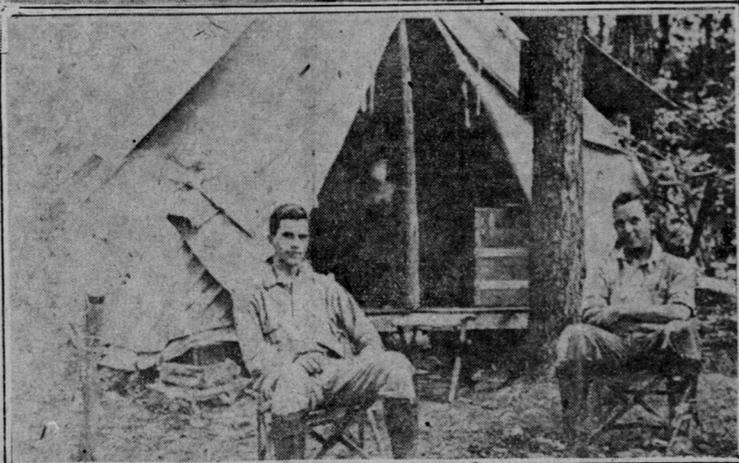
Camp Fire Night



The Club House



View of the Camp Looking Up Fifth Avenue



Two Foresters and Their Home

of every tree. The students are taught by frequent field expeditions to recognize at sight by both scientific and common name more than 100 different trees and important shrubs. Those who had not studied geology and elementary botany in college were given this year an opportunity to take these subjects Saturday and Wednesday afternoons as extra courses.

There is a short course in forestry, covering seven weeks, which is open to those who have not a college degree, but the men who intend to make forestry a profession and receive a degree of master of forestry at the end of their course must be graduates of a college or technical school of recognized standing.

The aim of the greater part of the men is to go into the government forestry service, but lumbering, private and state forestry claim their quota. The demand for men with a technical training in these pursuits increases each year and far exceeds the supply.

The students are drawn from all over the United States, with an occasional stray from other countries, as many as 29 different colleges being represented in one class. For the most part the men are athletes, the absence of letter or numeral on a sweater, the emblem of prowess at football, baseball or track, being rather the exception than otherwise. In age they range from the recent college graduate in the twenties to the man nearing 40, who has finally succumbed to the call of the wild.

The standard of scholarship is very high. It could not be otherwise when each man is doing exactly what he has chosen for his lifework. There is no nonsense in the course; it is intensely practical, and weaklings, physical or mental, find themselves quickly by the wayside.

Plenty of Good Play

One must not think, however, that it is all work. There is good, healthy play, and plenty of it. A baseball team, and a very good one at that, plays the neighboring villages on the Wednesday and Saturday half holidays, while the students encourage their champions with a cheer which is an astounding compound of one of the Indian tongues and the pleasing note of the hoot owl:

"Kick a lack, kick a lack, toodle kie ay!
Kick a lack, kick a lack, toodle kie ay!
Ca-hool ca-hool!
Forest school! Forest school!
Yale! Yale! Yale!"

The translation of the euphonious first part being: "Get away, get away, little yaller dog." There are two good home made tennis courts, on which the championship of the camp is decided, and numerous trout streams in the neighborhood and all the treasures of the forest.

In the rugged gorge through which the Sawkill flows willing hands have built a dam, behind which there rises a beautiful deep pool, just the spot for a tired forester after a 20 mile "hike" through the woods.

By far the most individual and characteristic feature of the school is the "campfire," which takes place every other week.

Gifford Pinchot dropped in between trains early in the summer and was present at one of these events. No body of men ever listened to a leader with deeper attention than that silent circle, lit only by the flames of the fire, as he spoke of the life before them, warningly, encouragingly, prophetically. He spoke as man to man, and the earnest, living words far surpassed any flights of oratory.

A day or two after his advent the following slogan sprang into existence:

"Mine eyes have seen the coming of the saviour of the tree,
Our great and glorious champion who set the forests free.

His name shall go resounding over land and over sea
While Pinchot marches on,
Glory, glory conservation!
Glory, glory conservation!
Glory, glory conservation!
Three cheers for Gifford P.

When there is no one to address the campfire meeting the students furnish their own program. A quartet sings an ode to the pitch pine, in which, in defiance of its scientific classification, it is charac-

terized as a "daisy" and the audience is further informed that

"It certainly sticks to me."

a statement which they have ample opportunity to prove correct. Or the whole assembly breaks into the following classic ditty:

"Oh, underneath the hill there is a little still,
And the smoke goes curling to the sky.
You can easily tell by the snuffle and the smell
There's good liquor in the woods close by.

"It fills the air with fragrance rare
That's only known to few,
So pucker your lip and take a little sip
Of the good old mountain dew."

while the echoes of the astonished woods and rocks of darkest Pennsylvania give back the last long drawn out "dew-w-w-w."

At other times representatives from various colleges are called upon to tell of their alma mater. And last, but by far the most interesting, are the tales of those who have been in the forests of this land and others.

One Man's Experience

There was one man who started to run, by compass, the boundary line between two South American republics some years ago. His bearers deserted him, food gave out, water was only drinkable when taken from a certain vine which stored it up, and, when cut, released it drop by drop. After wading through swamps, at times breast high, for the better part of two days, where the alligators made night hideous by their bellows, he reached dry land, only to be in-

formed that a revolution was taking place and that bandits were lying in wait on his trail. The story of how he avoided the bandits and the final quelling of the revolution is an epic in itself.

A young westerner had spent the previous summer with a surveying party which was running a line through the heart of the Ku-Klux country. By chance they stumbled on a store of the characteristic garments of these gentry hidden in a cave and which had evidently been undisturbed for many years. They promptly appropriated them as souvenirs, swearing each other to secrecy, and went their way.

Unfortunately, a rodman looked on the local untaxed liquor in its original virgin white strength and let the secret out.

Not many days afterward, in the dead of night, the surveying camp was visited by a party of masked men with large and businesslike revolvers. The surveyors were driven from their tents, their bags unceremoniously dumped on the ground, and the Ku-Klux garments recovered and burned. They were then given a drink of mountain dew and warned to leave all such finds alone in the future and not to mention the present incident on pain of very disagreeable consequences.

"And you bet your life we didn't," concluded the

narrator, "until we got good and plenty out of the country."

There were tales innumerable of the wild beasts of the wilderness, of mighty trees, great forest fires and the devastating rush of winter avalanches.

It was all delightfully informal. The men lie around the big fire on blankets, the smoke of their pipes drifting into the darkness.

Two miles down the hill (and three miles back home up the same hill) lies Milford. The inhabitants can never understand why the embryonic foresters "pay for doin' work that they could get a dollar and a half a day for doin'," but, nevertheless, they welcome them to the hotel dances.

The last campfire is ladies' night. The clubhouse is decorated with axes, saws and callipers and spoils of the forest, contrasting with the bright college colors on the walls. Fair maidens and their escorts sit around the campfire while the quartet sings its sweetest and the bold foresters look their boldest. There are no carriages, and each man gallantly sees the lady of his choice to her doorstep.

When the 10 weeks are up as happy and healthy a set of men as there is in the United States leaves for the two weeks' vacation. They have had a solid, practical experience on which to base the highly technical work in New Haven. At the end of September they gather together in the City of Elms and continue their instruction, half in the field, half in the classroom, until the spring.

For the most part they then secure minor positions in the government forestry service for the summer, teach or work with surveying or cruising parties.

They are graduated after the two year course with both a practical and technical knowledge of forestry in all its branches, and find an opening ready for them in lumbering, teaching, private forestry, or, after passing Pinchot's examinations, a place in the government forestry service.

THE HASH DIALECT

"THE old order changes, all right," said the white haired book keeper, taking a tray from a pile in one of the "help yourself" quick lunch places and passing down the counter. "It's changed so blame much that nowadays you don't give any order at all."

"I've been buying lunches down town for 30 years," he went on, as he settled himself at a table with his selected repast, "and I tell you I miss the kind of restaurant we used to have before these porcelain, automatic, self-cooking resorts came in. Why, there used to be some mental stimulus and agreeable amusement with your hash. But now you hurl in as much as you can hold or afford, glare at your neighbor as if you thought he was going to grab the pie, and break for the door."

"Take this matter of orders. You won't hear anything in hash dialect nowadays, except, maybe, 'one in the black' or 'brown the wheats,' even where they still keep waiters. A man used to be kept guessing in the old days, figuring out the combinations every restaurant had for certain dishes."

"Now there was 'Tommy in the bo-owl! Tommy!' You'd hear a waiter bellow that and if you were initiated you knew he was ordering tomato soup. 'Bobby blue on the iron!' was certainly an effective substitute for baked bluefish. 'Moonlight on the lake!' had a lot more poetry to it than plain 'poached egg on corned beef hash.' 'Adam and Eve on a raft' was way ahead of a prosaic demand for poached eggs on toast. But that's the tendency these days. Life is growing harder, faster and snarlier. We're losing the glamour. The hash dialect went out with cranking telephones and the county democracy."

