

## NEFTIC AFFAIRS

Chairman Edwin L. Giddings

### REPORT OF THE COMMITTEE ON IMPROVEMENT OF SPRUCE

James B. Carlaw, Chairman

#### Status of spruce planting in the Northeast

The current status of the planting of spruce in the Northeast was surveyed this spring by a written inquiry to the responsible officer in each State. The questions related to quantity of production, source of seed and planting instructions.

The results, in general, were:

1. 25 million spruce seedlings produced in 1957 of which 57% was white spruce and 43% Norway spruce. An unknown but substantial quantity of the white spruce is used for the production of Christmas trees.

2. The trend is toward tighter control of seed source documentation and toward the use of "home state" seed rather than seed from out-of-state sources.

3. Planting instructions including a check on the site conditions are commonly provided by service foresters.

Maine: All proposed planting sites are examined by State Service Foresters before tree species is granted for reforestation.

Maryland: All planting sites are examined by a Department Forester before trees are granted for reforestation. Trees are free providing an agreement is signed which prohibits any resale and agrees area will remain in trees for a timber crop (no time limit specified).

Massachusetts: All planting sites are inspected by forester before tree orders are accepted.

New Jersey: No orders for trees accepted unless a Department Forester has inspected site and made a planting plan.

New York: Advice of District Foresters recommended.

Pennsylvania: Advice of District Foresters offered if land owner desires. Application for trees includes description of planting site.

Rhode Island: Service Forester inspects all planting sites insofar as is practical.

Vermont: County Foresters attempt to check all planting sites before owner orders trees. Tentative key to planting sites keyed to drainage., texture., soil series and slope is being field tested.

More detailed results are included in tables 1-4. The Committee wishes to thank each of the persons contributing information for their cooperation.

Table 1.--Nursery production, 1957 - Seedling production

State	White spruce		Norway spruce	
	In-state	Import	In-state	Import
Connecticut <sup>1/</sup>	758,000 <sup>2/</sup>	--	243,600	40,000 (N.Y.)
Maine	120,300 <sup>3/</sup>	17,850 (N.J.)	65,540	237,250 (N.J.)
Maryland	200,000 <sup>2/</sup>	--	800,000	--
Massachusetts	150,000	--	290,000	--
New Hampshire	350,000	--	--	--
New Jersey	--	--	534,350	--
New York	11,474,000	--	3,557,000	--
Pennsylvania	1,029,700	--	4,261,400	--
Rhode Island	38,000 <sup>2/</sup>	--	--	--
Vermont	155,000	--	764,000	--
Totals	14,275,000	17,850	10,515,890	277,250

1/ 1958 Shipments. 2/ Primarily for Christmas trees. 3/ Included 45,500 white spruce and 32,000 Norway spruce from a private commercial nursery in Maine. Remainder of Maine production.

Table 2.--Nursery production, 1957, by seed sources (in percent)

State	White spruce				Norway spruce			
	Home state	New York	Wisc.	Europe	Home state	New York	Wisc.	Central Europe
Connecticut	100 <sup>1/2/</sup>	--	--	--	100 <sup>3/</sup>	--	--	--
Maine	50 <sup>4/</sup>	50	--	--	25 <sup>5/</sup>	75	--	--
Maryland	100 <sup>6/</sup>	--	--	--	100 <sup>6/</sup>	--	--	--
Massachusetts	100 <sup>1/</sup>	--	--	--	10 <sup>1/</sup>	90 <sup>7/</sup>	--	--
New Hampshire	100	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--	100 <sup>8/</sup>
New York	100 <sup>1/</sup>	--	--	--	20 <sup>1/</sup>	--	--	80
Pennsylvania	--	50	--	50	25 <sup>5/</sup>	--	--	75
Vermont	50 <sup>4/</sup>	50 <sup>7/</sup>	--	--	100 <sup>1/</sup>	--	--	--

1/ Seed from plantations. 2/ Seed orchards designed for Christmas tree production. 3/ Seed orchard being developed for timber production. 4/ Seed chiefly from natural stands. After 1957 expect to use 100% Maine sources. Prior to 1957 100% of seed from N.Y. and Wisc. sources. 5/ Seed chiefly from planted trees. 6/ Original seed came from Adirondacks. 7/ Seed of Adirondacks origin from private company. 8/ Certified seed from Austria.

Table 3.--Planting Instructions, White spruce

State	Site	Spacing	Remarks
Maine	Does well on moist loamy soils, fairly well on drier sandy loam	6 x 6	Subject to sawflies
Maryland	Moist heavier soils at elevation 2,500 feet and higher	6 x 6	--
Massachusetts	Heavier soils, more moist sites recommended	6 x 6	Mixtures not recommended
New Hampshire	Well-drained but moist soils in the north and on loamy soils in south. Potassium deficiency appears when planted on sandy soils.	generally 6 x 6 4 x 4 for Christmas trees	--
New Jersey	--	--	--
New York	Better sites, moist but well drained flats or lower slopes	6 x 6	Mixture with red pine or larch acceptable if spruce removed as Christmas trees
Pennsylvania	Fertile, moist, well-drained; will grow on sites too wet for other species.	8 x 8	--
Rhode Island	Average or good fertility	4 x 4 or 5 x 5 for Christmas trees	--
Vermont	Well-drained sandy loams, silt loams and clays. Poorly drained sandy loams and loams.	--	--



Table 4.--Planting Instructions, Norway spruce

State	Site	Spacing	Remarks
Maine	On moist loam or sand loams avoid very dry or wet sites	6 x 6 to insure recovery from weevil	Do not plant in mixture with white pine
Maryland	--	6 x 6 minimum	--
Massachusetts	Same sites as white pine, best growth on the loams and heavier soils	6 x 6 minimum or 8 x 8 (preferred)	Mixtures not recommended; subject to heaving on open or sod land
New Hampshire	Fertile, well-drained loamy soil	generally 6 x 6	--
New Jersey	Deep, well-drained but not dry	5 x 5	Plant pure or mixed with white pine or larch; where mixed cut spruce as Christmas trees.
New York	Good sites; moist but well- drained flats or lower slopes, not on ridge tops or very sandy soil	6 x 6	--
Pennsylvania	Deep moist soils, not in low swampy areas	8 x 8 recommended for most species	--
Rhode Island	Good fertility well-drained but not dry or imperfectly drained on northern exposures	6 x 6	--
Vermont	Sandy loams ( N & E slopes), loams and silt loams, heavy silt loams and clays in sloping areas	--	--