STATE FORESTRY IN ILLINOIS*

Anton J. Tomasek

State Forester, Springfield, Illinois

WOULD LIKE to take this oppor-I tunity to familiarize you with some of the activities and objectives of the State Forestry Division and tell you what has been accomplished and what we propose to accomplish in this important branch of the State government.

The State Division of Forestry was organized in 1926 as a division of the Department of Conservation. It was organized as a result of an increased need for proper forestry practices within the State on the part of the owners of timber land. The organization of the Division was also brought about by interested individuals who analyzed the forestry problems of the State and deemed it imperative that something be done to restore our natural forest areas.

The Division of Forestry operates on funds received from a general appropriation granted by the State Legislature every two years. For eleven years appropriations for this important field of activity had been comparatively small. The average expenditure, per biennium, during this period was approximately \$55,000. At the request of Governor Henry Horner and Director of Conservation Thomas J. Lynch, the last Legislature increased the biennial appropriation for forestry for the period July 1, 1937 to June 30, 1939 to \$171,000. This increase was warmly welcomed by all lovers of conservation and forestry in the State and has enabled us to inaugurate a well-balanced state forestry program.

The objectives of the Division of Forestry are: first, to promote and assist in the reforestation of idle lands unfit for agriculture; second, to prevent forest fires, not only on State owned land but on private forest lands throughout the State where a sufficient amount of timber is present to warrant expenditures; third, to control erosion by the planting of trees; fourth, to establish State forests to act as demonstration areas in proper timber land management; fifth, to give assistance to Illinois land owners and corporations in their forestry problems; sixth, to disseminate forestry knowledge

through the publication of forestry litera-

Of these objectives, the most important work of the Division is to promote and assist in the reforestation of idle lands now unfit for agricultural purposes. We have in Illinois today approximately 3,000,000 acres of such lands which are not being tilled and are not producing any timber crop. In their present state, therefore, their value is nothing. All this vast acreage is entirely in the hands of private land owners. There is no way in which the Division of Forestry can compel such land owners to reforest their lands or put them to some beneficial use. Our approach to this problem is through education, by demonstrating that such lands unfit for agriculture should be producing timber for profit.

The State Division of Forestry is doing everything possible to assist all land owners who are willing to reforest their idle lands. Two State nurseries have been established during the past four years for the production of forest and erosion control planting stock. The largest of these nurseries, the Horner Tree Nursery near Havana, can produce ten million trees annually for such plantings. The second nursery, the Thompson Tree Nursery located at Jonesboro in the extreme southern part of the State and named for the late Director of Conservation, Charles F. Thompson, has a capacity of five million trees annually. Both nurseries have been developed recently to a highly efficient stage, making it possible to produce fifteen millions of trees annually at nominal cost.

Tree seedlings produced at State nurseries are sold to farmers and land owners almost at cost for the reforestation of any lands unfit for agriculture. The following restrictions are placed on trees purchased from the State:

1. Trees are to be planted for the establishment of a new forest, or for the improvement of a forest already existing, and are not to be used for ornamental or landscaping purposes.

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- 2. Trees must not be dug, cut off, or otherwise moved and resold, until they are large enough to be sold or utilized as merchantable timber.
- 3. The planted area must be protected from forest fires, trespass and grazing by domestic livestock.
- 4. For the purpose of inspecting the planted area, the Division of Forestry, or its agents, will be given unrestricted access to the property on which these trees are planted.

Every effort is made by the Division to prohibit its trees being used for ornamental or landscaping purposes. It is not the intention of the Division of Forestry to sell trees for ornamental purposes in competition with commercial tree nurserymen who have excellent stock suitable for this purpose. Trees produced at State nurseries are produced solely for the purpose of providing planting stock for future forests. In view of this fact trees are sold only in lots of 500 or more.

Interest in reforestation has undoubtedly increased greatly in the last three years. In 1936, 176,000 trees were distributed for forest plantings, in 1937, 655,000, in 1938, 3,740,000 and this spring 4,829,000 were distributed from State nurseries. It can readily be seen, therefore, that the program of planting for future forests in Illinois is rapidly taking hold.

A new program in forest plantings was started by the Forestry Division in cooperation with owners of worked-out strip mine areas in the State during the past Undoubtedly many of you have seen the large spoil banks left by strip coal operations. It was deemed feasible by the Division of Forestry that such lands could well be reforested and beput to a profitable use by the production of timber. Conferences were held with the Illinois Coal Strippers Association who were enthusiastic about such a program and the Division of Forestry agreed to make surveys of such areas and provide the owner of strip mine lands with definite recommendations as to future forest plantings on such areas. The surveys were made and eight companies cooperated in actual planting operations during the spring of 1938 and planted 300,000 trees which were purchased from the Division nurseries. The strip mine owners furnished all necessary labor and the work was done under the supervision

of a trained forester of the Forestry Division. Planting inspections during the summer of 1938 have proven that this new venture was highly successful since approximately ninety-five percent survival of trees has been obtained. Strip mine companies continued this program with the Division this spring and 1,000,000 trees were planted, the last of the plantings being completed two weeks ago.

Benefits as a result of revenue derived from a timber crop are not all that can be expected of these plantations. In addition, such tracts will provide ideal recreational areas for the public in the future and will provide excellent wild life areas.

Planting trees for future forests in Illinois must necessarily be taken seriously by all owners of lands unfit for agriculture as a definite business proposition and timber should be considered by such individuals as a long term crop. At present, Illinois is a heavy consumer of wood products and pays from twenty-five to thirty million dollars a year on freight on timber shipped into the State. Lands in the State suitable only for the raising of trees, if producing timber at full capacity, would be of material help in reducing this freight bill, thereby effecting a cheaper price in lumber to the consumers in Illinois, and, at the same time, a fine return would be obtained for the owners of forest lands. Taxes are being adjusted in some states on timber land so that every encouragement is given to the owner to plant and maintain his forest area. The greatest problem confronting us today is the fact that many neglect to plant for future forests due to the fact that taxes must be paid over a long period of years during which time there is no return as there is when the owner plants an annual crop. The only remedy to this condition is by passage of tax exemption acts providing for a very nominal tax on forest lands. Such an act, if passed by our State Legislature, probably would be unconstitutional, therefore, it is necessary that at some time in the future our constitution be amended to provide for the tax exemption of forest lands as is being done in many states today.

Serious erosion of soil is going on in many parts of the State, especially in the south. This is taking place particularly on steep hill slopes which have been denuded of timber and which have been improperly farmed in the past. Trees planted on such land, especially the Black Locust, which has a very fibrous root system, are ideal for controlling erosion. In planting this tree for erosion control, it has a three-fold purpose: first, its fibrous root system holds the soil and prevents further erosion; second, in view of the fact that the roots are of a nitrogenous nature it will improve the soil fertility and, third, the Black Locust will produce a crop in view of the fact that Black Locust trees will attain fence post size in from ten to fifteen years and they are ideal for that purpose.

Trees planted on hillsides also serve another very important purpose, that being watershed protection. Undoubtedly the cause of our major floods in the country in recent years has been due to the fact that many of the watersheds have been stripped of their forests, resulting in a rapid runoff to the main streams and rivers. Where such watersheds are well-forested, the falling leaves and litter form a blanket over the forest floor which keeps the soil moist and porous and virtually acts as a sponge, holding the water and releasing it slowly. Illinois has been affected by floods many times in recent years and the reforestation of watersheds, not only in this State but in our neighboring states, is of vital necessity to prevent such reoccurrences.

We have in Illinois today approximately four million acres of timbered lands. The original timber stand in Illinois was approximately fourteen million acres or about forty-five percent of the total land area of the State. The major part of the four million acres remaining is located in the southern portion of our State. Practically the entire forest acreage is confined to farm woodlands with the exception of approximately 160,000 acres of land which comprise the Illini and Shawnee purchase units of the U. S. Forest Service in the southern part of the State, 3,400 acres of land which comprise the Union County State Forest and 5,000 acres of land recently purchased by the Division of Forestry as a State Forest in Mason county. Of the four million acres of timberland remaining in the State, approximately two million acres should be given protection from forest fires which is the greatest enemy of a forest area. Until 1937 no forest fire protection was afforded private forest lands in the State. As a result of the

increased appropriation granted the State Division of Forestry, we have been enable to inaugurate a program in forest fire protection and at the present time approximately 350,000 acres are under intensive forest fire protection. Our increase in appropriation has enabled us to construct fire towers, purchase forest fire fighting equipment, trucks, and hire forest fire wardens to carry out this phase of our forestry program. In addition to this we have just completed our main forest fire protection headquarters near Benton, Illipois at a cost of \$14,000.

Fire in the city is something that can readily be transferred to a visible dollar and cents problem. The damage is plainly seen. The damage done by forest fires can only be appreciated by those who know timber and timber values. is also a definite loss in dollars and cents but it takes an expert to see it. Every time a fire occurs some of the top layer of soil is destroyed thereby decreasing the fertility of the area. Fires also scar the base of trees, not only causing a loss in lumber when the tree is cut, but provides an entry for disease and insects. Forest fires destroy the habitat for game, its food and, in many cases, the game itself. In addition to this, many indirect losses can be recorded. Forest fires are caused almost entirely by negligence on the part of the public. Smoking in the woods and throwing away a lighted cigarette or match is undoubtedly the most usual cause.

The cooperation of the public is requested in this vital program of forest fire protection. Although the danger is most serious in the southern part of our State, it is also serious in areas such as the Cook County Forest Preserve District which has approximately 35,000 acres of timbered lands, and other timbered sections of our state.

One of the objectives of the Division of Forestry is to establish a number of State forests to provide demonstration areas in proper forest management. Illinois at the present time has two State forests. One of the two, the Union County State Forest located in the southern part of the State, comprises 3,400 acres. Through the efforts of the Civilian Conservation Corps and the Works Progress Administration under the supervision of the State, proper forestry practices on this tract have been inaugurated and, in

addition, the area has been developed as an excellent recreational tract for residents of southern Illinois.

Through the efforts \mathbf{of} Governor Horner the last State Legislature granted \$50,000 for an additional State forest to be purchased in the western part of the State during the present biennium. This has recently been acquired and development work has been started. It is hoped that our program will enable us to have some day a number of State forests located in every section of the State in order that farmers and land owners may be able to visit near their homes, a properly managed forest and a forest area which can bring a profit to its owner. We feel that if the State will point the way by such demonstrational areas, cooperation on the part of the forest land owner can more easily be obtained.

In many of the eastern states, many communities are purchasing potential forest lands and practicing proper forest management, setting these areas aside as community forests. Every effort is being made by the Division of Forestry to interest cities and villages to inaugurate a similar community forest program. Such a forest program is especially fitting where cities or towns own lands surrounding a lake which is their reservoir and drinking supply. It is important that the watersheds of these reservoirs be planted with forest trees to prevent silting. We have sixty-one such reservoirs in Illinois at the present time and under the direction of the Division of Forestry, surveys are being made of them and submitted to the town or city officials with the hope that such areas will be planted, thereby providing a community forest for the people of those cities.

Of the hundred and two counties in Illinois, six counties have forest preserve districts maintained as natural recreational areas. Those counties and the acreage they have at present are as follows:

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County	Acres
Cook	35,000
DuPage	1.010
Kane	350
Will	613
Winnebago	1,116
Platt	108
he Cook County To 1 -	

The Cook County Forest Preserve District of 35,000 acres, under the able direction of Charles G. Sauers, general superintendent, serves millions of people annually and illustrates, without a doubt, the value of a forest area to the citizens of a community.

The dissemination of forestry literature by the Division of Forestry, in an attempt to increase interest in forestry, has greatly assisted in furthering our program. Publications issued free of charge at the present time are as follows: Trees of Illinois and How to Know Them" is a 76-page booklet describing the native trees of the State and explaining as simply as possible how to identify them. Approximately 25,000 copies of this publication are distributed annually school children and adults. "Elements of Forestry," a 30-page booklet provides general forestry information especially as it pertains to Illinois. Miscellaneous publications on tree planting are also issued.

I have tried briefly to summarize the Department of Conservation, Division of Forestry's duties and activities.

In closing I wish to state that the Division is always happy to receive inquiries on our State forestry program and to assist individuals with any forestry problems that they may have.