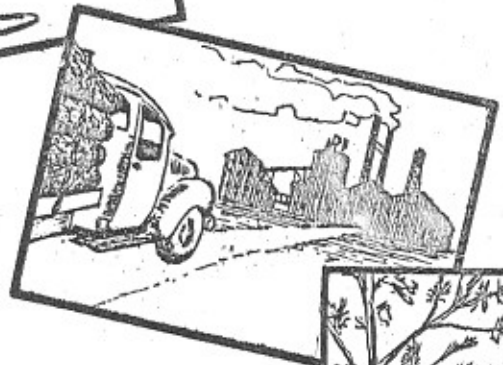
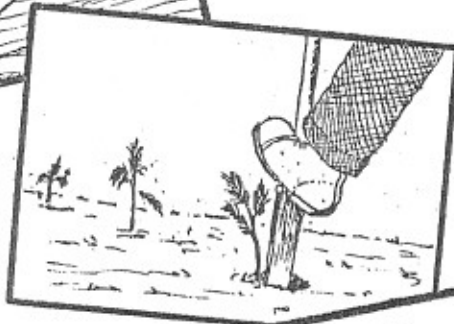
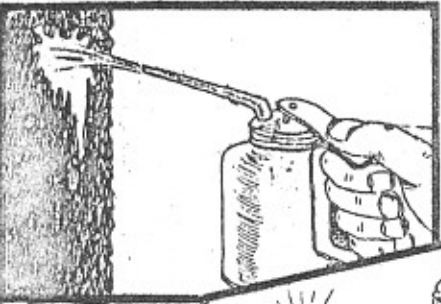


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# SOME VIRGINIA DIRECT SEEDING RESULTS FOR 1961



Virginia Division of Forestry  
Department of Conservation & Economic Development  
Charlottesville, Virginia

## Some Virginia Direct Seeding Results for 1961

(Reported by Virginia Division of Forestry - December 1961)

### Introduction

Until more definitive direct seeding tests are available the Virginia Division of Forestry will continue to report on the results of some direct seeding trials carried out by Virginia landowners. This report includes the results of some 1961 direct seeding trials.

The reporting of direct seeding results began in 1960 and were reported (Virginia Division of Forestry Occasional Report Number 8).

### Counties and Soils

Mountain, Piedmont, and Coastal Plain counties were represented in the 1961 seedings as were typical soil types falling within these physiographic provinces.

Both county and soil type are listed for each direct seeding trial. As a means of further identification tract name is also listed in a summary of results found later in the report.

### Seed Used

White and loblolly pine seed was used in the 1961 trials.

With one exception, Vaughan - Amelia County, stratified seed was used.

All seed used was of Virginia origin and treated with "sticker", Arasan 75, Endrin, and aluminum flakes as a protectorant.

### Site Preparation and Seeding Method

Site preparation for the broadcast seedings included bulldozing, disking of cut-over land, disking of pasture and other farm land, and logging.

Site preparation for the spot seedings consisted of raking away leaves and litter to expose mineral soil and dropping the seed on the exposed spot.

All the broadcast seedings except Vaughan - Amelia County were made using a "Cyclone" seeder. The Vaughan - Amelia County seed was scattered by hand.

The spot seedings were accomplished using a "Panama" seeder. The "Panama" seeder is another of the "walking stick" variety of seeders whereby the seed is dropped by gravity through a hollow metal tube onto the desired spot.

### Field Procedure and Results

The direct seedings were field checked for results during late Fall 1961.

Mil-acre plots (1/1000 acre or a square 6.6 feet on side) were taken and all the broadcast direct seeding data is based on these mil-acre plots. The summary of this data follows in tabular form.

The seed-spot data is based on an evaluation of each planting spot and is also summarized in the table which follows.

A percent stocking of 44 indicates, that on the average, there are at least 440 well-distributed seedlings per acre.

The Percent Stocking and No. Seedlings Per Acre in the following tables indicate with a probability of 2 to 1 that the same results would occur using similar field procedures.

Summary of 1961 Direct Seedings

Seed Broadcast - "Cyclone"

<u>Tract Name</u>	<u>County</u>	<u>Site</u> <sup>1/</sup>	<u>Soil Type</u>	<u>Lbs. Seed Per Acre</u>	<u>Date Sown</u>	<u>Percent Stocking</u>	<u>No. Seedlings Per Acre</u>
			(Loblolly Pine)				
Griffin	Brunswick	C.O.-D.	Cecil	1.0	3/28/61	76.0 <sup>±</sup> 6.0	3,090 <sup>±</sup> 515
Bruce	Orange	C.O.-D.	Mixed Alluvial	0.8	5/1/61	38.6 <sup>±</sup> 6.7	628 <sup>±</sup> 92
Neale	Orange	F.-D.	Davidson	1.4	5/1/61	44.0 <sup>±</sup> 4.0	610 <sup>±</sup> 71
Walton	Louisa	C.O.-B.	Nason-T	1.0	5/1/61	88.0 <sup>±</sup> 3.5	3,107 <sup>±</sup> 369
Carter	Albemarle	C.O.-B.	Davidson	1.0	4/21/61	86.0 <sup>±</sup> 3.0	2,160 <sup>±</sup> 139
Armstrong	Fluvanna	F.-D.	Nason-T	0.7	4/21/61	84.0 <sup>±</sup> 4.7	3,020 <sup>±</sup> 807
Bartholomew	Charlotte	F.-D.	Goldston	1.0	5/3/61	20.0 <sup>±</sup> 2.6	216 <sup>±</sup> 300
Bartholomew	Charlotte	C.O.-D.	Georgeville	1.0	4/18/61	83.3 <sup>±</sup> 4.2	1,876 <sup>±</sup> 376
Ellett	Nottoway	F.-D.	Appling	1.1	5/3/61	13.0 <sup>±</sup> 4.9	170 <sup>±</sup> 107
Earp	Halifax	C.O.-B.	Cecil	1.0	4/4/61	87.0 <sup>±</sup> 4.9	2,730 <sup>±</sup> 400
Snow	Amelia	C.O.-B.	Wilkes	1.0	4/13/61	75.0 <sup>±</sup> 5.8	2,250 <sup>±</sup> 403
Vaughan	Amelia	C.O.-B.	Madison	2.0	3/8/61	98.6 <sup>±</sup> 1.6	8,800 <sup>±</sup> 1007
Robertson	Bedford	F.-D.	Mixed Alluvial	0.8	5/4/61	20.0 <sup>±</sup> 6.5	270 <sup>±</sup> 107
Hare	Nansemond	C.O.-D.	Bladen	1.0	4/18/61	77.0 <sup>±</sup> 4.7	2,740 <sup>±</sup> 342
Griffin	Isle of Wight	C.O.-D.	Norfolk	1.0	4/18/61	72.0 <sup>±</sup> 5.3	2,200 <sup>±</sup> 340
Richardson	King and Queen	C.O.-B.	Sassafras	0.7	3/12/61	76.6 <sup>±</sup> 7.4	3,425 <sup>±</sup> 510
Simmons	Lancaster	C.O.-D.	Sassafras	1.0	4/6/61	84.0 <sup>±</sup> 4.5	3,350 <sup>±</sup> 468
Farmer	Richmond	C.O.-B.	Sassafras	1.0	3/14/61	93.0 <sup>±</sup> 3.0	5,220 <sup>±</sup> 1127

Jefferson	Caroline	C.O.-B.	Sassafras	1.4	3/30/61	97.1±9.0	6,014±1092
Wright	Caroline	C.O.-B.	Chesterfield	1.0	3/30/61	88.0±2.9	3,080±589
Burke	Caroline	C.O.-B.	Sassafras	1.4	5/4/61	64.0±7.0	2,030±626
Vaughan	Caroline	C.O.-D.	Sassafras	1.2	5/4/61	54.0±9.7	1,130±212
Deam	Fauquier	F.-D.	(White Pine) Fauquier	1.0	4/21/61	74.0±8.1	1,760±238
Wood	Floyd	F.-D.	Halewood	1.0	4/25/61	10.0±3.6	120±47
Turner	Carroll	C.O.-R.	Porters	1.0	4/25/61	36.0±4.3	600±111
Philpott	Henry	F.-Bn. & D.	Fill	1.0	4/24/61	2.0±1.4	20±14
Russell	Lee	F.	Shale	1.0	6/1/61	0	0
Porter	Russell	C.O.-H.L.	Westmoreland	1.5	4/26/61	76.2±7.5	2,037±326
Stoness Land Co.	Wise	C.O.-H.L.	Muskingham	1.5	5/5/61	41.4±12.2	728±242

Seed Spot Method - "Panama Seeder"

<u>Treat Name</u>	<u>County</u>	<u>Site</u>	<u>Soil Type</u>	<u>Date Sown</u>	<u>Avg. No. Seeds/Spot</u>	<u>Avg. Survival<sup>2/</sup></u>	<u>% Spots Containing Two or More Seedlings</u>
Stidham	Lee	C.O.	(Loblolly) Fullerton	5/4/61	4 - 5	22.5±4.6	10
Mullins	Wise	F.	(White Pine) Muskingham	5/5/61	4 - 5	38.3±5.5	43
Cox	Lee	F.	Fullerton	5/4/61	3 - 4	38.3±4.6	39
State Forest	Buckingham	C.O.-D.	Nason-T	4/14/61	3 - 5	71.8±4.6	62
State Forest	Buckingham	C.O.-D.	Nason-T	4/14/61	3 - 5	68.2±4.9	51

<sup>1/</sup> C.O. - Cut-over, D. - Disked, B. - Bulldozed, F.- Field, Bn. - Burn, H.L. - Heavily Logged, and R. - Raked.

<sup>2/</sup> Percent of seed spots containing one or more established seedlings.