

CONNECTICUT ESTABLISHES A SEED ORCHARD

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In 1950 the Forestry Division of the Connecticut State Park and Forest Commission began exploring the possibility of obtaining seed for its forest nursery from local seeds. Nursery stock raised for forest planting in Connecticut is entirely coniferous, and as most of the species used are not native to this State it will be necessary either to collect seed from plantations already established or to establish seed orchards for future collections. For the present, advantage will be taken of the occasional seed years to collect from selected plantations where the trees seem well adapted to local conditions. We recognize that this is at best a stop-gap procedure, Little, if anything, will be known concerning the origin of parent trees; closed stands produce small quantities of cones making the seed collection difficult and expensive. It therefore seems logical that we should explore the possibility of establishing seed orchards.

Since the beginning of World War II a great many landowners have become interested in establishing Christmas tree plantings. Locally grown trees have, for ten years, found a ready and profitable market. The local requirements for Christmas trees are that they be one of the firs or spruces and that they have

1. Blue-green foliage
2. Compact branching habit
3. Good retention of needles when placed indoors

White spruce fits these specifications well and the market is already accustomed to this species. Christmas trees are usually grown on a 12-year rotation. With this background in mind and with hopes of obtaining relatively speedy results, the first seed orchard selection was a 1935 planting of white spruce, 2 acres in size on the Natchaug State Forest in Eastern Connecticut.

Here briefly is what is known concerning the selected area and what we hope to accomplish in the way of future development of this stand:

1. The plantation is known to have borne viable seed in 1948 and again in 1950; in fact, the 1950 crop was collected and produced over 100 pounds of clean seed.
2. The area is fully stocked with trees 8 - 20 feet in height, a high percentage of which are desirable in form and color.
3. The area is level, relatively stone free, and accessible in all parts to trucks.
4. Late spring frosts are not an important factor on this site.
5. There are no other stands of white spruce in the immediate vicinity.

Future plans include:

1. Removing all trees not phenotypical (blue-green foliage, compact branching).
2. The establishing of a trial spacing of about 30 feet between seed trees,
3. The development of low, broad-crowned trees by topping out the trees during or following cone harvest. An arbitrary maximum height of 25 feet has been set.
4. Seed collection from truck-mounted ladders.
5. Running progeny test to ascertain the percentage of desirable Christmas tree stock resulting from seed collected.