Are We Too Many?

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THE greatly increased enrollment of students in the forest schools of the United States is viewed with considerable alarm by many, and the question is often heard, "Where will all of these students find employment?" Perhaps it might be well to explore a few of the possibilities for men who have forestry training, particularly those possibilities in the field of the forest industries.

Since the inception of the forestry movement in this country and the beginning of forest education most of the graduates of our forest schools have found employment in a relatively few fields. The study made by Graves and Guise shows that 27.4 percent of such graduates have entered the United States Forest Service, 29.2 percent have found employment in the forest industries and much smaller percentages in various other activities, mostly of a public nature. The study would seem to indicate that the industries were absorbing their share of the forest school graduates.

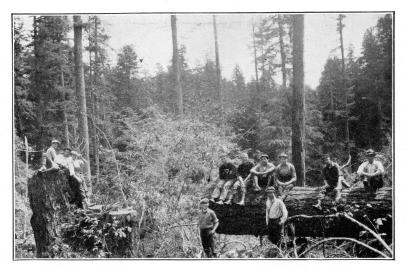
WHILE no exact figures are available as to the number of such graduates employed in each of the separate forest industries, it is very probable that a breakdown of the 29.2 percent so employed would reveal that most of these men have secured employment with the large logging and milling companies in some capacity, pulp and paper producers or in some branch of wood preservation, while comparatively few have entered the fields of small sawmill operation, the concentration plant and the many other forest industries. This is probably due to the fact that the first-named industries are better known and have offered higher wages and better opportunities for advancement than the latter named ones. However, the small sawmill operation and some of the lesser known industries hold potent possibilities for the trained man and throw out a challenge to the forester if he is interested in the problem of utilization, a problem which for years to come is certain to constitute the major part of forestry practice in this country.

THERE appear to be three chief impediments in the path of men who may choose one of these lesser known industries as a life work. These are, difficulty in securing work in one of these industries due to lack of proper contact, rather disappointing wages to begin with, and an apparent limited opportunity for advancement. But the forester needs to remember that he is on no strange sea alone in these respects. How many men trained in other professions make contacts and enter their chosen field easily as soon as graduated? How many men in other professions have started work at relatively high wages? How many men in other professions have started their life work knowing just what the future held for them or even advanced as fast or as far as they had hoped for? It would seem that the time is ripe for professionally-trained men to enter some of the fields which, to date, have been neglected, and the man who is really interested in utilization will be able to overcome the obstacles standing in his path and forge ahead in these lines of work which so much need his services.

In the entire eastern section of the United States, particularly the South and Southeast, the small mill is replacing the large unit and is certain to be an important factor in the forestry practice of those sections due to the rapidity of timber growth, the fast growing species present and the large areas available on which timber appears to be the best-suited crop. During recent years the small mill has made advancement in quality of product manufactured, but much still remains to be accomplished if proper utilization of timber is realized. Studies have been made by the Forest Service pointing out causes of waste, and a portable band mill has been developed which will decrease materially the waste due to kerf. In spite of these helps there is enormous waste which can be eliminated only through th efforts of the operator.

TREES are often felled leaving high stumps containing considerable high quality material. Careless bucking of logs in the woods with too much trimming allowance has meant much useless waste. At the mills heavy slabbing has been practiced which has resulted in heavy losses, especially where no provisions have been made to utilize such waste. Careless edging and trimming has also been the source of much wood waste.

After the timbers and lumber have been cut, there very often follows a heavy degrade because of a lack of knowledge



High stumps are a source of waste.

of proper methods of seasoning and handling. While this may not result in an actual loss of material, it does mean a loss of income due to lowered quality which in itself reacts unfavorably toward the operation as a whole and in general results in even more wasteful cutting practices in an attempt to recoup such losses of income. An excellent opportunity is afforded the trained man on such an operation, for with a knowledge of proper logging and milling methods and the use of approved seasoning and handling methods the percentage of timber utilized may be greatly increased. The financial return due to a high quality product will also be enhanced. A small saving in material daily and the increased income derived from a better product would compensate for the added wages of a trained man. Certainly this field needs attack by the forest school graduate.

A NOTHER field practically uninvaded by the trained man is that of the lumber concentration plant where seasoning and milling of lumber is done preparatory to the sale of the product. Quite often it is impractical, almost impossible, for the small mill operator to season, remanufacture and market the product of his mill because of financial inability, unfavorable location or limited output. A concentration plant, advantageously situated may handle the output of numerous small mills, giving such products the seasoning, handling and milling

care not possible at the point of production. Such plants will become increasingly prominent as the small mills increase in number and importance. Here, again, is an opportunity for the trained man who knows about wood and its care. He may serve as buyer or inspector of the lumber purchased from the small mill, or he may turn his efforts toward securing higher quality products at the concentration plant through better seasoning and re-manufacturing methods. A large part of the success of such a plant depends upon how well



Round products on the skidway.

the small-mill lumber is processed. The trained man here has an excellent chance both to practice utilization and to bring satisfactory financial returns to the plant. More foresters should enter this work.

PRODUCTION of cooperage stock has for years resulted in a heavy waste of material both in the woods and at the mills. The manufacture of staves, headings and hoops entails considerable waste which is unavoidable yet there is much waste, now common, which might be lessened. Bolts are frequently cut improperly with a consequent loss in equalizing. Considerable carelessness is often encountered at the stave and heading units. This may be eliminated. This field invites the energy and ability of the trained man and, as in other for-

est industries, a small decrease in the percentage of material wasted would pay the wages of such a man.

EACH year the requirements of this country for round products such as posts, poles, piling and mine timbers, take the forest growth of large areas in nearly all sections of the country. The waste of material is enormous because of slipshod production methods or a lack of knowledge of the particular needs of the buyers of such products. Orders for these ma-



The forests supply many industries.

terials are placed, generally, with certain rather-definite specifications as to the size and quality. This, of course, demands that a great deal of care be exercised in selecting the proper trees to fell. Trees are frequntly felled which are either too small or do not fulfill the quality requirements, hence are wholly unusable for the purpose intended. If no other use is found for such trees they are permitted, often, to lie in the woods where felled—a total loss. In other instances trees are felled, bucked into the required lengths and otherwise prepared for use but are allowed to remain on the ground in the forest for too long a period. Such a practice results in insect and fungus attack which render the stick unfit for most uses.

"On other occasions, after the materials are produced and hauled from the woods to concentration skidways near railroad sidings, they are left on the ground or are poorly stacked, whereupon they are subject to agents of destruction which may cause complete loss of the material. Skidways along railroad sidings in most forest regions are, all too often, a

cluttered assortment of materials unfit for use, a mute testimonial, in most instances, to ignorance or carelessness. It appears that this field of utilization with opportunity for saving both material and money, should beckon the forest school graduate. Surely he is sorely needed and should be able to exert a powerful influence toward less wasteful methods in the production of round products.

The foregoing are only a few of the lesser-known industrial activities involving forest products which are still undermanned as far as professional foresters are concerned. There are still other industries which fall in the same category and which should be aided materially by the influence of trained men.

The naming of the foregoing possibilities, of course, does not mean that the forest school graduate can enter such fields and overthrow all present practices and methods but merely points out some places where he may combine his technical knowledge with experiences of his own and others acquainted with such industries with the objectives in view which have been indicated. The fact that there is no beaten path to such industries need not be a deterrent factor. Anyone can go where someone else has gone before, but it requires an explorer with vision to seek out positions where service can be rendered. And it may be added, that very often the most may be accomplished and the remuneration may be the largest in fields which have been least explored.

