

# CHRISTMAS TREE PRODUCTION IN IOWA



# **Economics and Marketing**

### Introduction

Although production of Christmas trees in Iowa can be an attractive investment opportunity, it is not a get-rich-quick scheme. It is a planned production venture requiring money, considerable time, lots of work, and a willingness to accept risk.

Landowners can achieve high returns only if they thoroughly understand the problems of Christmas tree management. Lack of knowledge will usually result in reduced profits, or even losses. In some situations, Christmas tree production is not a wise investment compared with other land use alternatives.

For further information, consult extension pamphlet Pm-1500, Christmas Tree Production in Iowa: Establishment and Care.

# Marketability

At harvesttime, do not assume that all surviving trees will be sold as Christmas trees. Some will be deformed to the point that they can be sold only as cut greens.

Marketability percentage is the number of trees that can be sold at the average tree price, divided by the number that survived to maturity. As you gain experience in shearing, you will save more trees, and the marketability percentage will increase. Experienced Iowa producers approach 90 percent marketability of sheared trees. A new producer, however, should plan on 60 percent or less marketability for the initial production cycle.

### **Colorants**

Certain varieties of Christmas trees turn yellow each fall. To correct such discoloration and improve the trees' marketability, apply watersoluble green dye with a portable mist blower.

# Harvest age

The age at harvest determines tree height. Prices paid for Christmas trees are related to their height and other quality characteristics, so it is important to select the most profitable age for harvest. Retailers report that marketable Christmas trees range from three to eight feet high.

### Income

Before you start producing Christmas trees, decide whether you want a profitable hobby or a full-time job. A hobby requires just a few acres, but if you want to earn your living growing Christmas trees, you will need 40 to 60 acres.

Here is how to determine the size necessary to meet your needs: If each acre nets about \$6,000 and you want to earn \$36,000 per year, you have to harvest six acres per year. For a nine-year rotation, you need 54 acres (nine times six) to obtain your desired income every year. If you hire workers, your return will be less and you will need more land to earn \$36,000.

One person can do all the work on approximately 20 acres of Christmas tree plantation; the number of acres depends on topography, soil, ground cover, and equipment. Beyond this level of production, you will need to hire workers.

# **Economic analysis**

New producers must understand the costs and benefits of the business. It

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is impossible, however, to predict an exact dollar return from a venture in Christmas tree production. Many variables—such as tree quality, individual management, and the cost of labor, land, and equipment—determine economic return and can fluctuate widely.

To achieve sustained yield, divide your area into blocks and plant a block each year until all acres have been planted. Determine block size by dividing the total plantation area by the length of the rotation. For example, to achieve a sustained yield from 18 acres managed on a nine-year rotation, plant two acres each year. After nine years, you will harvest and replant two acres per year, providing you with an annual sustained yield.

In addition to providing a means for achieving an annual sustained yield, a block layout facilitates operations like planting, weed control, shearing, and harvest. Larger growers usually plant their trees in blocks, treating each block as a unit throughout the growth cycle.

Many smaller growers treat each individual planting space separately. When they harvest a tree, they plant a new tree in that space. This system provides more intensive utilization of land but requires more hand labor, such as planting by hand.

Before venturing into the Christmas tree business, do an economic analysis based on the best information obtainable. The following example calculates costs and returns based on selected assumptions.

Assume the species is Scotch pine, to be planted at six-by-nine-foot spacing, or 807 trees per acre. Roads and lanes will take up five percent of each acre, so only 767 trees will be planted. Twenty-five percent will not survive the first year and will be replanted the second year. Twenty-five percent of the replanted seedlings will not survive and will be replanted the third year. In addition, 10 percent will not reach maturity, and 10 percent will not be saleable as Christmas trees at the end of the rotation. That reduces harvestable trees to 614, with 107 harvested the seventh year, 400 harvested the eighth year, and the final 107 harvested the ninth year. The remaining nonsaleable trees will be removed in the ninth year.

Land value is assumed to be \$1,000 per acre; hired-labor wages, \$6.00 per hour; the discount rate, six percent. Trees will be sold for \$15 per tree. Follow these assumptions through the economic analysis shown in Table 1. Different assumptions and inputs will obviously change the final estimated dollar returns.

## Where to sell

Nearby towns and neighbors provide the best markets for Christmas trees. Some growers sell standing trees at retail prices, and individual buyers cut their own trees. Producers near large urban communities can affiliate themselves with a retail city lot and sell directly to customers on these lots.

Large wholesalers generally contract for Christmas trees well in advance of the season. Producers may contract the sale of cut trees or trees on the stump. Avoid consignment sales to wholesalers. Always require down payments, or "binders." Remember, when wholesaling trees a producer receives a lower price per tree but sells a greater volume. If you plan to wholesale a crop, begin making contacts for the sale of trees by midsummer.

# Other information

Each land manager's Christmas tree production possibilities are unique. For more specific information for a locality, contact the district forester of the Department of Natural Resources, the county extension director, or the local representative of the Soil Conservation Service. Appropriate information may make the difference between success and failure.

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