

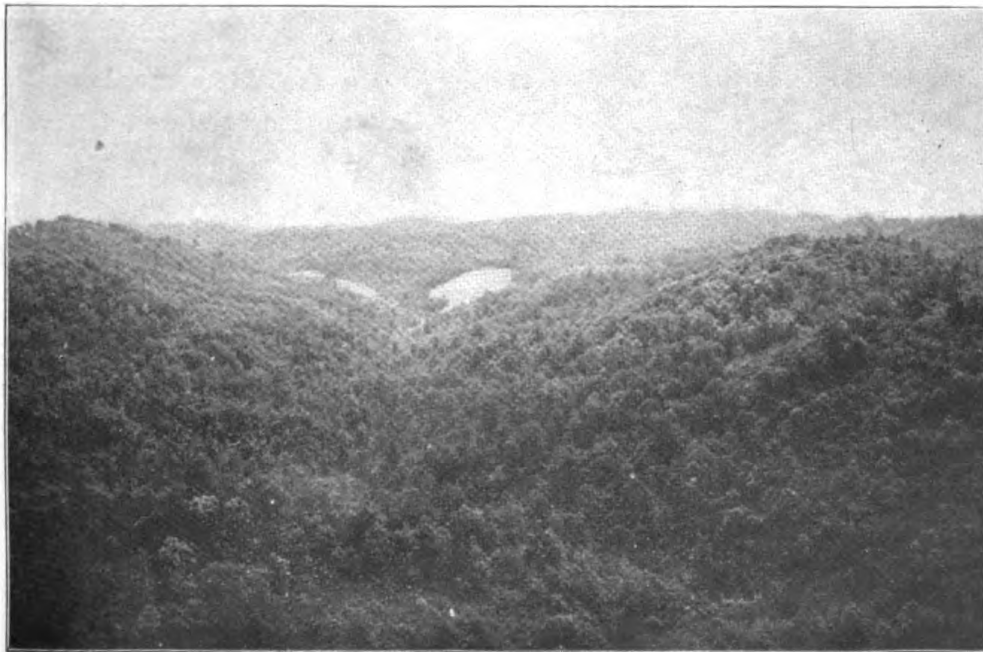
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OHIO AGRICULTURAL EXPERIMENT STATION

C. G. WILLIAMS, Director

FORESTRY DEPARTMENT

EDMUND SECREST, State Forester

J. J. CrumleyAssociate Forester
F. W. DeanExtension Forester
O. A. AldermanAssociate Forester
B. E. LeeteAssociate Forester
L. J. LeffelmanAssistant Forester
R. R. PatonAssistant Forester
R. I. AshmanAssistant Forester
Scott HarryIn charge Arboretum
G. C. MartinSuperintendent Marietta Nursery

Forestry

OHIO FOREST NEWS

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OHIO STATE FORESTS AND FOREST PARKS

In 1915, the Forestry Department purchased the first State Forest in Ohio near New Marshfield in Athens County. This tract, Waterloo Forest, was typical of many areas of south-eastern Ohio, an area cleared thru much hard labor and then farmed with diminishing profits as other better land was opened up until finally it was practically abandoned. It was land fit only for tree production, and to put it to such use the State took it over and immediately began reforestation work on the cleared hillsides.

Then Dean Forest in Lawrence County was purchased, and following this, Shawnee Forest in Scioto County, Pike County Forest, and Scioto Trail Forest in Ross County were added. These Forests are all similar to Waterloo Forest in the general type of land, rough, non-agricultural hillsides and valleys, suitable for timber crops solely, and land which should be maintained in forest growth to conserve and regulate stream flow.

In order to enable the Forestry Department to purchase tracts which possess some point of outstanding interest, the Legislature voted to empower an appointive committee of three to purchase areas without a price limit. The State Forests are

limited in price to \$10.00 an acre. The new enactment brought the State Forest Parks into being, and tracts which were of exceptional interest from either geologic structure or floral composition were secured.

STATE FORESTS HAVE MANY USES

This distinction between State Forests and Forest Parks, besides being necessary primarily because of land values, will also have a bearing on the management of the areas. Both general groups are open to the public with certain necessary restrictions, and both groups will be maintained under forest growth. Cleared areas are planted, and volunteer growth favored, but in the Forest Parks an effort will be made to maintain natural scenic conditions. Virgin stands of hemlock will be protected, for example, where these form an essential part of the natural beauty.

On the other hand, the State Forests will be put under a plan of silvicultural management with a view towards establishing normal conditions and securing a sustained yield. As sources of future lumber supply these areas will eventually become self-supporting.

They will logically form the nuclei of timber supply for small mills in those localities, and thus enable

economic significance of this undertaking is not easy to calculate, but every present local indication is that it has been worth while. Also the fact that the U. S. Forest Service and 37 other state governments are engaged in similar enterprises further confirms the belief that we are on the right track.

The pasturing of the small scattered woodlots of the more typical rural Ohio has probably been the most powerful agency of woodland deterioration and decline for the state as a whole. But the case is otherwise in the section in question. Grazing is not intensive and cutting operations are normally followed by an abundant natural regrowth. To the careless use of fire alone may be attributed the unproductive condition of thousands and thousands of acres of woods in the southern hills. The woods most run-down are the woods that have been most burned.

Where repeated hot fires have occurred, a long period is necessary for complete recovery but on areas that have escaped fire injury, a strong healthy growth is rapidly developing. In consideration of the fact, that unless these rough areas grow woodland products, they will produce nothing at all of economic value, it can readily be seen that forest fire control is the key to the successful development and use of the rough areas in this section.

CONTROL CENTERS

The state forests and forest parks of which there are several, will continue to serve as important centers of fire control activities. Only four percent of the area protected is state owned, but the state forests, and surrounding wooded areas are at present the best protected on account of the four forest fire lookout towers and connecting phone lines which

have been installed on state land. The improvement of the existing system calls for the extension of the fire lookout tower system as rapidly as possible. It is not possible to prevent large fires unless the smoke can be seen and the alarm spread while the fire is small. Provision must be made for more towers with telephone connections and someone to dispatch to the scene from the other end of the wire. Past experience indicates that this can be done at a reasonable expense. It is hoped that the necessary improvements and other arrangements for quick and effective action may be provided.

B. E. LEETE

CHRISTMAS TREE INDUSTRY EXPANDING

The past decade has watched the development of a new industry in Ohio, that of Christmas tree production in commercial quantities. The annual consumption of Christmas trees in this State alone is undoubtedly over a million, and the big majority of these are purchased through retail agencies. To meet this enormous demand for trees nurserymen began within the past few years to raise the stock themselves, competing with complete success with the imported trees from Canada and New England.

The success of home-grown trees is due largely to the fact that they hold their needles much longer than the imported trees, and this is appreciated by all of those who have been fortunate enough to obtain home-grown trees. The result is an increasing demand for home produced stock.

The demand for Christmas trees in general is growing in spite of some talk of abandoning the time-honored

custom. With the increasing use of trees produced for that particular purpose there is no reason why the custom should not be furthered instead of being discouraged and more trees be used annually.

The custom, inaugurated not many years past and being sponsored by public spirited papers, of decorating the exterior of the homes during the holidays is a laudable one. Cities at the Christmas season take on a more attractive appearance with the generous use of trees in outdoor decorating, an appearance which is truly admirable. This is the manner in which Christmas trees best serve their purpose.

Rather than lose this custom so well begun, more Christmas trees should be grown in Ohio to replace imported stock. The growth of this industry, in addition to protecting the beautiful custom of a lavish use of greens at Christmas time, will be furthering the cause of forestry directly. For, by supplying the demand for trees and greens with home-grown stock it will largely reduce the drain on natural grown trees now being cut annually to supply the market. This will prevent large areas of young timber trees in Canada and New England from being cut off, areas which should be producing timber for the country instead of Christmas trees. The latter can be far better produced artificially near the point of marketing than cut weeks before and shipped hundreds of miles to the user.

WINDBREAKS IN WESTERN OHIO

One of the most appreciated assets on a farm in western Ohio during these winter months is a windbreak

or shelterbelt. Where these shelterbelts exist, which is too infrequently, the farmers boast of their influence on the wheat or on the late apples, and a common statement is, "those trees have more than paid for themselves in coal saved".

The majority of the windbreaks found in western Ohio are 25 years of age or older. Relatively few windbreaks have been set out in recent years and yet the need of them is certainly not diminishing.

One cannot but wonder at the urge found in the hearts of the men of a generation past, to plant a protecting belt of trees around the house and orchard, not so much for themselves as for their sons and daughters—an urge which is found today only in the hearts of the most progressive.

Those farmers who today have a windbreak of Norway spruce along the north and west sides of their house and barn prize those trees as invaluable. And there are some, knowing the worth to them of the shelterbelts, feel that shelterbelts should be made a community project. The effect on the whole locality of extensive lines of spruces would be real and lasting.

Windbreaks of Norway spruces in western Ohio do not require decades of growth before beginning to show their influence on the prevailing northwesterly winds. A triple row of spruces near Bellefontaine planted only 11 years ago contains some trees 20 feet high, and the average for the entire belt is about 15 feet. These trees are already showing an effect on the wind. Another shelterbelt located in Hardin County, north of Kenton, barely 25 years old averages over 30 feet in height and some of the trees are over 40 feet high and nearly a foot in diameter. These

cases are picked at random and undoubtedly even better growth might be found in some instances.

The majority of the shelterbelts found are of the single row type. This type is not as effective as a double or triple row as the trees must be planted close together in order to shut out the wind and this close spacing causes the lower branches to die off early in the life of the tree. A double row spaced wider apart, but with the trees in staggered positions gives the same if not a better effect on the wind and yet prevents the lower portion of the tree from opening up excessively.

Windbreaks, like many of the more permanent improvements on a farm, require far-sightedness to appreciate their desirability. The man who sets out a shelterbelt of young spruces is looking ahead further than the next year—he must be able to see their worth to the next generation.

TRANSPLANT NURSERIES SHOULD BE MULCHED

One of the important phases of reforestation work in Ohio is the proper care of the transplant nurseries. There are many small nurseries in the State, set out by planters who require larger planting stock than is available at times, and these contain many thousands of young trees.

These nurseries will suffer a heavy loss through the winter months unless they are mulched well after the ground is frozen. The alternate freezing and thawing which occurs during the winter and spring forces the trees out of the ground, often almost completely. This heaving is responsible for the loss of a large number of trees every winter and should be reduced by mulching.

An effective mulch is a layer of straw 4 to 6 inches thick laid down over the ground between the rows of trees after the ground is frozen somewhat. The cost of such a mulch is small, and is necessary to a successful nursery. To fail to mulch is to lose much of the effort of the year's labor in addition to losing the year's growth on the trees.

FARM WOODS IMPROVEMENT

Considerable interest is being shown lately in farm woods improvement work. One of the most intensive projects covering this phase of farm forestry is being conducted on the C. H. Strong farm, Lake County, Ohio.

The farm contains 42 acres of a beech, maple type woods which has not been pastured for 15 years. Since then the stand has gradually reseeded and passed thru the usual recovery stages. With the better species of seedlings like sugar maple, ash, tulip, oak, etc., a heavy growth of grapevines, thorn apple, ironwood and blue beech developed.

Last winter all of the grapevines were cut at the ground line. On portions of the stand the vines had damaged young tree growth to such an extent that it was necessary to clear cut areas up to an acre in size. In other places the removal of thick stands of thorn apple also left large openings. These will be planted with forest tree seedlings this coming spring.

This winter all of the weed trees, and deformed and defective trees of better species are being cut. This will include all of the dead chestnut. Wherever a poor species like soft maple or beech is found over-topping and suppressing young trees like ash, maple, or tulip, the inferior tree will

be removed. All of the timber cut will be utilized down to a diameter of four inches.

Arthur Martin, the farm manager, has had a crew of two men on this work, and it is surprising to note the changes which have taken place in the woods in so short a period of time. In its previous condition about one-half of the stand was in a productive condition. When the entire project is completed every acre will be in good silvicultural condition for the production of future timber crops.

All of the idle abandoned land on this farm is also being put back to work. As soon as any field is abandoned it is planted to forest trees. Last year 10,000 mixed pines (Scotch, white, Corsican, and red pine), were planted on an old field adjoining the native woods. The farm forest nursery now contains another 10,000 transplants which will be set out this spring. The completion of both projects will make this one of the outstanding farm forestry demonstration areas in the state.

EXTENSION NEWS

4-H FORESTRY CLUB WORK

The 4-H forestry clubs this fall collected large quantities of hardwood seeds and sold them to the State Forestry Department. So far they have collected 75 bushels of walnut, 10 bushels of tulip poplar seed, and a small quantity of red oak seed. These clubs are the pioneer forestry clubs of Harrison, Athens, and Preble Counties.

Collecting hardwood seed is a part of the forestry club project, teaching the boys and girls on the farm the value of knowing the principles of collecting forest seeds and appreciating trees that are of high lumber value in contrast to those that are of low value. Each member of the club is also required to collect sufficient seed to start a small nursery and reforestation plot of the most valuable native hardwoods.

FOREST DEMONSTRATIONS

During the first half of the year ending June 30th, 101 days were spent in the field on extension forestry. On these days 49 counties were visited in which 84 forestry

demonstrations were given in forest planting, woodland improvement, and timber estimating. Over a thousand people interested in forestry attended these demonstrations. During the same period 40 talks were given on forestry with a total attendance of nearly 5,000, most of whom were farm folks. During these six months, 158 farm visits were made with county agricultural agents to confer with landowners on farm woodland and forest planting problems.

WOODLAND PROTECTION PAYS

A farm woodland owner in Seneca County has sold \$1200 worth of hickory, basswood, sugar maple, white ash, and oaks from a 40 acre woods during the past 4 years. The original timber was cut off about 35 years ago. Since that time the woods has also furnished enough material for a new barn on the farm and plenty of firewood. The woods comprises now second growth sugar maple, basswood, white ash, red oak, white oak, and elm. The woods if sold today on the market would easily bring \$4,000 and still have a

fine young start of forest growth for the next timber crop. The owner was sold to the idea long ago that it pays to protect the young growth from pasturing.

In Richland County a farmer recently sold \$850.00 of white ash on the stump. There were 86 trees of white ash marked for removal, containing a volume of 26,000 feet. The trees were estimated on the stump by the Extension Forester in cooperation with the County Agricultural Agent. Before the trees were marked and estimated, the owner was offered \$300.00 by the same buyer who finally purchased the trees at the sale price. This is another excellent example that it pays to know your trees before they are sold.

THINNING DEMONSTRATIONS

During the past winter and spring 30 farm woodland demonstrations comprising 650 acres have been established in Richland County in

cooperation with John Gilkey, County Agricultural Agent. These areas are well distributed over the County in 12 townships and will serve as excellent demonstrations for future woodland improvement work in the County. The areas have all been classified under the forest tax act which means they are to be used strictly for timber growing purposes and all livestock excluded. Weed trees have been removed, such as ironwood, dogwood, and water beech; culled trees, and inferior species as beech, gum, and scrub oak are also being removed. Grapevines which are a big hindrance to young growth, particularly to ash and tulip poplar, are removed by cutting the main stem before any of the weed trees are taken out.

All of the material taken out is of low merchantable value. However, it can be converted into fuelwood instead of using more valuable species as ash, sugar maple, tulip poplar, basswood, and oak.