

# FACT SHEET

## GROWING CHRISTMAS TREES IN TEXAS

James W. Chandler\*

Marketing studies show that four to five million Christmas trees are imported into Texas each year from northern and western states. Texas producers could capture much of this market by supplying well-formed, fresh trees at a competitive price, and such



Shaping is the most important factor in producing a quality Christmas tree.

\*Area Extension forestry specialist, The Texas A&M University System.

additional land use would greatly supplement the income of thousands of Texans. Texas Christmas tree production can be profitable, but it requires considerable time for intensive cultural management practices to produce quality Christmas trees.

In 1971, a Texas Agricultural Extension Service result demonstration showed that Virginia pine (*Pinus virginiana*) is a Christmas tree species proven for East Texas production. The Texas producer can grow a 6-foot Virginia pine Christmas tree in 4 years. On good sites under excellent growing conditions some trees can be cut in 3 years.

Characteristics of Virginia pine make it a particularly attractive Christmas tree. Needles are short and branches are numerous, stout and hold decorative ornaments well. The tree has a pleasing aroma which is a tremendous selling point. After the tree is cut, the foliage does not dry out rapidly and needle retention is good. Virginia pine is similar in appearance to Scotch pine (*Pinus sylvestris*), a major Christmas tree species imported into Texas annually.

The present source of seedlings is a genetically improved Virginia pine from a seed orchard at Coosa Pines, Alabama. This is the only source of the improved Virginia pine for the southern Christmas tree producer. Because of this, Texas producers have problems in acquiring enough seedlings to meet their needs. To remedy this problem, the State of Texas is establishing a 5-acre improved Virginia pine seed orchard near Magnolia Springs in Jasper County. This will alleviate future problems of an inadequate supply of seedlings for the Texas Christmas tree producer. It will take this seed orchard 5 to 7 years to begin producing sufficient quantities of seed.

Another species of Christmas tree native to East Texas is the eastern redcedar (*Juniperus virginiana*). This is a popular tree in small towns and communities



A Virginia pine Christmas tree plantation in Rusk County.

where traditionally the redcedar appeared in the home every Christmas. Redcedar grows well on most soils, but prefers heavy clay sites.

Eastern redcedar has a pleasant aroma and requires light shearing to reach a Christmas tree taper. Prickly foliage and rapid drying are disadvantages of the species.

Many later problems may be avoided by carefully choosing and preparing the planting site.

Virginia pine attains its best growth on well-drained, deep topsoils of loam, sandy loam or clay loam. This species survives under a diverse pH range, but best growth occurs on soils with a pH ranging from 5.5 to 6.5. Avoid deep, dry sands and heavy clay soils. Steep slopes can be hazardous in operating mechanized equipment and they contribute to soil erosion.

A recently cultivated or pastured site is easier and more economical to prepare than one requiring cull tree or brush removal. Remove residual trees in the immediate area to be planted. If these trees are not removed, they will be cumbersome to work around once the Virginia pine seedlings are established. These large trees also will cut off direct sunlight to the pine seedlings; sunlight is an essential element in proper growth and development of Christmas trees. The site may need disking if hardwood sprouts are present or if soil compaction is evident. If only weeds and grasses exist, mowing or burning is sufficient.

The planting site should have access to an all-weather road. If the producer does not live near the site, plan protection measures against theft.

Plant seedlings either by hand or machine, depending on the number. Hand planting is preferred for best layout so that rows are straight in two directions. This facilitates mowing in two directions between the trees. The planting season extends from mid-December to mid-March.

The spacing depends on the mowing equipment owned by the producer. Number of trees per acre at various spacings is as follows:

Spacing in feet	Number of trees per acre
6 by 6	1210
6 by 8	908
8 by 8	681

The first year that seedlings are in the ground is critical regarding soil moisture. If feasible, water first-year seedlings when experiencing very dry conditions. Once the trees get through the first year, they survive well under dry conditions.

Maintain control of competing vegetation at all times. Mow between trees with a tractor or lawn mower (if the acreage is small). As a rule, monthly mowings are adequate. When mowing, avoid breaking lower branches on larger trees with the equipment.

Herbicides can be used in the immediate vicinity of the tree to control weeds. Use herbicides very carefully because of possible damage to the tree if placed in direct contact.

Cultivation is not recommended for weed control because of possible damage to the root system of the trees.

Shearing and pruning Virginia pine begins in the second year of production. Currently all shearing and pruning is done by hand. Trees are sheared in late April and again in mid-July. Lateral branches are sheared and the terminal shoot is pruned. Lower branches should be about two-thirds as wide as the tree is tall to show correct taper. Devote more time to each tree as it becomes larger in the third and fourth growing season.

The major insect pest of the Virginia pine is the Nantucket pine tip moth (*Rhyacionia frustrana*). This insect does considerable damage to the tips of the terminal and lateral branches throughout the growing season. An insecticide application schedule is necessary to control this pest in a Christmas tree plantation.

Most Christmas trees are marketed when they range in height from 5 to 7 feet. Producers may consider marketing directly to the consumer, selling



through a wholesaler or eliminating the wholesaler and selling directly to a local retail organization.

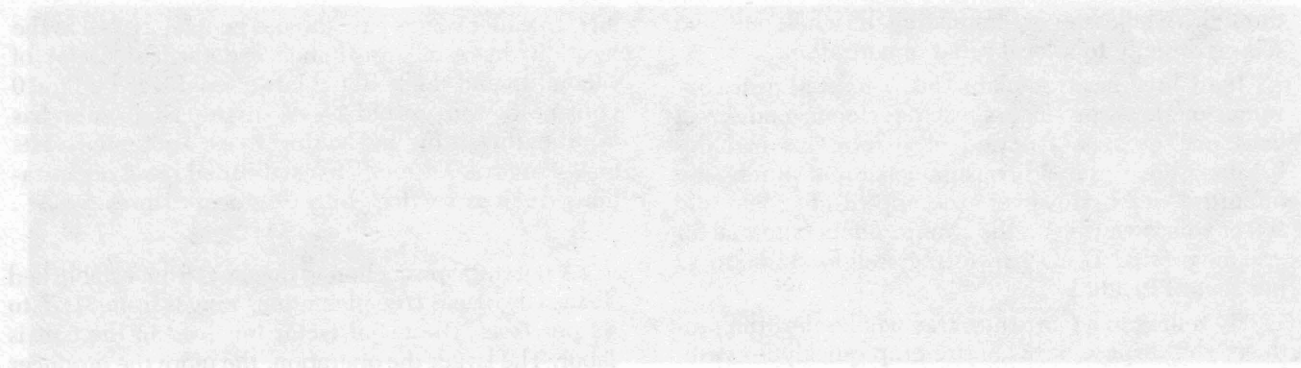
If a Christmas tree plantation is located near consumer markets, producers may develop a good direct local market over a period of years. This includes breaking down the old consumer habit of purchasing imported trees. However, the appeal of "come and select your own tree on the stump" offers potential for greater profits. Texas-grown trees sell for \$1.50 to \$2 per foot of height.

By selling to a Christmas tree wholesaler, the producer can dispose of his entire crop quickly for cash, but he probably will receive less overall profit.

Retail Christmas tree lots usually are not successful in towns under 10,000 population. In managing retail

lots, consider wages paid to sales people, as well as the location, licensing, insurance and the risk factor of vandalism and theft. Retail lots often discard up to 10 percent of the unsold trees. If the landowner has facilities for cutting and hauling trees, a potential exists for selling trees directly to established retail organizations, such as service clubs or grocery stores.

A potential projection of the costs from established Texas Christmas tree plantations ranges from \$1.75 to \$2 per tree. The major factor involved in the cost is labor. The larger the operation, the more the producer must depend on salaried labor to assist with intensive management. Consider this when determining the acreage to establish.



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Spacing in feet	Number of trees per acre
6 by 6	1,210
8 by 8	900
10 by 10	675

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3M — 1-80, Reprint FOR