

GOT ANY SEEDLINGS TO SPARE? OR HEY FELLOW, WHERE ARE YOU GOING WITH
THOSE TREES?*

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The South, already an important wood producing area, is to become the nation's wood basket by the year 2000. Now, if my mathematics are correct, that's less than a southern pine pulpwood rotation away. We are talking about harvesting then, trees you men produced in your nurseries three or more years ago - in some instances, we'll be harvesting then the superior tree progenies yet to be produced, but as certain to come as is tomorrow.

Hey, does that sound familiar? Well it should. It's the first paragraph of the talk which I gave and which was published in the Proceedings of the last nurserymen's conferences held in 1972. I carefully read over that speech in preparation for writing today's presentation and decided I could, for all practical purposes, give the same talk again. Why? --- well the story's the same and we've talked it for a long time. Use the right seed - plant the right stock! Only thing different now is that we have even more definitive data to back up the recommendations that we've been passing on to you all these years.

In my 1972 paper, I referred to Ozzie Wells' paper (3) given at the Tenth Southern Conference on Forest Tree Improvement held in Houston, Texas in 1969; copies available from Jim McConnell, Nursery Specialist, Eastern Tree Seed Laboratory, Macon, Georgia. In that paper, Wells made specific recommendations as to what seed sources were best to utilize for the production of our major southern pine species. Maps were included to indicate acceptable seed collection areas. Those same recommendations hold today and they have been further defined in work reported by other researchers. Rink and Thor (2) reporting at the 11th Conference on Southern Forest Tree Improvement held in Atlanta, Georgia in June 1971 recommend that "most loblolly pines to be used in establishment of seed orchards in Tennessee should be selected from Maryland, Virginia and North Carolina." Grigsby (1) in a recent publication, recommends specific seed sources of loblolly for planting in Arkansas.

Wells had indicated that the latest series of measurements of the Southwide Pine Seed Source Study have been made and analysis of the data is well underway. These data represent 15 years of growth for the 77 shortleaf and longleaf plantings and 20 years of growth data for the slash, loblolly and a few of longleaf and shortleaf trials. Early indications are that the results closely follow those presented in his 1969 paper.

*Same talk given at Eastern Nurserymen's Conference held at Gainesville, Florida on August 5-8, 1974.

And so it goes - research data continues to bear out earlier recommendations. Use the right seed and you will have met your responsibilities for producing the right seedling crop.

But here again a great big OOPS! comes on the scene. For years, Livingston Parish Loblolly pine seed has been used to produce seedling which show a high degree of resistance to fusiform rust. Quoting Wells (4) again "The most dramatic application of the S.P.S.S.S. results to date has been the use of Livingston Parish Loblolly (seed) in parts of the southeast where fusiform rust is a serious problem. Enough Livingston Parish seed has been sold so far to plant over 500,000 acres and a backlog of orders exist of a nearly equal amount. The recommendations resulting in this large-scale application were made in 1969 at the Tenth SFTIC in Houston on the basis of 10 and 15 years data from the S.P.S.S.S. so the 20 year results are of particular interest.

Preliminary analysis indicates that the good initial growth rate of the Livingston Parish trees is still being maintained through age 20 in plantings throughout the area where its use was recommended. Also, the coastal Carolina loblolly is maintaining its outstanding growth rate through age 20 in plantings in northern Mississippi, Alabama and southern Arkansas. In 1973, Hoy Grigsby reported similar results at age 10 in an independent Arkansas seed source study. Coastal Carolina loblolly may prove very useful in parts of the southern pine regions that are too cold for Livingston Parish trees and where rust is not a problem."

Dr. Bruce Zobel, sitting in at this same committee meeting where Wells reported his preliminary results, hastened to point out an unfortunate example of what could-prove to be a disastrous extension or misinterpretation of these recommendations. He knew of one company which had purchased or produced 8 million seedling of the Livingston Parish loblolly source and then had planted them on 1000 acres of Piedmont land! That was a today's wrong decision which undoubtedly will have dire results tomorrow -- a consequence of some company official who figured if that seed is that good in Louisiana, it ought to be O.K. here. Bayer aspirin may be used to treat headaches the world over, but Livingston Parish loblolly pine seed, or any other seed for that matter, should not be used beyond the recommended range or you'll have need for much of the Bayer aspirin! Truly, this was a case of "Hey Fellow, Where are you Going with Those Trees?"

Now remember, I warned you earlier, it's just the same old story - and we've got to keep on telling it. Use the Right Seed! Plant the Right Stock! Actually, most of you fellows are doing a good job at it too -- but I always figure, if there is still just one fellow out there who squirms a bit when I mention using the wrong seed, then the time will have been well spent.

The Forestry Incentives Program is off to a great start - and indications are that it will continue and get bigger. That means more planting and a greater need for planting stock.

The Third Forest Report listed 10 million acres of bare or poorly stocked land that needs to be planted or seeded, mostly to pine and an additional 20 million acres that should be converted to pine from low quality upland hardwoods. While these figures may have changed somewhat from that 1969 report, nevertheless they still represent a tremendous planting opportunity - and present a need for millions of seedlings.

Then we need add to this, the thousands of acres of forestland harvested annually which must be replanted. Yes indeed, we have our work cut out for us - and we've got to do it right.

As you know, Forestry Incentives monies are to be used to plant only on sites of high productivity. Fortunately, Rural Environmental Conservation Program Fund can be used to plant less productive yet potentially valuable forestlands.

Increasing quantities of genetically improved forest tree seed are entering your nurseries each year. During the 72-73 planting season, you men produced well over 85 million improved genetic quality trees in your southern forest tree nurseries. The Cooperative Weedicide Study at Auburn University has produced some promising results.

Nursery Specialist McConnell is now on board to provide technical assistance to area forest nurserymen on a full-time basis.

Testing procedures at the Eastern Tree Seed Laboratory have been further refined and speeded up.

Research on mycorrhiza, nematology, and other insects and diseases is in progress. The results of some of this work will have direct application to forest tree nursery practices.

Containerized seedling production systems are in various stages of development. The systems will provide an additional type of seedling for use in forestation on adverse sites as well as provide a means for extending the planting season and supply volumes of seedlings needed for certain types of "crash" or special planting jobs.

So, all in all, things really aren't too bad. Just keep on using the right seed! Produce the right stock! Then when that fellow asks - Got any seedlings to Spare? or "Hey Fellow, Where are you Going with those Trees?" - then you'll be able to say "Man, I've got the right stock for your planting site and I really mean it!"

REFERENCES

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- (4) Wells, O. O. 1974. Summary report of geographic variation specialist given to executive committee meeting of Southern Forest Tree Improvement Committee, June 1974.