

PLANNING AND SITE SELECTION

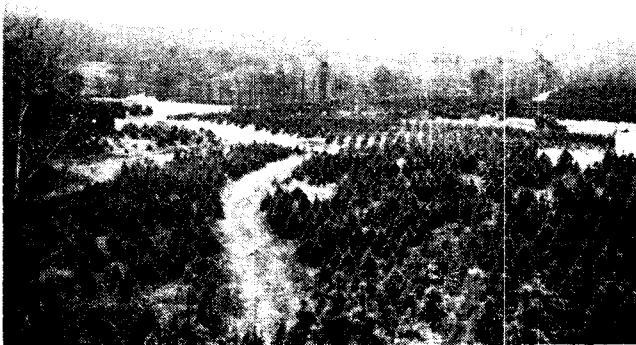
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There is no substitute for careful planning in many ventures, particularly when you are dealing with a long-term crop like trees. Growing Christmas trees can be very rewarding, both aesthetically and economically, but they are a long-term, intensive-labor crop and new growers should consider these factors before committing themselves.

Do you enjoy tending and watching trees as they grow? If so, ask yourself the following questions before even *thinking* of putting trees in the ground. If you can answer "yes" to all of them, you will probably make a good Christmas tree grower.¹

Are you willing to:

- invest land, equipment and labor in a crop that will take at least 5 or 6 years to mature enough to give you a cash return?



- devote time to educating yourself about all aspects of the Christmas tree business?
- accept possible heavy losses due to drought, hail or other natural causes (or are you able to)?
- protect trees from fire, livestock, vandalism, voles, rabbits, deer and dogs?

- plant trees on an annual basis (usually March-April)?
- control weeds and grass to limit competition for water and nutrients?
- correctively prune trees annually?
- shear trees annually from when they reach a height of 24 in. to final harvest size?
- monitor your trees frequently during the growing season for indications of insect or disease problems?
- develop and maintain a good record-keeping system for materials, equipment and labor?
- devote time all year to market your trees?
- devote time in November and December to sell your trees?

Planning Your Plantation

Once you have established that you are *willing* to take on the responsibility of Christmas tree production, here are some more practical questions for you to address:

- How do you plan to market your trees?
- How much land do you want to plant in total?
- How will the timing of Christmas tree cultural operations fit in with other time commitments on your farm?
- What do you have to do to prepare the land for tree planting?
- What kind of soil (sandy, loamy, clayey) do you have where you want to plant?
- What is the pH of the soil (conifers prefer somewhat acid conditions) and what is the NPK nutrient status?
- What kind of trees (species/ages) do you want to plant?

¹Adapted from Nebraska CES publication, *Christmas Trees—A Management Guide*.



A well-managed, small-scale Christmas tree plantation.

- What spacing do you want between your trees and between your rows?
- Are there topographic limitations (e.g., steep slopes) to how you will be able to plant your trees?
- Do you have older pine or other conifer species near your proposed plantation site which show evidence of disease?
- How will you lay out your plantation (orientation of rows, mix species or segregate species, etc.)?
- Where and at what time of year can you get the seedlings you want to plant?
- What materials (seedlings, herbicides, hydrogels, pesticides, fertilizers) will you need for your particular situation?
- What specialized equipment do you need in order to plant, maintain, and harvest your trees optimally?
- How much money will you expend before you begin to get some return on your investment?
- What kind of tax breaks are available for Christmas tree growers?

Selection of Site

One of the first decisions is where to locate your plantation. As with most crops, the ideal land on

which to grow Christmas trees is good agricultural land—level, free of obstructions, with good fertility and tilth, good drainage, etc. Christmas trees can, however, be grown on marginal land, even reclaimed mined land, making them a very adaptable crop.

Selection of a site depends upon both physical land characteristics and less tangible features such as markets and labor force. Therefore, many factors should be considered regardless of whether you will use land you already own, or will lease or purchase new land.

Follow these steps as you select your site:

- Start by obtaining a soil survey and map for your plantation's county from your county Extension agent or the local district soil conservation office. Determine the type(s) of soils and the types of vegetation these soils will support. Look at water infiltration rates, water holding capacity, texture (percent mixture of sand, silt and clay), depth of root restriction, etc. While the survey will indicate a possible pH range and inherent fertility, have a soil test run to get a more accurate measure. A moderately acid pH (5.0 to 6.5) is desirable.

- Plan to adjust for your site's soil deficiencies by careful species matching. For example, white

pine is **more** tolerant of poorly-drained soils, but **less** tolerant of sandy or gravelly soils than Scots pine. Spruce, fir and Douglas-fir require much better soils (better fertility levels, better drainage, etc.) than any of the pines.

- Consider the influence of past herbicide use on your site as well as possible future use and its relationship to soil type. If herbicides will be used in site preparation and/or vegetation control, soil type will have an influence on their success or failure. Rate of use can vary considerably from sandy to clayey soils.

- Locating the plantation near the owner or manager's residence is important. Frequent monitoring is desirable to reduce pest problems and to be sure that shearing and herbicide treatments are properly timed.

- Naturally, cost of the land is important and can influence growing practices and the way you market the trees. Always consider alternative uses for a particular site to be sure that Christmas tree production will give the best money return for the investment.

General Information

This workbook will help to answer many of your questions about "how to" produce Christmas trees as a crop. County Extension agents, Kentucky Division of Forestry (KDF) Service Foresters and University of Kentucky specialists can help if you have questions beyond the workbook's scope. Other titles in the workbook series include:

- FOR-17 *Plantation Layout*
- FOR-18 *Site Preparation*
- FOR-19 *Ground Covers*
- FOR-20 *Species Selection*
- FOR-21 *Seedlings and Transplants*

- FOR-22 *Planting*
- FOR-23 *Vegetation Control*
- FOR-24 *Fertilization*
- FOR-25 *Irrigation*
- FOR-26 *Pruning and Shearing**
- FOR-27 *Pest Control: Animals*
- FOR-27A *Pest Control: Insects*
- FOR-28 *Harvesting*
- FOR-29 *Marketing and Merchandising Christmas Trees*
- FOR-30 *Use of "Cull" Trees*
- FOR-31 *Record Keeping and Taxes*
- FOR-32 *Developing a Demonstration Plot*
- FOR-33 *Production Calendar*
- FOR-34 *References*
- FOR-36 *Economics and Budgeting*
- ID-85 *Needlecast Diseases of Conifers*
- PPA-16 *Leaf, Branch and Stem Diseases of Pines*

The reference publication (FOR-34) includes names and addresses of KDF regional offices, equipment and materials manufacturers, nurseries and relevant publications by the U.S. government and other states.

The *Kentucky Christmas Tree Workbook series* is available from your county Extension office.

*There is also a videotape on Pruning and Shearing Christmas Trees available through Agricultural Communications Services at U.K.

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