

## NEW NURSERY EQUIPMENT AND ORDER PROCESSING

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My part in this nursery conference is a discussion of new nursery equipment in the southern states' nurseries.

As we all know, we are living in an economy-minded world. We are called upon to produce seedlings at less cost each year, even though the cost of labor and machinery continually rises.

The one place or phase of the nursery work that we have left to work with to combat the demand for seedlings at less cost is our labor cost. Therefore, we have to devise, build, and use labor saving equipment, such as the weeding machine, lifting machine, packing equipment, and many others.

Most of the southern state nurseries have some kind of new equipment in use that some of us here do not know about. To mention a few, Florida has a weeding device that will carry six men on the back of a tractor. The foreman drives the tractor and supervises the weeding operation. Florida also has an electric motor operating on a battery of a 2-ton truck to spread sawdust more evenly on the nursery soil.

As you know, hand weeding and packing is where the bulk of day-labor is used in the nursery. The old method was to use a crew of people walking the fields and pulling the grass out of the nursery bed. Two people worked each bed, bending or squatting to reach the grass. The new method using the self-propelled or the type drawn behind the tractor has the worker riding while doing the job. This makes the job much easier for the worker yet it keeps him alert and busy to keep the grass pulled as the machine moves forward.

South Carolina has a self-propelled weeder that will carry four men allowing all to pull grass and weeds. This weeder is patterned after the Don Ryder Model and one is here on display for you to see.

The State of Tennessee has a walnut huller that is simple to build and saves a lot of labor; also, this piece of equipment will clean the walnuts in such a manner that you will have all good walnuts to plant.

The State of Mississippi has made a machine to cut cottonwood for cuttings. Using the gang saws, they can harvest 10,000 cuttings in 2 hours with 1 man. This is certainly a labor saving machine and it also works so that you can have freshly cut cuttings for the landowner instead of having them stored for a long length of time. Mississippi is also using the root pruner on their grading tables, having made improvements over the U. S. Forest Service type root pruner. Some of

the States do not use the root pruner or the grading tables in their packing operation, but where the grading is done and where there are lots of hardwood seedlings, the table-type root pruner can save a good deal of labor costs and also give the planter a better seedling to plant.

The State of Georgia has been working on a seedling lifter that will work on the basic principle of pulleys and belts. This machine has proven that it can lift seedlings in large quantities and preserve the root system as well as the tops. We do not say we have the perfect tree lifter. This is a working model and it could be made lighter and with less adjustments for more ease in handling. New York State has a seedling lifter patterned after this model. Campbell Soup Company of Cairo, Georgia, has a plant lifter, built on the same principle as the Georgia model, to harvest tomato plants. Their lifter has been modified some from the original one--built lighter and has less adjustments.

At this time I would like to show you some film strips and slides on some of the equipment I have mentioned in the last few minutes. First, we will have films, then slides.

I have some information on the Georgia machine I would like to pass on to you for you to look over.

#### Order Processing by IBM

After the order has been received by Reforestation Department, accepted, checked for correct payment, and assigned a number, it is sent to administration for IBM handling listed below:

- A. Administration will receive daily, during shipping season, paid orders from Reforestation. These orders will be accompanied by a correct adding machine tape showing amount of money due. Administration (IBM) is to prepare:
  1. Name and address card
  2. Payment record card
  3. Order card showing number ordered, method of shipment, and species
  
- B. Weekly, Administration will furnish Reforestation with a complete ledger showing:
  1. Landowner name (alphabetized)
  2. Order number
  3. Species
  4. Number trees

5. Shipment method (1 or 2)
6. Amount of money received
7. Date of deposit
8. Deposit number
9. Refunds and cancellations are to be listed along with the above and subtracted from total of seedling sales. A symbol is to be placed beside refunds and cancellations to identify same
10. Total funds received

C. Administration will receive completed orders from Reforestation for statistical purposes. The following will be keypunched.

1. Order number
2. Species
3. Amount
4. Method of shipment
5. Nursery shipping trees
6. Type ownership
7. Type program
8. District
9. County

2. At the completion of shipping season, Administration will prepare a summary of statistical data on seedling orders so the annual seedling report can be prepared.