CONE COLLECTION METHODS AND COSTS

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Since the establishment of the seed production areas in Mississippi in 1955, we have been experimenting with methods to economically collect cones. As far as cost per pound goes, it is very hard to compete with the individual cone collector who collects cones from the easiest and, usually, undesirable trees in the general forest area. The method of cone collection is changed somewhat by the more elaborate type of equipment needed to collect cones from the better quality trees. A method has to be found which is safe and yet be economical.

The first method we tried was a truck-mounted hydraulic hoist equipped with a fibre glass bucket and controls so it could be operated from the ground or by the person doing the cone picking. It was tried on the hard to pick loblolly pine cones. The picker was raised up along the outside of the tree crown. He had difficulty picking cones from parts of the tree other than along the outer edges. Production cost was found to be about five times greater than when cones were purchased from individuals who collected cones the regular way. So this method was abandoned.

The second method we tried was a truck-mounted 40-foot telescoping ladder, mounted on a power wagon truck. This ladder was used to put 4 to 6 climbers into trees. Each climber was equipped with a safety belt, safety goggles, and a manila rope long enough to lower himself from the tree top. These climbers worked in a longleaf seed production area. The trees only yielded about 2 bushels per tree, so the cost was still about three times more than the cost of cones purchased from individuals.

Various cone collection methods have been used over the region, such as using Swedish ladders and tree bicycles. Some contract the collection job to concerns, such as tree expert companies.

The tree shaker used in gathering pecans is going to be demonstrated in southern Mississippi the second week in September. This might have some potential in the collection of longleaf and slash.

We have got to face the facts, if we want better quality seed we will have to pay for them. No proven method is known to us yet that will reduce the cost as low as we really would like to have it--so, we are still seeking new ideas.

Another important part of the cone collection program is to identify the cones clearly and properly as to the origin, species, and amount of cones on individual trees. If seed production or seed orchard seed or cones are lost in the extraction process, all of our extra effort has gone down the drain. Cones should be stored properly prior to shipment to extractories. They should not be stored in

large piles or stacked over 5 bags high. Cones should not be shipped by freight while still green because of the heating problem. We should not endanger our seed viability after collection, so let's collect and ship cones with the greatest of care.

Discussion

Q. How deep can you store these green cones before they might go through a heat?

A. (Martin) Not over five cones (of loblolly) in a closed building on wire racks.

Q. (Michelson) How about economics? All this is going to cost money. Should state agencies absorb this cost themselves, or pass it on to the purchasers? If it is passed on to the purchaser, it may reduce sales.

COMMENTS. If we can prove the genetic worth of these superior cones, the industry will be glad to absorb some of the technical cost. We are saying that they will be worth more in the long run.

COMMENTS (Martin). We may be able to reduce the cost of collection by contracting the cone picking.

COMMENTS. Many states are increasing the cost of improved seedlings to offset the cost of the nursery.