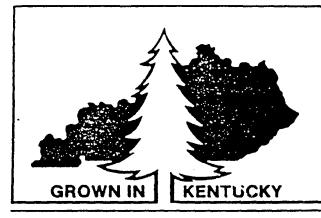
## KENTUCKY CHRISTMAS TREE PRODUCTION WORKBOOK

FOR-20



## SPECIES SELECTION

Deborah B. Hill



A Scots pine

Many different kinds of conifer trees can be grown as Christmas trees. Various species are limited by climatic and environmental factors. The two most salable trees in Kentucky are Scots pine (Pinus sylvestris) and white pine (Pinus strobus). Virginia pine (Pinus virginiana) is native to Kentucky and is adaptable to more severe conditions than either Scots or white pine. It

grows very rapidly and will take more cultural care than the others, but will also produce a salable tree in a shorter period of time. The deep south states are growing Virginia pine almost exclusively and can produce a 6-ft. tree in three years!

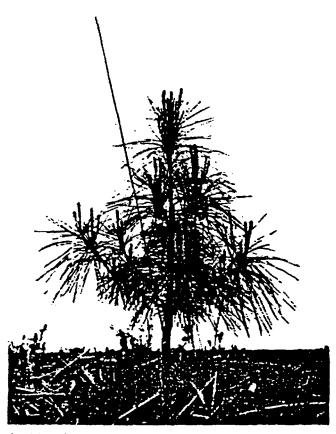
Douglas-fir (Pseudotsuga menziesii) can also be grown in Kentucky, providing you select the 'Lincoln' cultivar which comes from the mountains of New Mexico and can tolerate both the heat and cold extremes we experience here. Some people like to grow Colorado blue spruce (Picea pungens), especially if they are planning to sell the trees live for later ornamental use. In Kentucky, the spruce grows about half as rapidly as the pines, and so producing a standard six-ft. tree takes much longer.

Two-year-old seedlings of Scots and white pine and one-year-old seedlings of Virginia pine are all available from Kentucky Division of Forestry nurseries (contact your local county Extension agent for order blanks). Some white pine and Virginia pine seedlings are from controlled genetic stock; the nursery managers are still working on Scots pine. There are many reputable commercial nurseries, also. It is recommended that you obtain stock only from contiguous states (or perhaps Pennsylvania) so that you will be able to get the seedlings when you are ready to plant (see Cooperative Extension publication FOR-34 for a listing of nurseries in neighboring states).

The Christmas tree production program at University of Kentucky and Kentucky State University set out trials in 1985 for several commercial cultivars of Scots pine to see which would grow best in Kentucky, but results will take several years to show. The species being tested are as follows:

Cultivar	Nursery	State
Belgian	Hensler*	Indiana
East Anglia	Canale/Hensler	Pennsylvania/ Indiana
French	Canale	Pennsylvania
French Bitche	Carino	Pennsylvania
French Central		-
Massil	Hensler	Indiana
French Hag	Carino	Pennsylvania
French Highland	Carino	Pennsylvania
Hensler's own	Hensler	Indiana
Highland	Canale	Pennsylvania
Johnston	•	
#252-04-07	Johnston	Pennsylvania
Norwest	Canale	Pennsylvania
pal Select	Carino	Pennsylvania
Pennspanish	Carino	Pennsylvania
Scottish Highland	Hensler	Indiana
Scotland	Carino	Pennsylvania
Spanish	Canale	Pennsylvania
Spanish Guad.	Carino	Pennsylvania

<sup>\*</sup>Information on annual mortality, height growth and number of branches per tree will be published in the Kentucky Christmas tree newsletter, Pens and Needles.



A white pine



A Virginia pine

Growers should probably plant more than one species, to reduce the probability of insect and/or disease problems. Many Kentucky growers grow both Scots and white pine; a few have experimented successfully with Virginia pine and Douglas-fir. Occasionally people try other species of spruces and true firs. Fraser fir, perhaps the single most valuable species for Christmas trees, require a minimum elevation of 2000 ft., so they would grow successfully in only a few Kentucky locations.

The following factors are important in selecting your seedlings:

- They are appropriate for the soil on your property.
- They are appropriate for Kentucky's climatic growth zone.
- They can be shipped when you need to plant them (March-April).
- They are fresh and healthy stock (moist dark roots with some white tips and vigorous green color on top).

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<sup>\*</sup>See References (FOR-34) for complete addresses.