

PIECEWORK SYSTEM OF GRADING AND TYING SEEDLINGS

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We instituted a piecework system of counting, culling, and tying seedlings in the fall of 1960. We set up ordinary large tables and put two boxes of loose seedlings in the middle of each table. The boxes were placed on edge for ease of removing seedlings. Four women worked at each table; and each woman was supplied with a stool and cushion, cleaver and block for pruning roots, a bundle of plastic coated wires precut to length, a counting board made of a 2x4 with 21 nails in it to provide 20 spaces wide enough for a bundle, and a prepared crate (fig. 1). The women also had special sticks marked for minimum and maximum root and top lengths and notched for stem diameter.

One man looked after two tables, supplying boxes of trees, empty crates, and wires. He also tallied the number of bundles each woman tied. Whenever a woman filled her board with 20 bundles, the man checked one or two bundles to see that each bundle had exactly 25 seedlings of good quality. He then placed the bundles in the crate and added wet moss.

The piecework rate was determined by the supervisor, the nursery foreman, and two nursery laborers working for 3 hours. A rate of 3 cents per bundle was decided on. After the first day this was raised to 4 cents when the women didn't do too well and complained. After the second day when the women did quite well we lowered the rate to 3.5 cents and realized that we should have left it at 3 cents. Production was low the first day because of inexperience. Production was held down during the job by shortages of seedlings supplied from the field, throughout by heavy culling required in our dense 2-0 jack pine, and finally by part days. The average per woman per day was 8,750 trees tied,

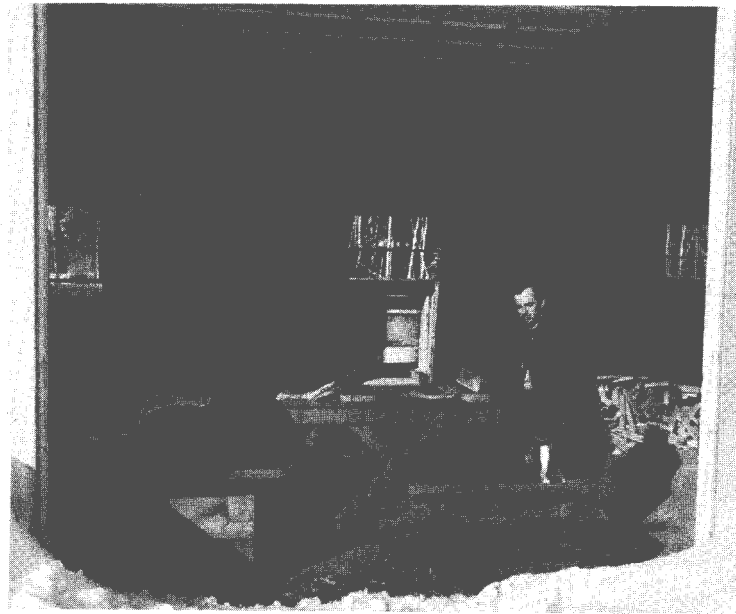


Figure 1.--Tying table in barn and counting board on crate for counting bundles, White River Nursery.

350 bundles of 25 trees each (table 1). We expect to use a rate of 3 cents per bundle next year, but this will be checked and finally set by actually working at it before the shipping season.

Though we only shipped a small number of seedlings in the fall of 1960, we know that the piecework system of counting, culling, and tying was much quicker and cheaper than our previous day work system. For shipping 267,000 trees our total lifting and shipping cost was \$950, or \$3.56 a thousand. This included lifting and the high lifting cost per thousand of scattered spruce in some very thin beds.

We would like now to devise a method of putting the whole operation from lifting in the field to crating on a piecework basis.

TABLE 1.--Piecework bundling of seedlings, White River Nursery, 1960

Date	Bundles ¹ tied per woman			Trees tied per woman, average	Rate per bundle	Range of earnings
	Minimum	Maximum	Average			
September	<u>Number</u>	<u>Number</u>	<u>Number</u>	<u>Number</u>	<u>Cents</u>	<u>Dollars</u>
8.....	260	275	260	6,500	3	7.80- 8.25
9.....	300	380	340	8,500	4	12.00-15.20
14.....	350	500	435	10,875	3.5	12.25-17.50
15.....	348	508	406	10,100	3.5	12.20-17.78
20 ²	280	324	305	7,650	3.5	9.80-11.35

¹ 25 trees per bundle.

² Part day.