

HARDWOOD SEED COLLECTION IN LOUISIANA

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In the broad field of forestry, every phase must be economically feasible to be of value. Before any recommendation is accepted, any theory explored, any policy adopted, or any project initiated, the question has to be answered, "Will this be of economic benefit?"

"Does it pay?" is the first consideration given to any undertaking. In many forestry endeavors, the profitable return is not expected before a long number of years have elapsed. Other efforts yield a return in a relatively shorter term of years.

Tranquility reigns while these long or short term activities, involving numbers of years, run their courses to determine if they have payed off.

Unfortunately, this same patience is not extended to the nurseryman in his endeavors. His results are evaluated in the shortest of time. In 1-year he has to prove economic feasibility for his activities. The question put to him is, "Did your costs of producing the seedlings exceed the selling price?"

Each year is a new world to the nurseryman in the South producing 1-0 forest tree seedlings. He is confronted anew each year with the challenge, "costs versus selling price." This challenge forms the guidelines in all his administrative and operational activities, and no rationalization is extended him to operate outside those lines.

SEED

Seed is a cost in producing seedlings and it too has to be placed on the side of the ledger that, by year's end, has to balance favorably with the price of seedlings paid by the planter.

The nursery practices involved in producing hardwood seedlings are more costly than those that are used in growing pine. There are many reasons for this difference. The chief reasons being lower volumes of each species, with corresponding lower densities per square foot of bed space. Also, the amount of hand labor involved from sowing through weeding, to lifting and shipping.

To keep the costs to the minimum, the Louisiana Forestry Commission utilizes its fire fighting crews to collect hardwood seed. This is no small chore for these crews. Hardwood production averages between one and two million seedlings each year, and this involves tons of seed. One year, the figure was 4-1/2 tons or 9,250 pounds. Of course, this is green weight and is comparable to the bushel of pine cones that weighs 35 pounds and yields 1 pound of seed.

All hardwood seedlings are grown at the Columbia Nursery and seed collection is assigned to the four districts that are immediately north, east, south, and west of the Nursery. If difficulties are encountered, then any of the remaining six districts are assigned quotas of seed to be collected.

Some species, such as yellow-poplar and cherrybark oak, have been in short supply in Louisiana, and this seed has been purchased from collectors in the adjacent state of Mississippi.

The price has climbed to \$10 per bushel for the seed of these two species. With a production of 1,000 to 2,000 yellow-poplar seedlings per bushel of seed, the cost of the seed alone is \$5 to \$10 per thousand. With a selling price of \$5.50 per thousand for the seedlings, the nurseryman finds it hard to reconcile his "cost versus selling price." Yellow-poplar may be an extreme case, but it is indicative of the trend in hardwood planting stock production costs.

PRODUCTION

<u>Past years</u>	<u>Proposed</u>
Red oaks	Sycamore
Cherrybark	
Water	Cherrybark oak
Shumard	
Nuttall	Sweetgum
White oaks	Baldcypress
White	
Cow	Cottonwood
Sycamore	White oak
Sweetgum	
Cottonwood	
Tupelo gum	
Green ash	
Baldcypress	
Arizona cypress	

Autumn of 1958 was the time of the first extensive collection of hardwood seed for the first large-scale nursery hardwood production scheduled for 1959.

The Commission began producing hardwoods in the nursery to learn the techniques for growing the various species successfully. Through experimentation and experience it was hoped to develop these techniques for use when interest and demand was expressed for any particular species. Since that time, many different species have been produced.

Due to the lack of demand for some species and high cost involved, including seed costs, certain species will no longer be routinely grown. A table of experience has been obtained on the cultural methods employed to produce these seedlings and production will be resumed if and when a cooperator expresses a firm interest in planting a particular species. In all probability, a working arrangement will be entered into with the cooperator to assure the seed supply for the requested species.

CONCLUSION

A tremendous increase of wood using industries are moving into the western region of the Southeastern Area. They are moving in because the raw product, timber, is available in huge amounts.

A large part of the credit for this supply of timber should go to those individuals--whether they be one person or a company--who planted seedlings years ago to renew a natural resource and improve the forest lands of Louisiana and other Southern states.

Largely through their efforts, new industries are springing up which shower their benefits in many directions for the prosperity of individuals, other industries, towns, cities, and states.

Seedlings grown on 1 acre in the nursery are planted the next year on 1,000 acres. Activities on that 1 acre of nursery are now influencing activities on a thousand acres. In 30 years, think of what can become of that thousand acres and countless other thousands of acres that have been planted.

Looking at the "big picture" perhaps there should be some degree of rationalizing permitted the nurseryman to provide the stock for reforestation without the confines of "seedling production costs versus seedling sales price."