

Caring For Your Cut Christmas Tree

Dr. Ricky M. Bates
Department of Horticulture
Penn State University

The key to maintaining your live Christmas tree throughout the holiday season is to give it the proper care from the time it is purchased until the tree is removed from your home.

Maintaining a high moisture level in the tree is the single most important factor in reducing needle loss and keeping the tree fresh. This is accomplished primarily through the use of water-holding stands and maintaining the water level in the stand above the base of the tree.

Every year there are many articles written concerning the handling and care of Christmas trees. Unfortunately, they often contain erroneous information.

The following research-based guidelines will help you to maintain the freshness and aroma of your live Christmas tree this holiday season.

1 Use a tree stand with an adequate water-holding capacity. A tree stand should have a water basin that provides 1 quart of water per inch of stem diameter. For most Christmas trees, the stand should hold at least 1 gallon of water. A cut tree will absorb a surprising amount of water, particularly during the first week, so replenish the water daily.

2 The tree stand should fit your tree. Some stands have circular rings at the top, so the ring must be large enough for the trunk to go through the hole. Avoid whittling down the sides of the trunk to fit a stand. The outer layers of wood are the most efficient in taking up water and should not be removed.

3 If the tree is to be stored more than a couple days before display, it is advisable to place its trunk in water and store it in a cool, shaded and protected area such as an unheated garage.

4 If the tree has been cut within the past 12 hours, it will not be necessary to recut the trunk prior to display indoors. If it has been longer than 12 hours since harvest, the trunk should be recut to improve water uptake.

5 Cutting off a disk of wood about ¼” thick from the base of the trunk is all that is necessary before putting the tree in the stand. Make the cut perpendicular to the stem axis. Don’t cut the trunk at an angle, or into a v-shape, which makes it far more difficult to hold the tree in the stand and also may reduce the amount of water available to the tree.

6 Keep displayed trees away from sources of heat (fireplaces, heaters, heat vents, direct sunlight). Lowering the room temperature will slow the drying process, resulting in less water consumption each day.

7 The temperature of the water used to fill the stand is not important and does not affect water uptake.

8 Check the stand daily to make sure that the level of water does not go below the base of the tree. With many stands, there can still be water in the stand even though the base of the tree is no longer submerged in water.

9 Drilling a hole in the base of the trunk does not improve water uptake.

10 The use of “I-V” type devices to supply water directly to holes drilled into the sides of the tree trunk is not as effective as displaying the tree in a more traditional, water-holding tree stands.

11 Applying anti-transpirants to the tree does not significantly reduce the rate of moisture loss. These products are marketed as a way to block evaporation from the foliage surface, but in reality they have little effect on a cut tree displayed indoors.

12 Adding water-holding gels to the stand is not beneficial and they can reduce the amount of water in the stand that is available to the tree.

13 Do not use additives in the water, including floral preservatives, commercial tree preservatives, molasses, sugar, bleach, soft drinks, aspirin, honey, and other concoctions. Clean water is all that is needed to maintain freshness.

14 Displaying trees in water with proper care is much more effective in reducing fire hazards than spraying trees with flame retardants. Some flame retardants can damage needles and actually increase the rate of moisture loss from trees.

15 Monitor your tree for dryness. Run your fingers across the needles to determine if they are dry and brittle. If the needles break easily or fall off in your hand, the tree is dry and should be removed from the house. A well-cared-for tree should normally remain fresh at least three to four weeks before drying to an unacceptable level.