



## **Starting a Christmas Tree Farm in CNY**

Every good farm starts with planning. Christmas tree farms are no exception. Before you plant even one tree, you have some serious decisions to make about time, labor and marketing. How will this farming enterprise effect your time and budget. Remember, although Christmas tree farming does not require the amount of constant care some operations do, there is still a lot of work to be done:

List of activities: Soil preparation, planting of new seedlings, shearing, weed control, pest scouting and control, fertilizing, harvesting, selling, and marketing (year-round activity).

Marketing is a year round activity, you could have the best trees in the world and no one will buy them if they don't know where to find you (or the trees) or if they cost too much. Take some time to explore your market options before you plant.

Sales methods (you can have for a mixture of the three):

- Wholesale- sell to a secondary retailer, less money per tree, but your time is cut down by not selling directly to the public.
- You-Pick- invite potential customers out to your land to choose which tree they would like before the tree is cut. You can get a higher asking price per tree, as well as save inventory (only the trees that will be sold will be cut).
- Retail- Sell your own pre-cut trees at a roadside stand, local business, or on your own property. Can be combined with a You-Pick operation. Invite customers out to choose pre cut trees. Usually easier and faster for the customer, can still get a fairly good price. Only a really good option if you have an easily accessible sales site.

There are many small-medium Christmas tree growers in Central New York, so consider finding markets outside of the area. You can fetch higher prices in more urban areas, but conversely your costs will be higher (trucking and marketing).

To Grow Christmas Trees:

Start with accessible land: not too steep, easy to get to, well-drained; an old field usually works well.

Conduct a soil analysis to determine if any nutrients need to be added or if the pH needs to be changed. This is much easier to do before planting than after. (Additional fertilizer will be needed as the trees grow). Soil test kits can be purchased through your local Cornell Cooperative Extension office for a price that is well worth it. Conducting a soil test every three years is recommended. The test results will recommend amounts of fertilizer, the type of fertilizer you use, organic or inorganic, is up to you.

Choose tree species that are hardy in your area. There are many different varieties of species each with its own set of desirable characteristics. Choose varieties hat you think will sell, or talk to other Christmas tree growers to see what they are growing. Popular trees are Douglas-fir, balsam fir, Fraser fir, concolor fir, Canaan fir, blue spruce, Norway spruce, Serbian spruce, and white spruce.

Spring is planting time. You can either plant by hand, or rent a planter attachment for a tractor. Seedling care before and during planting is crucial. Two types of stock are available, bare root and plugs. Bare root are field grown and come completely free of soil, often dipped in hydrogel and packed in moisture holding materials. Plugs are grown in tall, small-diameter containers, and are shipped in them; soil media and all. Plugs can be more expensive than bare root, but can be planted later in the season. Both require special attention. Be sure the roots do not dry out and are planted at

the correct depth. The top of the root system should be just below the surface of the ground, and the roots should be pointed down in the planting hole, laid out as they grew naturally, not bent or broken. Make sure the soil is lightly tamped to remove air pockets and help ensure survival.

Trees should be planted in rows with adequate spacing in between. You do not want the growing trees to touch or crowd each other. Plant within rows 5-8 feet apart, and leave at least 5-8 or so feet between rows, depending on the size of equipment you will need to move through the plantation. You will need access to all sides of every tree. Every few rows you should have an access road to allow the movement of larger equipment.

Consider using a ground cover between the rows and mulch or a ground cover within rows. This will help cut down on weeds and soil erosion.

Seedlings may need watering to keep them alive, but once the trees are established, little watering should be needed.

Christmas trees can have insect and disease problems; be on the look out for them. It is easier to prevent them from getting out of hand if they are caught early. If using chemical controls, be sure to follow the label directions exactly. If you find an insect or disease problem, contact your local CCE office or the Plant Disease Diagnostic Clinic, <http://plantclinic.cornell.edu/> or Insect Diagnostic Lab <http://entomology.cornell.edu/cals/entomology/extension/idl/index.cfm> for identification.

Weed control. It is important to control the weeds at the base of the trees to prevent the lower limbs from dying off. Tall weeds can grow into the lower branches and the tree sheds will shed those branches. This will not affect the top of the tree, but will cost you a couple of extra years of growing to make up for the lower branch loss. Chemical, manual, and mechanical weed removal may all be needed.

Most people like sheared Christmas trees. Shearing causes dense, full looking growth, creating lots of places to hang ornaments. Pines must be sheared in the spring as the new shoots are elongating. The newly forming shoots, or candles, are cut down by half or two thirds. This will subsequently result in buds being clustered together at the base of the shortened new growth. Buds will not form on old growth, and shearing back to old growth will result in no new growth, and eventual branch or even tree death. Needles live for 2-3 then shed in the fall.

Spruces and firs can be sheared almost anytime during the growing season, as buds will form on older growth. For ease you may want to shear all types of trees at the same time, spring/early summer. There are a variety of tools that can be used for shearing, knives, blades, pruning shears, clippers, and even mechanized pruners. Trees should not be sheared until they are 3 or 4 years old.

Trees should be harvested after the temperatures have started to drop. Drought stressed trees lose their needles faster than healthy, fresh cut trees. Try to keep the trees from being drought stressed before cutting and don't cut them too far in advance. Balers can be used to wrap the trees with twine or netting to ease in the movement of the cut trees. You-pick operations are generally known for having the freshest trees.

Spaces where trees were harvested from in the winter should be refilled in the spring with seedlings. Do not plant directly on top of the old stump, off set slightly to allow for easy root penetration into the soil. If whole blocks are harvested, you can let the ground sit fallow for a few years so nutrients can rebuild and stumps can rot.

Christmas tree farms are cyclical plantations and are treated more like crops than forests. Minimizing inputs to maximize growth are a good way to keep costs down and prices up.