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# Your Christmas Tree

UNIVERSITY OF IDAHO

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EXTENSION FORESTER

Disappointment in the tree certainly detracts from your family's full enjoyment of the Christmas season. You can avoid disappointment if you select a fresh tree and take good care of it after you get it. The purpose of this bulletin is to help you choose a tree that is in good condition and to take proper care of it afterward.

There are two main reasons why some Christmas trees may not remain fresh until they reach the market places. The first is that many growers start cutting their trees as early as they can safely do so. Cutting in Idaho and other western states usually begins as soon as the trees have had three hard frosts to make them dormant. Early cutting is necessary because adverse weather may later make it extremely costly or even impossible to reach the cutting areas and get the trees out. Storage conditions after cutting may not always be controllable by the grower. For example, warmer temperatures than normal or excessive wind may cause some drying damage if trees must be stored in the open.

Secondly, conditions during transit may be conducive to the drying of some trees. Warm temperatures, excessive cold with low humidity, and delays in transit can reduce freshness of trees before they reach their destination. Here again may be a situation that is not entirely controllable by the Christmas tree grower or dealer. If storage and shipping conditions are favorable, then trees will reach the markets in good shape because most evergreens will stay fresh for several weeks after cutting if they are kept cool and reasonably moist.

A third possible reason for apparent dryness of trees in the market place is the work of a few insects and diseases that damage the needles of certain species. This is not generally important because growers usually detect trees that have been so damaged and do not put them on the market.

Trees grown locally for local markets usually are fresh when put on the retail lots. Ordinarily they are cut later than trees that are shipped to distant markets. They have faced no risk of drying damage in transit. Though trees can be cut early and shipped great distances without reduction in quality when all conditions are favorable, there is a greater chance for them to lose

some of their freshness than for trees which are cut and sold locally.

## SELECTING A TREE

You know what you are looking for in a tree with regard to size, crown density, foliage color, needle length, etc. When you find the tree that suits you in these respects, your chief concern then becomes: Is it fresh? Will it remain as attractive in my home as it is now?

There are three general rules of thumb that can help you determine whether or not a tree is fresh enough for satisfactory use:

1. Needle appearance. Has the green of any needles faded slightly, becoming a little whitish in appearance? Do any needles look a bit contracted or shrunken rather than well-filled or turgid? If so, the tree has begun to dry out. Branch tips and the upper third of the crown will usually keep a fresh appearance longer than the lower interior of the crown. Therefore, check the inside part of the crown on the lower two-thirds of the tree. If you can detect no signs of dryness here, the tree should be in good shape. Some drying damage in this portion of the crown can be condoned if you will care for the trees as recommended in this bulletin. If drying is evident on the branch tips and in the upper portion of the crown, the tree most likely is already too much damaged to respond to good care.

2. Needle brittleness. Needles that have begun to dry will usually respond differently than fresh needles to a simple pull test. Take a hold of a few needles with your thumb and forefinger. Bend them over your thumb at approximately a right angle and give a steady pull. On most species needles that have begun to dry will break when pulled in this manner. On the other hand, needles that are fresh will normally pull loose at their base where they join the twig or branch.

3. Needle resistance to shock. On some species the needles' points of attachment to the twigs begin to weaken as soon as they start to get dry. Therefore, a test that helps reveal dryness on spruces and Douglas-fir is to lift the tree about 16 inches and let it fall a free fall, hitting the butt of the stem on hard ground or pavement. If any green-colored needles shatter from the tree, it is a sign of dryness. If very few green



Species	Other names used	Identification aids	
		Needles	Other
<u>Douglas-fir</u> ( <u>Pseudotsuga menziesii</u> )	Doug-fir red fir	Borne singly, about 1" long, flat, pointed but not stiff and sharp, mostly blue-green, but may be yellowish green to dark green.	Distinctive red-brown buds, 1/4"-1/2" sharp pointed; cones 2"-3" long with pronged, exerted bracts.
<u>fir, grand</u> ( <u>Abies grandis</u> )	white fir balsam	Borne singly, 1"-2" long, flat, blunt or notched at the tip, grooved on upper surface, shiny dark green above, silvery underneath, often 2-ranked.	Buds are small, green, rounded. Cones of young trees usually have numerous resin blisters.
<u>fir, subalpine</u> ( <u>Abies lasiocarpa</u> )	alpine fir balsam white balsam	Borne singly, 1/2"-1 1/2" long, blue-green with a thin white band in center of upper surface. Usually needles on under sides of twigs are twisted and turned upward so that the needles appear to be massed on upper sides of twigs.	Young bark generally smooth, resinous like that of grand fir. Crown usually narrow and narrow.
<u>fir, white</u> ( <u>Abies concolor</u> )	concolor fir balsam fir silver fir white balsam	Borne singly, 1 1/2"-2 1/2" long, pale blue-green, often with tendency to be 2-ranked.	Buds are rounded, up to 1/4" long, green. Young bark smooth, gray.
<u>pine, Austrian</u> ( <u>Pinus nigra</u> )		In groups of two, 2 1/2"-5" long, dark green.	Distinctive buds 1/2"-1 1/2" long, white. Bark gray, somewhat scaly, darker gray in cracks.
<u>pine, lodgepole</u> ( <u>Pinus contorta</u> )	jack pine black pine birdseye pine shore pine	In groups of two, 1"-3" long, stout, usually twisted, yellow-green to green.	Cones often borne at early age. 1"-2" long, unequal at base, scales forming sharp spines.
<u>pine, ponderosa</u> ( <u>Pinus ponderosa</u> )	yellow pine bull pine black pine	In groups of 3, 3"-10" long, dark green.	Buds are 3/8"-1 1/4" long, light brown; bark on young trees dark gray with narrow furrows and ridges.
<u>pine, Scotch</u> ( <u>Pinus sylvestris</u> )	Scots pine	In groups of 2, 1 1/2"-3 1/2" long, yellow green to dark green. Some strains blue green.	Young bark with thin, flaky scales, gray-green to near orange.
<u>pine, western white</u> ( <u>Pinus monticola</u> )	white pine Idaho white pine	In groups of 5, 2"-4" long, blue-green.	Young bark is smooth and gray green.
<u>pinyon, singleleaf</u> ( <u>Pinus monophylla</u> )	pinyon pine nut pine	Borne singly with a sheath at the base, 1"-1 3/4" long, usually curved quite stiff and sharp-pointed, green to blue green.	Young bark gray or gray-green, flecked with resin.
<u>spruce, blue</u> ( <u>Picea pungens</u> )	Colorado blue spruce	Borne singly, 1"-1 1/2" long, 4-sided, stiff and quite sharply pointed, green to blue green.	Bark on new twigs usually yellowish gray to light orange color. Older twigs where needles have fallen are roughened by many short woody pegs.
<u>spruce Engelmann</u> ( <u>Picea engelmannii</u> )	spruce	Very similar to blue spruce, except they are not quite so stiff and have more of a tendency to appear grouped on upper sides of twigs.	Bark on new twigs usually light gray with fine hairs. Older twigs similar to blue spruce. Cones of both trees have thin, papery scales.
<u>spruce, Norway</u> ( <u>Picea abies</u> )	spruce	Borne singly 1/2"-1" long, dark green, usually showing tendency to look grouped on upper sides of twigs.	Bark on new twigs gray to yellowish green; branches spreading with drooping internodal twigs.



Christmas tree characteristics		Additional Notes
Retention	Other	
(days) (good excellent)	Branches are usually too pliable for heavy ornaments. Unsheared trees usually have light to medium crown density.	Douglas-fir stores and ships well. It is the No. 1 Christmas tree in the Pacific Northwest. It was the nation's leading tree from 1950 to 1960. Still contributes about 22% of the nation's Christmas tree supply. Grows in most forested areas of Idaho. Plantations have serious trouble with needlecast disease.
(good excellent)	Open grown grand fir has relatively stiff banches. It has a more formal appearance than Douglas-fir. Unsheared trees usually have light to medium density. Sheared trees often are very dense.	Grand fir stores well. It is somewhat bulky for shipping. In 1964 it ranked 12th among the nation's leading Christmas tree species. Grand firs' popularity as a Christmas tree is increasing. Grows in moist forest conditions in Idaho from Canada to near south fork of Payette River. Used in north Idaho plantings.
(good excellent)	Branching is dense and branches are relatively stiff. Crown of tree is usually narrow in proportion to its length. Usually a very well formed tree for those who want one with narrow taper.	Subalpine fir stores well but it is a heavy tree for shipping. Grows commonly in most high elevation forested areas of Idaho. Not an important Christmas tree species. As yet it has not been grown in plantations.
(good excellent)	Crown is usually dense and branches stiff. Has a good Christmas tree form.	Widely used as an ornamental, but not much in Christmas tree plantings because of slow growth and difficulty in getting good survival.
(good)	Unsheared trees have medium density and are quite desirable for flocking. Sheared trees are quite dense. Makes a stout looking tree, similar to ponderosa pine.	Austrian pine is native to Europe. It is being planted rather widely in Christmas tree plantations. Very few as yet on Idaho retail markets. Makes a rather heavy tree for shipping.
(good excellent)	Often the fall color is too yellowish to be satisfactory without green tinting or flocking. Makes good tree for flocking. Light to medium density unless sheared.	Lodgepole pine stores and ships well. It is heavier than Douglas-fir. It occurs naturally in nearly all forested areas of Idaho. It is also being put in Christmas tree plantings. Fourth in importance as a Christmas tree in Idaho.
(good excellent)	The long needles and stout branches make ponderosa pine a highly desired tree for flocking. Density usually medium to heavy.	Ponderosa pine stores well but is not usually shipped far because of its weight. Now being produced in moderate numbers from natural stands. Used some in plantations. Grows on dry forest sites from Canada to near Mountain Home and northeast to Montana.
(good excellent)	Nearly all Scotch pine put on the market are sheared trees, shaped to good form and made quite dense by shearing. Some varieties must be green tinted to have desirable color.	There are many varieties of Scotch pine, which is a native of Europe. It has been the No. 1 Christmas tree of the U.S. since 1960. All Scotch pine Christmas trees come from plantations. It is widely planted in Idaho.
(fair good)	Has very desirable color. Branches are not strong enough for heavy ornaments. Unsheared trees usually have medium density.	Cannot be stored long without browning. Some recent plantings have included small blocks of western white pine, but it is not an important Christmas tree species. Grows on moist sites in Idaho from Canada to and including Clearwater River drainage.
(fair excellent)	Singleleaf pinyon grows very slowly; so the crown is usually quite dense. Form of natural trees is generally acceptable for Christmas trees.	Can be stored but it is quite heavy for long distance shipping. Source in Idaho is in Cassia County. Trees harvested from natural stands and sold mostly in south central Idaho towns. Has not yet been planted commercially because of slow growth.
(fair good)	The even growth and branching of blue spruce gives it a formal appearance. Branches are stiff and support ornaments well.	Very few blue spruce Christmas trees are being produced. Native stands are quite limited and few plantings have trees of marketable size. Can be stored for only a short period. Too bulky for shipping because of stiff branches.
(poor fair)	Not quite as formal in appearance as blue spruce. Branches are reasonably stiff.	Cannot stand storage except under very favorable conditions. A poor shipper because it suffers heavy loss of needles unless the hauls are short. Most Engelmann spruce that become Christmas trees are sold in the localities where they are cut.
(poor fair)	Usually a well-balanced tree, with medium to heavy crown density. Branches are not as stiff as those of the other spruces.	Norway spruce will not stand storage and shipping, except during a very short period, and under favorable conditions. A native of Europe, Norway spruce is widely used in Christmas tree plantings in this country principally for local markets.



needles are loosened by the fall, the tree is safe to use with good care. If many green needles shatter, the drying damage is severe.

### CARING FOR YOUR CHRISTMAS TREE

When you have selected your tree, keep it fresh and fire resistant by following these suggestions:

1. Store it in a cool, shaded place until the time you take it in the house. If you can, place the butt of the stem in a container of water. If you know the tree has been cut for several days, saw off about one inch from the bottom of the stem before placing it in water. The fresh cut will enable the tree to take up water more readily.

2. Be sure the Christmas tree stand is stable. Use a stand that will permit keeping the butt of the tree in water. Keep the water basin filled. This will prevent your tree from becoming unsightly and unsafe.

3. Place the tree as far as possible from a radiator, fireplace or other source of heat.

4. Locate the tree so that all exits from the room are kept open.

5. Carefully check cords and connections of the electric lights you will use on your tree. Frayed cords or faulty connections are dangerous. Avoid plugging the tree lights into an overloaded circuit.

6. Keep metal foil and tinsel out of tree light sockets.

7. Allow no playing with electrical toys under the tree.

8. Keep all used package wrapping and other flammable materials away from the tree.

9. Never use lighted candles or other open flame on or near the tree.

### DID YOU KNOW THAT

A cultured Christmas tree is one that has been pruned, trimmed or sheared to improve its quality?

A plantation tree is one that has been planted and grown for the specific purpose of providing a tree to help some family enjoy the Christmas season?

You violate the Idaho trespass law if you go on any forest land besides your own and cut a Christmas tree without having permission from the landowner?

It is unlawful in Idaho to transport more than 2 Christmas trees without a bill of sale or other proof of ownership?

The harvesting of Christmas trees does not devastate young forests and upset the ecology because most of today's Yuletide trees are grown

in plantations or managed native stands that are farmed for the specific purpose of producing Christmas trees?

### OUR CHRISTMAS TREE TRADITION

Before the dawn of Christianity, several peoples used evergreen boughs and trees in various rites and celebrations. For example, raising an evergreen bough was part of the Roman feast of Saturn.

A tree in the home was little used as a part of the Christmas observance until Martin Luther (sometime before 1546) brought in a small evergreen and decorated it with candles to allow his family to share some of the beauty he saw in the snowdecked trees in winter moonlight. Putting lights on the Christmas tree was at first considered child's play. It was not until 1700 that lights became an accepted part of the Christmas tree decorations. By that time the Christmas tree custom was firmly established in the Rhine River district. Gradually it spread to all Germany.

The Christmas tree tradition crossed the Atlantic during the American Revolution. Hessian soldiers, hired by the English Crown to fight against the colonies, are credited with having the first Christmas tree in America. Finland had accepted the custom by 1800, Denmark by 1810, Sweden 1820, Norway 1840. From the Scandinavian countries the custom spread to England and France about 1840.

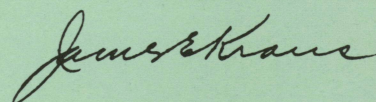
The tree has become so important in our observance of Christmas in America that we use about 43 million trees each year. Nearly 35 million of these are "home grown." Approximately 8 million are imported, mostly from Canada.

Currently over 90 percent of U.S. Christmas trees are produced on private lands. Forty-five per cent is grown in plantations. More than  $\frac{3}{4}$  of all plantation trees are sheared for better quality. Most trees that are produced from managed native stands are also cultured.

Today the trees that are cut for Christmas trees are nearly all grown for that purpose. The cutting of Christmas trees does not jeopardize our future timber production. Instead, it harvests a specific and important forest crop.

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