

# FACT SHEET

8-19-74  
RE 5000

L-1033

## A LOOK AT TEXAS CHRISTMAS TREE PLANTATIONS

Dwight W. Fate\*



*A Virginia pine Christmas tree plantation in Wood County entering the fourth growing season.*

Texas imports approximately \$20 million worth of Christmas trees each year. Texas producers could capture much of this market by supplying well-formed, fresh trees at a competitive cost, and such additional land use would greatly supplement the income of thousands of Texans.

For successful production of Christmas trees in Texas, both growing and marketing phases must be considered.

### **Growing Christmas Trees**

A recent demonstration by the Texas Agricultural Extension Service indicated that the following species could be grown in East Texas: Arizona cypress (*Cupressus Arizonica*), Eastern redcedar (*Juniperus Virginiana*) and Virginia pine (*Pinus Virginiana*). Other species tested which failed to survive or grow were: Douglas fir (*Pseudotsuga menziessi*), white pine (*Pinus strobus*), spruce pine (*Pinus glabra*), and Scotch pine (*Pinus sylvestris*).

Of the three tree species which grew in Texas, Virginia pine makes the most desirable Christmas tree. However, Virginia pine is susceptible to the Nantucket pine tip moth. Control of this insect can be

achieved with insecticides. When applying insecticide, use extreme care and follow label instructions exactly.

Planting stock, including some genetically improved material, is available from state and private nurseries. Ordering seedlings several months in advance of the planting date is recommended. Planting should be done in December, January or February and can be successfully done by hand or by machine. Generally, plantings in late December or early January will be most successful. Seedlings must be spaced to permit cultivating or mowing between the rows with available equipment. A 5- by 8-foot spacing requires about 1,100 trees per acre while a 6- by 6-foot spacing requires about 1,200 trees per acre. By using equipment designed for Christmas tree operations, the producer can increase his profits by increasing the number of trees per acre.

Quality trees are essential for profitable Christmas tree production. High quality trees have proper density, taper, balance, a straight stem, and are free of defects. Such quality trees can only be obtained by shearing. The first shearings are needed during the second, or possibly the third, growing season. The first shearing of the year should be done near the first of May with the follow-up shearing during the last week in June or the first week in July.

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

Weed and grass control is essential in the commercial production of Christmas trees. If weeds and grasses are allowed to build up around the trees, quality is hampered and growth rate is reduced because of competition. Mechanical, chemical or a combination of control methods may be used.

Mechanical methods include mowing as an effective means of controlling weeds. Usually two or three mowings are necessary during the growing season. Mowings can be done between the rows with an attachment on a tractor. If trees are hand planted, cross spacing can be obtained, thus allowing movement of the mower in two directions. Other mechanical control methods include cultivating or discing around the trees. However, this should not be done after the first growing season because many of the roots will be severed.

Chemical weed control should be carried out as part of the pre-planting, site preparation. Chemicals may be applied shortly before planting. Pre-emergent, weed control chemicals may be applied after the trees are established. Apply all chemicals in accordance with label instructions.

### Marketing Christmas Trees

Four-year-old trees usually are ready for market. 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, the producer may develop a good direct local market over a period of years. Developing such a market 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. Some Texas-grown trees have sold for \$2.00 per foot of height.

Markets also exist for selling "live" Christmas trees. This system requires digging, balling and burlapping the trees, which is expensive and requires site rehabilitation. An alternative would be to grow the trees in large containers.

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, the producer must consider wages paid to sales people, as well as finding a good location, licensing, insurance, and the risk factor of vandalism and theft. Retail lots often discard as much as 10 percent of the unsold trees after Christmas.

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 and returns from established Texas adaptive Christmas tree research projects follows:

	Approximate cost/acre
1. Establishment	
Site preparation	\$ 25
Genetically improved planting stock @ \$40 per thousand (including shipping costs) cross spaced at 6 feet x 6 feet (1,200 trees)	48
Planting per thousand (by hand) @ \$25 per thousand	<u>30</u>
Total establishment cost/acre	\$103
2. Cost per tree during 4-year growing period	
Weed control	\$ .20
Shearing	.15
Tip moth control	.65
Marketing	<u>.05</u>
Total per tree	\$1.05
1,200 trees = \$ 1,260 maintenance	
@ \$1.05/tree + 103 establishment	
\$ 1,363 4-year total cost/acre	
3. Estimated 80 percent of the tree crop (960 trees) marketable at \$3.50 per tree	
Gross income for 960 trees at \$3.50/tree	\$ 3,360
Less total expenses	<u>-1,363</u>
Net income	\$ 1,997 or about \$500 per acre per year

*Educational programs conducted by the Texas Agricultural Extension Service serve people of all ages regardless of socio-economic levels, race, color, sex, religion or national origin.*

Cooperative Extension Work in Agriculture and Home Economics, The Texas A&M University System and the United States Department of Agriculture cooperating. Distributed in furtherance of the Acts of Congress of May 8, 1914, as amended, and June 30, 1914.  
5M-4-76, Revision

FOR