



# Selection and Care of Christmas Trees

James E. Johnson\*

## Christmas Tree Selection

For many families, selection and purchase of a Christmas tree is an annual tradition. Indeed, bringing home the tree often signals the official start of the holiday season. Proper selection of a tree, like any other product, will help to make the season even more enjoyable. With today's live-tree market, healthy, fresh, fragrant, and affordable Christmas trees are abundant and available to anyone who wishes to have a real tree. Of course, artificial substitutes for real trees are also readily available at commercial outlets, but these will not be discussed in this publication.

## Ways to Purchase Christmas Trees

Christmas trees can be purchased in many ways, but the two most popular are retail lots and choose-and-cut farms. There is also a small but growing mail-order Christmas tree market in Virginia and surrounding states.

### Retail Lots

Retail lots are temporary lots set up in shopping centers, at discount stores and service stations, in farmers' markets, and at other visible locations. Overall, retail lots offer the services of a variety of tree species and convenience. They are especially popular with people who have limited time to shop for a tree, or if the weather is poor and choose-and-cut farms are not available. Trees on retail lots are more expensive, however. Many retail lots are run by local civic clubs, Boy Scouts, school groups, etc., and serve as money-makers for those organizations.

Consumers should always check carefully for freshness of trees on retail lots, because the length of time since cutting and the way the trees have been handled can greatly influence how well they will hold their needles and fragrance once they are put up in the home. A recent survey of retail lots in Virginia revealed that only 29% of the trees for sale were grown in Virginia. In the Richmond area, 85% of the trees for sale were grown out of state, while in the Tidewater area, 67% of the trees were not grown in Virginia. Just because a tree was not



*Temporary retail lots commonly spring up the weekend following Thanksgiving.*

grown in Virginia does not mean that it is not a fresh, high-quality tree. All trees on retail lots should be checked carefully, regardless of origin.

The Christmas tree industry participates in the agricultural marketing programs of the Virginia Department of Agriculture and Consumer Services (VDACS). Trees for sale that carry the logo, *Virginia Fresh*, are certified to be grown in Virginia and to meet the highest standards for Christmas tree quality. If this logo is displayed where you purchase your trees, you can be sure you are buying a locally grown, high-quality tree.

### Choose-and-Cut Farms

Choose-and-cut farms provide much more than just a Christmas tree. In addition to a tree, consumers are also treated to an outdoor recreation experience. Christmas trees are grown on farms, which always provide the opportunity to

\*Extension Forester, Virginia Tech



*Choose-and-cut farms are especially popular with families with young children.*

enjoy the fresh air and the out-of-doors. Most farms have areas or rows of trees marked for harvest, and consumers are free to wander about, look at all the trees, and select one for cutting. Farmers will provide hand saws or will cut down the tree and haul it out of the field for you. At many farms, it is possible to pre-tag a tree earlier in the season and then go out at Christmastime and harvest it.

Choose-and-cut farmers will often have many cut trees of differing species available for sale, as well as other products such as wreaths and roping. It is not unusual for choose-and-cut farms to offer other services such as wagon or sleigh rides, seasonal foods and drinks, and tree baling and loading. Trees purchased at choose-and-cut farms are usually cheaper than at retail lots, and, of course, there is no need to question the freshness of a tree that you cut down.

To find out where choose-and-cut farms are located, it is a good idea to watch for newspaper ads at the beginning of the holiday season, preferably around Thanksgiving. Each year VDACS provides a listing of choose-and-cut farms in the state. The county Extension offices should be able to provide you with a copy of this list.

#### Mail Order

A number of Christmas tree growers are now offering mail-order services, whereby a consumer can order a tree, generally of a certain species and size. The tree is then packed fresh in a special box and shipped directly to the consumer.

Recently, major mail-order catalog companies have begun to carry Christmas trees, often featuring Fraser fir trees grown in the Southeast. Of course, these trees are the most expensive, but this method of purchase provides the ultimate in convenience to the consumer. Although the mail order business is now small, it is a growing business around the country.

#### Living Christmas Trees

Some consumers are interested in purchasing living, balled-and-burlapped Christmas trees that can be used as landscape

trees after Christmas. This way of enjoying a Christmas tree has become especially popular in Virginia, where the late-December or early-January climate is often conducive to tree planting.

Living Christmas trees can be purchased at retail lots, choose-and-cut farms, and many nurseries and garden centers.

### Important Points to Consider When Selecting a Christmas Tree

#### Species

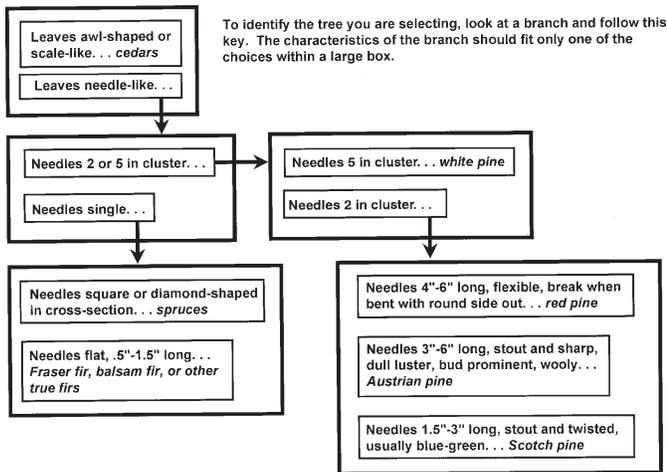
There are many different species of Christmas trees normally sold in Virginia, but the most popular are the eastern white pine, Fraser fir, Scotch pine, and Norway spruce. Table 1 provides some useful information for these species. Fraser fir emerges as one of the best species in terms of needle retention and fragrance, while the Norway spruce has the least desirable characteristics.

Table 1. Characteristics of common Christmas tree species under room conditions. (1 = most desirable; 4 = least desirable)

	Fraser Fir	White Pine	Scotch Pine	Norway Spruce
Needle retention without water	1	1	1	4
Needle retention with water	1	1	1	3
Firmness of branches	2	3	1	2
Fragrance	1	2	2	2
Resistance to ignition	2	3	3	2

*Adapted from: Winch, F. E., and G. R. Cunningham. 1969. Selection, identification, and care of Christmas trees and greens. Cornell Univ. Cooperative Extension Service Bulletin 983.*

Figure 1. Identifying Christmas trees.



Usually the Christmas tree species can be identified by the tree farmer or the salesperson at the retail lot, but occasionally it is useful for the consumer to identify species. The key displayed in Figure 1 is useful for identifying the major Christmas tree species.

### Size

Christmas trees are available in a variety of sizes, and to properly assess the size of tree needed, it is best to consider where in the house the tree will be kept. Most standard rooms will easily accommodate a 7-foot tree; however, some rooms with cathedral ceilings can accommodate a much larger tree. Consumers can expect to pay a premium for oversized trees. There are not many large trees on the market, and the cost of producing large trees of 10 feet or more becomes extraordinarily high. These trees are hard to shear and to protect from insects, diseases, and bird and animal damage, and they take up a lot of room in the field.

On many lots and farms, trees are priced according to height, so it becomes especially important to buy a tree of the right size. Some sellers also offer table-top trees, which are relatively inexpensive and may be a good alternative for a small apartment, dorm room, etc.

### Freshness

It is very important for consumers to be able to tell whether or not a tree is fresh. In general, each tree should have a healthy, green appearance without a large number of dead or browning needles. Needles should appear fresh and flexible and should not come off in your hand if you gently stroke a branch. A useful trick is to lift a cut tree a couple of inches off the ground and let it drop on the cut butt. Green needles should not drop off the tree. A few dried, inner needles may fall, but certainly the outer, green needles should not be affected.

### Gypsy Moth Egg Masses

When selecting a tree, you may find clumps of brownish, wooly material adhering to the stem or branches. These are probably gypsy moth egg masses. In Virginia, the southern and southwestern parts of the state have not yet been infected with this pest, so transport of egg masses on Christmas trees

can be a potentially serious problem. If you see these egg masses on trees, you should report it to the seller immediately. Retail lots outside the gypsy moth-infected area in the state are regularly inspected by VDACS. Egg masses should be removed from the trees and destroyed by burning.

## Care of Christmas Trees

Once you have returned safely home with your Christmas tree, its continued freshness depends upon the type of care you provide.

The tree should have a fresh cut across the bottom, about 1 inch above the old base. This removes any clogged wood that may not readily absorb water. Next, the tree should be placed in a stand with a large reservoir of water and located in the room. Depending upon the size, species, and location of the tree, it may absorb a gallon of water in the first day, so it should be checked frequently and re-watered as necessary. Although some people advocate placing various substances in the water to preserve freshness, we recommend that consumers simply keep the tree well-watered with pure tap water. As long as the tree is able to absorb and transpire water, it is reasonably fire-resistant.

It is important that the tree always be kept watered and not allowed to dry out. If the tree does become dried out, it may not be able to adequately absorb moisture once it is re-watered, and it will shed its needles prematurely. Taking the tree down and cutting about a 1-inch slice off the bottom of the trunk, then replacing the tree in the stand and re-watering, will remedy this problem. Although inconvenient, it is the only way to prevent early needle loss. Overall, a good rule of thumb is to treat a green Christmas tree just like a fresh bouquet of cut flowers.

The Christmas tree should be located in a safe place, preferably near a wall or corner where it is not likely to be knocked over. Keeping the tree away from heat sources such as hot air ducts, wood stoves, fireplaces, etc., will help to



Checking a live tree on a retail lot for freshness.

preserve freshness and lessen fire danger. Similarly, light cords and connections used in decorating the tree should be in good working condition. Lights should always be turned off at bedtime or when leaving for an extended period of time.

Fresh, well-watered Christmas trees do not represent a fire hazard. Trees that are dried out, however, do. In public buildings it is often advisable to spray the trees with a fire retardant. In fact, in many locations this is necessary for insurance purposes. In the home, however, the best fire retardant is to keep the tree supplied with plenty of water.

### Disposal of Christmas Trees

After Christmas, the family tree represents a source of organic waste. Most consumers simply put the tree out with the rest of the household garbage to be carted off to a landfill. Depending upon your situation, however, there may be other alternatives to disposing of your tree. The tree could be placed in the backyard, adorned with bits of bread and suet, and used as a bird feeder. In the spring, the tree could be chipped for mulch or burned for fuel. Farmers with ponds have found that a couple of Christmas trees, properly weighted down, provide good habitat for fish. Some communities even provide special chipper services for Christmas trees, with the chips either sold or used for landscaping purposes in city flower beds, parks, etc.

### Living Christmas Trees

Living Christmas trees are unique and should definitely receive special care. Since the root balls are often heavy and cumbersome, it is important that they are not mistreated or dropped. Balled and burlapped trees should not be carried by their stems, because the weight of the root ball can exert pressure on the roots and break them. It is best to pick the tree up by the ball itself or to roll the ball along the ground.

Once the tree is home, it should be conditioned before being brought into a heated room. Leaving the tree upright in an unheated barn or garage for a couple of days should be sufficient. After the conditioning, the tree can be brought indoors and placed in a cool location away from direct sunlight. It is even more important with living trees that the location be away from heat sources such as wood stoves, fireplaces, heater vents, etc.

Living Christmas trees will also need water, although not nearly as much as cut trees. Prior to moving the tree inside, the root ball should be moistened and kept in a moist condition while the tree is displayed. The root ball should be placed in a bucket or a large pan to prevent soil and water from staining the floor.

Living Christmas trees are fairly sensitive and should not be kept inside for more than 10 days. Exposure to the warm temperatures may cause the dormant tree to break buds and start to grow, and of course this is undesirable. Before removing the tree directly outside, it should be allowed to recondition in the same manner as when it was brought inside. After a couple of days, it should be ready to outplant.



*Living Christmas trees provide the added advantage of a landscape tree after Christmas.*

If the ground is frozen or if the tree cannot be planted immediately, it should be placed in a sheltered area and the root ball heavily mulched. When planting, the hole should be dug about the depth of the root ball and 1.5 to 2 times the diameter. In heavy clay soil, the hole can even be dug 1 or 2 inches shallower than the root ball. The tree should be placed in the hole, backfilled with the soil removed from the hole, watered, and mulched with straw, bark, sawdust, etc. The tree will remain dormant for the rest of the winter and then will start to grow normally with other vegetation in the spring.

### Conclusion

Ever since the first Christmas tree retail lot was set up on the streets of New York City in 1851, Americans have been enjoying the tradition of a live tree to celebrate the holiday season. Today, over 32 million Christmas trees are sold each year. Nearly all of these trees are grown on tree farms across the country. The total area of tree farms in the United States has been estimated at over 1 million acres, and about 100,000 people are employed in the live Christmas tree industry.

With the proper selection and care, consumers can enjoy a fresh tree throughout the holiday season. Soon after the bite of winter has ended, busy tree farmers will be back in the fields planting seedlings to replace the trees harvested the year before.