1-1-1923

Summary of State Forest Nursery Operation in the United States.

E. W. Watkins
Iowa State College

Follow this and additional works at: http://lib.dr.iastate.edu/amesforester
Part of the Forest Sciences Commons

Recommended Citation
Available at: http://lib.dr.iastate.edu/amesforester/vol11/iss1/16

This Article is brought to you for free and open access by Iowa State University Digital Repository. It has been accepted for inclusion in Ames Forester by an authorized editor of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
Summary of State Forest Nursery Operation in the United States.

E. W. Watkins

The increasing interest in reforestation work throughout the States has resulted in the establishment of a number of State Forest Nurseries. In order to carry on an extensive reforestation project it has been found that more rapid progress may be made by securing quantity production at a low cost through the maintenance of State nurseries. Most timber planters realize that it is necessary to keep the initial cost of planting operations down to a minimum in case the planting investment is to show satisfactory returns. This means that trees must be supplied at a very small cost per acre or extensive reforestation will not be attempted.

In many of the States the economy of putting to work idle and waste lands by producing a timber crop has been recognized. The growing scarcity of our valuable timbers and the fact that our merchantable timber supply is becoming further and further removed from the centers of population have brought the people to realize the necessity or at least the advantage of growing new crops of timber close at hand.

Wherever State forest nursery operations have been attempted, for the purpose of supplying trees at a nominal cost to timber planters, these efforts have not only met with general approval in the various states, but in most cases with enthusiasm. In many of the states, forest nursery operations and reforestation work have been started but recently. Where the work has been commenced, it is the usual policy to plan on active reforestation work covering a long period of years. In some States millions of acres should be replanted to timber and this program will best be carried out by distributing the planting operations over a relatively long period of years.

It is the purpose of this article to show in a very brief way what is being done in connection with the State forest nurseries over the country. The data presented is based on investigations carried on during the spring of 1923.

The state of Colorado maintains one State Nursery which has an annual capacity of fifty thousand trees. The trees are used entirely for planting on privately owned lands and are distributed at cost of production. The planting stock is purchased originally from the United States Forest Service and from private nurseries. Any person purchasing trees from the State nursery is required to furnish reports on the success
of the planting operations. The trees are sold at prices ranging from $2.45 to $5.82 per thousand, depending upon the species and the size.

The State of Connecticut has no state nursery at the present time. For a number of years this state has undertaken to grow forest planting stock in order to encourage reforestation work in the state, but has had no special appropriation for the purpose and after a commercial nursery had become well established to supply the need, the state nursery was abandoned. At the present time Connecticut is securing wholesale rates for land owners in the state by placing a large order with the commercial forest nursery a year or so in advance. This year they are securing two-year-old seedlings of red pine and white pine for $3.50 per thousand packed for shipment.

Idaho maintains one state nursery. Its annual capacity is 100,000 trees. All of the trees are planted on privately owned land. All the trees that have been planted have been planted through the state agency. No data was submitted in regard to the acreage planted. The general regulations governing the distribution of planting stock are as follows:

1. Trees shipped under inspection tags.
2. Price F. O. R. Moscow, includes drayage but not express charges.
3. All trees must be shipped by express.
4. Money must accompany all orders.
5. No order of less than 50c can be accepted.

The average cost per thousand for trees is $5.00. The nursery has received the endorsement of the people generally over the state.

The State of Indiana has just started to maintain a state nursery. Its annual capacity is about 132,000 trees. Seventy-five percent of the trees are planted on state owned land and twenty-five percent of private land. The nursery has just been in operation for two years and the number of trees which have been planted is not known but about 175 acres of land have been re-planted. The price chalked for oaks, cherry and black locust is $1.65 per thousand.

Kansas maintains one state nursery which has an annual capacity of 48,000 trees. Approximately seventy-five percent are planted on privately owned land. About 48,000 trees have been planted through the state agency. The trees are sold at a price little below the cost of production. The nursery in Kansas has received the endorsement of the people generally over the state.

The State of Maine maintains one state forest nursery
that has an annual capacity and distribution of 250,000 trees. Seventy-five percent of the trees are planted on privately owned land. Twenty-five percent are planted on corporation lands. Practically no trees are planted on the state owned land. The trees planted so far have covered 1500 to 2500 acres. The prices charged for trees ranges between $5.00 and $10.00 per thousand. The general regulations governing the distribution of planting stock are:

1. The trees purchased shall be used only for the purpose of planting lands in the State of Maine.
2. The trees shall not be resold or offered for sale before being planted by the purchaser or his agents.
3. The trees shall be properly planted with due care not to allow the drying out of the roots.
4. Reports shall be furnished when requested upon the condition and growth of the plantations.
5. Cash, check or money order for the amount of the purchase shall accompany the order or be received before shipment is made.

The nurserymen have raised no objection to the state nurseries which are raising real forest stock. The state nursery has received the endorsement of the people.

Maryland has one state nursery which has an annual distribution of 100,000 forest trees and 5,000 shade trees. Five percent of the trees are planted on state owned land and ninety-five percent on privately owned land. No data was received on the number of trees already planted and acreage covered. The general regulations governing the distribution of planting stock are:

1. To pay the purchase price of the trees to said Board of Forestry within ten days after the granting of this application.
2. That the trees hereby sold shall be used by the undersigned for the purpose of reforesting lands or for roadside planting in the state of Maryland.
3. That the trees secured from the Board of Forestry shall not be sold again, or offered for sale, to any person.

Massachusetts maintains two seed bed and transplant nurseries which have an annual capacity of 4,000,000 four-year-old transplanted trees. Fifty percent of the trees are planted on state owned land, twenty-five percent on private land and twenty-five percent on the town forests or corporation lands. The total number of acres which have been
planted to date is about 34,188 acres. The general regulations governing the distribution of the planting stock are:

1. The trees must be planted within the borders of the state.
2. The trees must not be purchased for resale purposes.

The approximate cost per thousand for raising trees averages $4.50 for three-year transplants and $2.50 for two-year seedlings. The state nursery has been heartily endorsed by the people of the state.

Michigan has one state nursery which has an annual distribution capacity of about 4,000,000 trees. About ninety-eight per cent of the trees are planted on state-owned land and two percent on private land. In all, 21,000,000 trees have been planted and the plantings cover 15,000 acres. The general regulations that are followed in distribution are:

1. No order accepted for less than 500 plants and not less than 50 of any class will be sold.
2. Prices are F. O. B. Roscommon, Michigan, including packing and crating and apply to stock to be planted within the state.
3. Advise shipments be made by express.
4. Full purchase price must accompany the order.

The cost of raising the stock per thousand ranges from $5.00 to 10.00 for white pine, $2.00 to 2.50 for Jack pine and $10.00 for Norway pine.

Minnesota has two nurseries for supplying trees for windbreaks and State forest planting. The annual capacity of the Itasca Nursery is about 250,000 per year. About ninety percent are planted on state owned land and ten percent on private lands.

New Hampshire finds that is more economical to have just one small nursery. This nursery has an annual capacity and distribution of 300,000 trees. About two-thirds of the trees are planted on state land and one-third on the privately owned land. Just the reverse was true five years ago. It is hoped in a few years that 1,000,000 tree will be distributed annually. About 1,000 trees are planted to the acre. There have been 1,100,000 trees planted on state land which have covered 1,100 acres and 2,000,000 trees on privately owned land covering about 2,000 acres. The state has turned over orders to commercial nurseries for 1,200,000 trees. The only regulation governing the distribution of stock is that the stock must be planted within the state. The approximate cost per thousand for raising the trees ranges from $7.50 for four-year-old transplants to $7.00 for three-year-old stock and
$4.25 for two-year-old trees. The people of the state recognize the value of a nursery and they heartily support the forestry movement.

Two small nurseries are maintained in New Jersey for the growing of stock which cannot be obtained from commercial nurseries, and this is used for experimental work on State Forests or private lands. The state nursery does not distribute any planting stock. Satisfactory stock can be obtained from commercial nurseries. There are in the state at present 2,500 acres of plantations which have been established by some 250 owners. In the spring of 1923, thirty or forty owners will plant several acres more. Of this area, the state plantation covers about 75 acres.

New York maintains two large nurseries and two small ones. The annual distribution and capacity is about 12,000,000 trees. About seventy-five percent are planted on state owned land and twenty-five percent on private lands. The number planted so far is 31,736,000 trees on state land, 34,992,000 in privately owned land, and in all 74,000 acres. The general regulations for distribution of stock are:

1. Trees furnished free of charge, providing the owner enters into agreement with the commission which provides for continuous forest production upon the land and gives the state the control for cutting thereon.

2. Sold private owners at a price not exceeding the cost of production.

Ohio maintains three nurseries which have an annual capacity for distribution of 300,000 trees. The capacity is being enlarged rapidly through larger appropriations. Applications this year call for nearly 500,000 trees. Twenty percent of the trees are planted on state owned land and eighty percent are planted on privately owned land. The total number of trees planted so far is about 2,500,000 distributed over an area of about 2,750 acres. The trees are distributed without any restrictions whatever. The approximate cost ranges from $1.50 to $6.00 per thousand. The commercial nurserymen in this state as a rule, do not carry stock suitable for forest planting and the price charged is prohibitive. The forest nursery as a whole has been endorsed by all the people in the state.

Pennsylvania has three large nurseries for the growing of forest planting stock. Two small nurseries are for producing shade and ornamental trees and seedlings, and also transplants for reforestation. The annual capacity and distribution is 8,000,000 trees. In 1924 it is predicted that 12,000,000
trees will be used and in 1925, 20,000,000 trees. About eighty percent of the trees are planted on state owned land while twenty-five percent are planted on private land. In all 54,-
586,022 trees have been planted on 44,000 acres. The general regulations governing the distribution of the planting stock are:

1. To pay the cost of boxing, hauling and transportation as soon as the purchaser receives the stock.
2. That purchaser must use the stock in Pennsylvania only.
3. They must not be offered for sale or sold.
4. The trees shall be planted in accordance with instructions furnished by the Department of Forestry.
5. The purchaser must furnish a report on the planting when requested.
6. The planted areas are to be protected from trespass, fire, and grazing so far as lies in the purchaser's power.

The cost of stock ranges from $1.50 to $8.00 per thousand, depending on the age and class of stock. The movement has received the endorsement of most of the people.

Vermont maintains two state nurseries which have an annual capacity for distribution of 1,000,000 trees. One-twentieth of them are planted on state owned land and the remainder on privately owned land. Ten to twelve million trees have been planted, covering 10,000 acres. The general regulations governing the distribution of planting stock are:

1. To enclose one dollar to cover the cost of entering order.
2. To make full payment for the trees in April prior to shipment.
3. To use the trees for the sole purpose of reforestation on lands owned by applicant within state of Vermont.
4. To furnish the State Forester from time to time upon request, a report upon the condition of the plantation.

The cost of raising stock ranges from $5.00 to $10.00 per thousand depending on the stock.

The State of Virginia maintains one state nursery which has an annual capacity an distribution of 50,000 trees. Sixty percent of them are planted on state owned land and the remainder on privately owned land. Approximately 50,000 trees
have been planted on 40 or 50 acres. The regulations governing distribution of stock are:

1. No charge made except for transportation for trees to be used on public lands while private applicants have to pay full price.
2. Plants inspected before ordering.
3. An order for less than 50c not accepted.
4. Must not sell or offer to sell stock received.
5. Letter of planting instructions to accompany the order.

Wisconsin maintains one nursery and has an annual capacity for distribution of 1,000,000 trees. Approximately eighty percent of the trees are planted on the state or public lands and twenty percent are used on privately owned land. In all about 2,400 acres have been planted. The cost of stock ranges from $1.00 to 6.00 per thousand depending on the class.

States Attempting to Secure Legislation

In Kentucky, two forest nurseries have been established, one at Louisville and one at Frankfort.

A number of states have not yet established State Nurseries. The following states either do not have nurseries or did not reply to the inquiry sent out in connection with State Forest Nursery operations. Alabama, Arkansas, Delaware, Georgia, Illinois, Louisiana, Mississippi, Montana, Nevada, New Mexico, North and South Carolina, North and South Dakota, Oklahoma, Oregon, Rhode Island, Tennessee, Washington, West Virginia, Wyoming and Iowa.

In many of the states, however, where state forest nursery operations have been attempted, there is growing interest in the possibility of state owned nurseries. It is probable that during the next few years a much larger percent of the states will be actually engaged in forestry nursery operations.