For the past twenty-four years I have been employed as an official in educational, experimental, and demonstration forestry work in New England, having been State Forester of Massachusetts for the past thirteen years. During this time it has been my avowed purpose to do everything within mortal power to accomplish something in establishing fundamentals from which forestry practices of a permanent nature might be the outgrowth.

There are few, if any, problems of greater moment and more economic importance to New England at the present hour than that of forestry. There are those still living who have seen beautiful primeval forests dotting the hills and valleys everywhere throughout this rugged and beautiful country. Year by year these forests have succumbed to our mad rush of uneconomic commercialism, until today finds us in a sadly depleted and irrational condition.

The Forest Primeval

It is always easy to point out mistakes after they have happened; but experience, though a dear teacher, should sober us at the present time. Year by year the primeval forest has been cut and harvested. Second growth, inferior but valuable, has followed, where conditions have been favorable, which, in turn, has been utilized as soon as it reached merchantable size. Demand for forest products
MASSACHUSETTS

has increased in greater and greater proportions as we have been developing in commercial power and prestige, while products themselves have been approaching exhaustion. During the recent war New England was fairly gone over with a fine-tooth comb for forest products for every conceivable use, and with results only too well known to all business men.

We have looked upon our forest products as inexhaustible, and think that though New England should be depleted, there are other sections at our very doors with plenty for our demands. Many of our statesmen and foresighted, country-loving citizens have predicted our calamity, but they have been heeded as one crying in the wilderness.

THE COMMERCIAL ERA

The commercial era has absorbed us. Esthetics and standards of economics in a new country, whose natural resources are apparently boundless, are as nothing compared with commercial activities. There is bound to come a time, however, when the pendulum swings back, and unless our natural resources are conserved, we are bound to suffer the consequences. We are beginning to get a taste of it already.

We have in New England a natural forest country that will respond to forestry development as readily as any country on earth. We are dependent upon the forest crop to continue our innumerable industries located everywhere throughout our five states. In our studies of the Massachusetts wood-manufacturing industries in 1910 it was ascertained that this State alone converted 550,000,000
feet of rough lumber a year into finished products. When we realize that this is only a part of the product in one state, certainly not one-half of it, but only that portion which, after it leaves the sawmills, is further worked by machinery, it may give a basis for judging the industry. These wood-working industries are scattered everywhere throughout New England, and there are many thriving villages whose main livelihood is dependent upon them.

FORESTRY AND AGRICULTURE

Forestry and general agriculture in New England are to a great degree interdependent. While it is conceded that forestry is no longer a simple woodlot proposition, but one worthy of the economic utilization of all lands non-agricultural, nevertheless its development makes possible the use of labor and teams in winter at a time when they are available. Large forest areas in various sections will greatly augment, therefore, both manufacturing and agriculture.

We have not begun to realize even yet what we should in the economic utilization of the forest products we still possess. It was not until we were freezing, due to the coal shortage following war conditions, that we realized that wood has a value for fuel. Our fathers depended upon it altogether.

In recent years wood has gone out of style, and even farmers have found it more convenient to have coal shipped in from Pennsylvania and West Virginia than to cut it on their own farms. It is an actual fact that during the trying times a few years since, the winter of the unemployed, there were instances
of people practically freezing to death while wood in great quantities was rotting all about on our hillsides.

War conditions drove our people to burning wood in their furnaces and fireplaces, and it is believed many will continue to use more firewood than heretofore as it has many advantages even over coal. Cordwood is really a by-product of the forest. Great quantities of wood for fuel should be available in all forest sections, as it is to the benefit of the forest that improvement thinnings be carried on, and whenever forest crops are being harvested there are always the limbs, tops, and slabs suitable for little else than cordwood. The great hindrance to the use of wood for fuel in the past has been the inconvenient form in which it has been dealt.

City people, and users in general, are delighted to purchase wood cut into convenient short sizes. They do not want four-foot lengths. Every conceivable kind of wood can be used if cut into small sizes. Why should we not be able to utilize every stick of wood possible for fuel in our more thickly populated sections of New England? In other sections there should be more definite plans for making it into charcoal, or shipping it to brick factories, or using it in other ways. One is impressed in this respect when in the Black Forest country abroad. Everything there is utilized, and there is no waste.

NEW ENGLAND FOREST POLICIES

Each of the New England States has its forest policies, and is feeling its way toward greater accomplishments. Much more has been done than most people realize. Massa-
AND HER FORESTS

chusetts, for example, has enacted laws aiding forestry in the following ways:

1. Expert advice at no expense, except travel and subsistence, to anybody in the Bay State.

2. Free forestry literature, to be sent to all citizens who care to make use of it.

3. Forest-fire prevention. — A forest warden in each town, with equipment, organization, and mandatory laws, to get results.

4. There are thirty-five forest-fire lookout stations scattered over the State on high points, which are connected by telephone with local and State officials to bring aid.

5. Forest Warden Conventions. — The forestry officials of cities, towns, and the State are empowered to meet to discuss methods, equipment, and better ways of co-operation.

6. State Aid for Forest Fire Equipment. — The poorer towns are given State aid in procuring equipment.

7. Utilization of Forest Products. — Studies and practices of making greater economic use of all wood in the industries, and for fuel. This includes the cost of production and transportation.

8. Regulations of brush and slash disposal.

9. Railroad fires and railroads.

10. Forest Taxation. — A modern system of taxing forest lands and their production.


13. State Forest Nurseries. — Young trees are grown in State nurseries for use on State lands, and are sold at cost to citizens and municipalities.

14. The Governor has power to issue proclamations for a closed season on hunting in dry times.

15. Reforesting Private Lands. — Lands suitable for planting may be turned over to the State Forester by title, with power of redemption within ten years, provided the expense of planting and care is reimbursed to the State.
16. We have probably planted in Massachusetts, in both public and private work, about 25,000 acres.

WEEDING OUT NEEDED

Do not think that planting or reforestation is the whole thing. Much of our present forest lands need weeding out or thinning, and rational management as well. We need mandatory laws that have enough teeth in them so that uneconomic practices cannot be allowed even on private holdings. This may seem a strong policy, but often individuals are their own worst enemies, and, after all, the economic use of lands as a whole can be made a success only when what benefits the individual also, in a larger sense, benefits the community.

England begins at once to spend $17,000,000 in forestry. Are we of New England staggering under anything like the blow, both financial and otherwise, that all England is bearing? Should we not at least make a creditable start?

If our farmers are afraid that the Lane Bill in congress will create over-production in agriculture, why not convert a large part of our share into improving our forestry conditions throughout New England?

FUTURE WHAT WE MAKE IT

The future of New England forestry will be exactly what we of today propose to make it. We can continue to go along at a half-dying pace and try to feel we are doing something, but what is really needed is a definite and business-like and more drastic policy if we are to really accomplish results. We need more
live business principles, backed up by modern financing. If, as Americans, we can build a Panama Canal, a Roosevelt Dam to irrigate the desert, and spend uncounted billions to better the world's conditions, surely the raising of funds sufficient to finance an undertaking bound to solve the future successful existence of a country whose traditions are dear to us is nothing for Americans to undertake.

It matters not, either, whether the individual or the State does the work. The main thing is to get it done. Private forestry needs to be greatly encouraged, but it is believed that the State and Nation should shoulder the undertaking. Where would the Allies have turned had not France, to the credit of her statesmen and people, in earlier time begun the practice of forestry?

We need in New England to begin not tomorrow, but today, while we still have some remnants to tide us over the lean period, to go to work on a tremendous scale to recoup our birthright. It takes time to grow a forest, but we have the possibilities in millions of acres of idle lands that will work for us day and night, winter and summer, constantly solving the basal economic problem of the future of our Pilgrim lands, if only we do our duty by them.

It is the time for all men of affairs throughout New England to give this subject constructive thought. The future of New England Forestry will be what we of today make it in guiding its destiny.

State House, Boston, Mass.
Sept. 15, 1919.