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<u>Abstract</u>.--The talk traces southern nursery production and tree improvement progress during the 1970's. Planting gradually increased from 875 thousand acres to over 1.3 million acres. Seedling harvesters, improved environmentally acceptable weedicides for use in nursery operations, precision seeders and shrinking nursery budgets have all been a part of the action for the decade. Current seedling production, southwide, is about 50 percent from genetically improved seed -- target 100 percent by the late 80's. A new southwide emphasis on pine reforestation will place great pressure on nursery production facilities during the next decade but southern nurseries and southern nurserymen will meet the challenge!

As I looked at the title for my presentation today, I began to wonder --is that a question or is it a statement of fact? Well, I decided to make it a question. -----A decade of progress??? Has it really been that???

Including and since your 1970 meeting you have had nine Southern Nurserymen Conferences. Eight hundred and eleven of you attended these meetings and listened to at least 166 different papers on more than 67 different subjects. Five proceedings were published with a total of over 900 pages. What a learned group you are!!!

Ten years ago at this same meeting, at this same place, you talked about and listened to discussions about equipment which included topics on nursery systems, the seedling harvesters, and hydro-mulching. A second topic was nursery management including packaging, stock packing and incentives; another topic dealt with insect and disease control in nurseries and seed orchards, furthermore, other topics included weed control, soil management, seed handling and tree improvement...seven broad topics.

Now gathered ten years later, you have six major subject or topic categories----three old ones and three new ones. While equipment, its development and maintenance, is still a chore and often a problem for all of you, now you have stopped talking about it so much and you are just doing your "thing" with it.....packaging, seedling harvesters, hydromulchers, precision seeders and on and on. You're moving out-----great!!! That's certainly a step forward!!!

Let's look at the early 70's....seedling harvesters were just coming on scene..on drawing boards and onto nursery beds. Hydro-mulching was relatively new for forest nurseries. Weighing versus counting of seedlings was still in the trial stages at many nurseries around the South.

Bill King was incentive paying his packers. (He says he still is!)

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Fusiform rust and black root rot were taking their toll.

Auburn's Mason Carter had a series of herbicide/weedicide tests going in numerous nurseries around the South.

Seed orchards were springing up all over and so were the problems associated with them----graft incompatibilities, wind throw, seed bugs, no pollen, fusiform rust-----. There were others!

How about seedling production and acres planted back then??

Well, back in 1970, collectively you produced about 625 million trees. The trees planted slightly over 875 thousand acres. By 1973 and 1974, the Forestry Incentives Program began to crank up and your seedling production also increased. By 1975, total planting and seeding across the South for all types of ownerships had increased to over 1.27 million acres.

The mid 70's saw great strides in developmental work and widespread use of continually improving models of seedling harvesters.

Auburn University, through the Federal/State Cooperative Weedicide Project, made notable progress in its pilot testing of a wide spectrum of weedicides in your nurseries across the South.

Don Marx and his Research group at Athens, Georgia, began to get excited about "fungi of the roots"----Mycorrhizae. Their work has continued to be of great value in improving not only the quality of the planting stock you men produced, but perhaps even more importantly, the ability of that stock to survive and thrive under good to very adverse site conditions.

On the National scene, the Watergate mess had come and gone----but it was not forgotten. The stock market had run up, down and sideways. Vietnam, for all its cost and losses of lives and other resources, became a National disgrace. On the brighter side, Gerry Ford kept using his head on the golf courses around the country!

But back to the South....new State Foresters were coming on board and new forest industry nurseries began to spring up in various places around the Southern States. Clark Lantz left the academic community to join State and Private Forestry in the mid 70's as our Nursery and Tree Improvement Specialist.

By this time, too, a few of the more experienced nurserymen had retired, changed jobs, gone on to help establish and run industrial nurseries and a few had traveled on to that weedless, greener nursery in the sky. Now as we move into the last third of the 70's, we see a flurry of activity. Many new faces as well as more nurseries are established. Early in the 70's there were nearly 60 nurseries in the South. By early 1978, there were nearly 70 nurseries---practically---since a number were under development or in various stages of production start up - nine new company nurseries in the last two years.

In 1977-78, you produced a total of about 895 million seedlings which planted about 1.34 million acres.

F.I.P. planting as a part of this had gradually increased from 130 thousand acres to over 192 thousand acres annually. I'm told that last season, the planting probably exceeded 200 thousand acres.

By 1978, seedling harvesters were common place. Seed orchards and improved quality seedling stock production were big on the scene. In the 13 Southeastern States in 1977-78, you produced over 370 million genetically improved seedlings. Now that was 41 percent of the total production!!! I suspect this year your genetically improved seedling production will approach, if not exceed, 50 percent of your production. You are well on your way to 100 percent production of improved stock by the mid to late 80's..Bravo.

Oh yes, I should mention, too, that during the mid 70's, Dr. Steve Boyce and his team at the Southeastern Forest Experiment Station in Asheville began to tell us of the great shortfall in acreage replanted each year to pines here in the South. We were harvesting about 5-6 hundred thousand more acres each year than we were replanting...thus creating a tremendous backlog of acreage in need of replanting. And equally as important, increasing the shortage of certain age classes of growing stock -----tomorrow's harvest, if you will.

In late 1977, Director John Vance of State and Private Forestry, put together a special Task Force to look into the problem and make recommendations. This was done. Work on that problem has continued to date and Bob Lentz, Staff Director in Forestation and Management in State and Private Forestry in Atlanta, will tell you about that in a few minutesbut one thing for sure coming out of that action was an expressed need for greatly increased production of and increased planting of improved Southern pine seed and seedlings----this is <u>urgent</u>, especially if we are to even come close to meeting the projected wood and fiber needs of the nation by the year 2000 and beyond.

On the problem side, many of your nurseries are now overworked, in need of renovation, need new irrigation systems, more cold storage---you name it. Some of your nursery acreage, converted years ago to seed orchards, is now needed for seedling production.

On the brighter side, the Herbicide Cooperative is still alive and going strong. In fact, it's about to become two, of sorts, with a companion Cooperative for Silvicultural Herbicides in the offing. The late 70's also saw Jack May retire from the University of Georgia ---- only from the University of Georgia, however ---- he's still a going strong nursery consultant and a great friend for many of us here today.

Quite a few more of the old gang retired or passed on in the late 70's.

---- And so we have arrived again back at Lake Barkley for another meeting. Some a little grayer, all a little smarter, and not a one any older!!!

Have we made any progress??? Has this been a decade of progress??? Absolutely yesss!!! You collectively produced over 9 billion seedlings which planted over 11.5 million acres here in the South.

---- You are meeting the challenges of nursery management under the new stringent codes for pesticide use.

---- You are dealing effectively with labor shortages and Equal Employment Opportunity constraints.

---- You are carrying on with continually shrinking budgets due to the spiralling inflation.

---- You are moving forward in soil management as you increase your use of testing services and as you put into practice their recommendations.

---- You are practicing insect and disease control measures not only in your nurseries but, as well, in your seed orchard management.

---- You are becoming more and more conscious of the need for cost effective management practices so important in these days of greatly increased costs for labor and supplies.

---- You recognize the importance of seed source and make efforts to seek and use the best possible seed.

---- Ever increasing numbers of you fully utilize the National Tree Seed Laboratory and all of its services. For those who missed that name, it's the new name for your old friend, The Eastern Tree Seed Laboratory---now it's the National Tree Seed Laboratory at Macon, Georgia.

---- You are still a strong, respected group of men serving a dynamic industry----The Southern Forest Industry----an industry whose products, by the year 2000 and beyond, will furnish over 50 percent of the nation's wood and fiber needs.

---- Your trees of this past decade will be the paper pads, furniture, heat, and houses for the year 2000 and beyond.

Truly, it has been a decade of progress----one you can all be proud of and one whose products will serve our nation for many years to come. Rest on your laurels, men ----- <u>Never!!!</u> The challenges of tomorrow are great - new issues, new initiatives, new problems, new challenges, new opportunities. Individually and collectively you will meet these issues, initiatives, problems, challenges, and opportunities.....and when we reassemble here in 1990 and look back, we will again look back on another great decade of progress!!!