

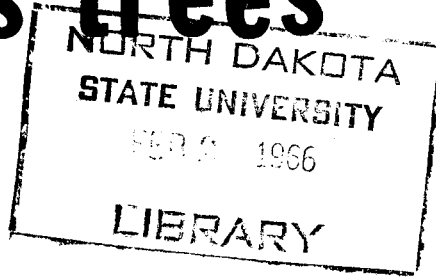
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NORTH DAKOTA STATE UNIVERSITY

Growing christmas trees

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Forester



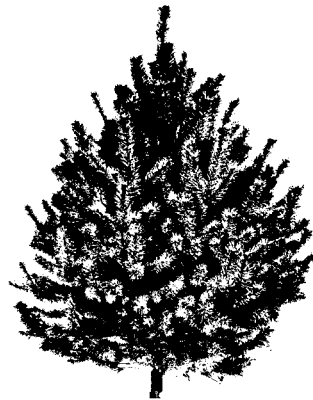
EXTENSION SERVICE
NORTH DAKOTA STATE UNIVERSITY
FARGO, NORTH DAKOTA 58103

Ponderos pine Christmas tree plantings, Earl Veum Farm, Cavalier, N.Dak. Fred Roberts - Earl Veum

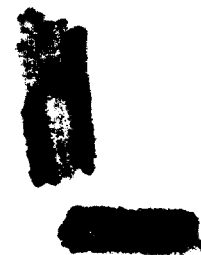


Varieties for Christmas Trees

1. **Scotch pine**--This is the most popular plantation grown Christmas tree. It is a rapid grower, often ready for harvest in 6 years. The needles vary from 1½ to 3 inches in length and there are two needles to a cluster. The trees vary in form, color, growth rate and susceptibility to winter browning, depending on the origin of the seed. Information on North Dakota plantings as to strain or strains most desirable is being obtained at this time.
2. **Black Hills spruce**--This tree, often used in farmstead windbreaks, field shelterbelts and as an ornamental in North Dakota, also is a good Christmas tree. It does best in the river valleys and other moist sites. The needles vary from 1/2 to 3/4 inch in length, are blunt pointed and quite soft.
3. **Colorado blue spruce**--A common ornamental planted in the state. Its color varies from powder blue to green. The needles are 3/4 to 1-1/4 inches long, stiff and sharp-pointed. Because of the prickliness of its needles, this tree isn't expected to become a popular Christmas tree.
4. **Ponderosa pine**--The needles are often as long as 6 to 8 inches, with two to three needles to the cluster. It is a native to western North Dakota and will grow under a wide range of soil and moisture conditions. Until recently it was used very sparingly as a Christmas tree, but shows promise of becoming a good substitute for Norway pine, which doesn't grow in the state.



SCOTCH PINE



growing CHRISTMAS TREES in North D

5. **Red cedar**--Native to the Badlands of the state and is a beautiful tree. Local residents, where it grows, have used these trees for many years.

Other evergreens, the balsam fir and black spruce, often sold as Christmas tree locally, are not adapted to North Dakota conditions. These trees require an acid soil and bog conditions. Douglas fir, for reasons not completely understood, doesn't do well. Austrian pine, a tree rarely used in the state, might also be tried in North Dakota.

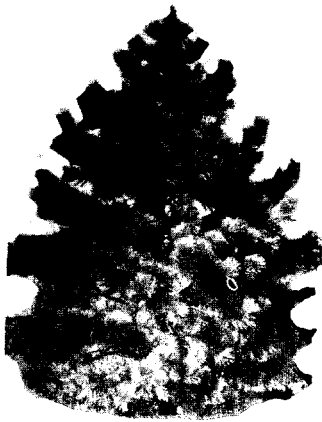
Source of Planting Stock

Always purchase your trees from a reliable nursery. The state nursery at Towner, North Dakota, as well as commercial nurseries in North Dakota and adjacent states, can supply you with the necessary trees. If in doubt about the trees, write to your Extension Service Forester, NDSU, Fargo, N.Dak.

Size of the Planting

Christmas tree growing should be a continuous crop. Therefore, trees should be planted every year. For most plantings, this should be from 400 to 500 trees yearly.

A yearly planting of this size will take, when in full rotation, from 2 to 4 acres, depending on the spacing and variety of trees used.



PONDEROSA PINE



Trees Per Acre

The most desirable spacing for the various species is 5 by 5 feet. Some may want the rows to be 10 to 16 feet apart, with 5 feet spacing in the row.

At a 5 by 5 feet spacing an acre requires 1,740 trees. This check row type of planting will require a row crop cultivator. Planting of trees 5 feet apart in the row and the rows 12 feet apart takes approximately 900 trees per acre. Whatever spacing is chosen it must be such that the plantation can be cultivated, especially during the early years.

Harvest Time

This will vary considerably, depending on where the trees are growing, the kind being grown; and the size desired.

Under good conditions, pine might be big enough to harvest in 6 years, Spruce may take 8 or more years for the same size tree. If larger trees are planned on then more years are required. Then, too, not all the trees on a given area become harvestable at the same time.

Table top trees can be raised in less time than the 6 to 8 years normally expected.



SPRUCE



RED CEDAR

Land Condition at Planting Time

The land should be well prepared. It should be in fallow or row crop the year before planting, and free of grass and noxious weeds.

Maintenance of Plantation

1. Cultivation--the trees will have to be cultivated if you want satisfactory growth.
2. Protect trees against insects, disease and animals.
() The plantation may have to be sprayed to prevent insect injury. This possibility must be recognized and accepted.

() Although disease rarely wipes out a plantation, this is still a possibility, and you must be prepared for it.

() Animals, especially mice, porcupines, squirrels and deer, occasionally damage plantations. You will have to protect your investment against these animals.
3. Shearing or shaping the trees for maximum quality has to be practiced. With the pines, this shearing may have to begin as early as the third year following planting. With spruce, shearing may not be necessary until the fourth or fifth year.

Not all trees need shearing, nor do they need it every year.

4. Discoloration of the leaves or needles is definitely a possible occurrence in prairie plantings. There is little you can do to prevent it. Good cultivation, proper maintenance and use of a good planting site may help to reduce the injury. Little, if anything can be done to prevent wind or winter injury.

Soil Requirements

In general, you can raise Christmas trees wherever you can raise a good small grain crop. Soils that are wet, saline (high in salts) or drouthy are poor risks for a planting of this kind.

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Possible Harvest Per Acre

There is little experience in the harvesting of Christmas trees in the state. States to the east of North Dakota figure on a 50 to 75 per cent harvest of the trees planted. The other 25 to 50 per cent includes mortality from various causes from planting to harvest, and trees too poor to be salable as Christmas trees. These poor trees, in many cases, can be harvested and used in wreaths, swags and other decorations. Plantings that are not maintained, or pruned may not produce many usable trees. Deformed or leggy trees are not in demand as Christmas trees.



SPRUCE



PINE



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