

NEW NURSERY EQUIPMENT AND PROCESSES

by

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It is a little embarrassing to load up the big guns and then have them misfire, which is in part what has happened to our Nursery.

The use of aerial photos was probably our biggest disappointment. After discussing the possibilities and potentiality with several of our photogrammetrists, we thought it would be feasible to compute areas of like densities of shading; multiplying by a predetermined factor for each degree of shading used would then give us a useable inventory. It is still a wonderful theory; but we could not get enough detail on our photos. The idea has not been abandoned and maybe we can still work something out.

The use of I.B.M. computers in our Nursery Inventory is held up pending our programmer's time to set up the program for our Department's particular computer, a 1401-18K.

There is a write-up in Tree Planters Notes No. 64 describing how a forest nursery in Norway, Michigan is using the I.B.M. cards and recording the plots with an electrographic pencil. Our use will utilize the Porta-Punch system, where the information can be punched directly on the card at the plot site thereby eliminating several opportunities for errors and in general facilitates faster service. The cards can be printed up in any form desired and after a program is set up, the use of Punch cards and I.B.M. computers will save a lot of time and effort on the part of Nursery personnel.

As a matter of interest, I did go along with a field crew taking inventory and punched the information onto the cards using a Porta-Punch base and stylus. It was not difficult to keep up with the recorder who was recording manually the counts of the crew.

I have slides of our 2010 John Deere Hi-Clear tractor which is quite a machine. We have quite a program of transplants that are allowed to attain a height range from **80 to** 130 centimeters. We found that our low silhouette tractors and equipment were causing too much top damage, hence the Hi•Clear which has 90 centimeters of unimpaired clearance.

We attached a center mounted lifting blade that is interchangeable with a root pruning blade that are very efficient. If our stock gets any larger, we may have to decide on either the 4010 tractor or a lumber carrier.

We have a very successful version of a transplanter, using three Holland units mounted behind a geared tractor that planted three rows of trees offset to accommodate three additional rows, for a total of six rows a bed. This last year we improvised a six row planter that reduces tractor time and gives us straighter, more easily cultivated transplant beds. The units are standard Holland seedlings transplanters with all of the current revisions and modifications on the shoes. With the use of the hydraulically controlled carrier wheel our same tractor handles the six row as easily as the three row machine.