# Reduce Christmas Fire Hazards



Prepared by CHARLES R. Ross Extension Forestry Specialist and

JAMES J. MCALISTER Extension Public Affairs Specialist Oregon State University, Corvallis

Make it a safe Christmas. Christmas is the time for parties, festivities, gift wrapping, Christmas trees, and decorations. It should be a time for rejoicing, yet for some it will be a time of tragedy. There will be a rash of fires from a few days before Christmas to the week following New Year's. You can help to make this a safe holiday period.

#### Buy a Fresh Tree

A dry tree is a fire hazard. Shop early and obtain a fresh tree. Shake the tree—don't buy it if needles drop off. Run your finger along the branches. Don't buy it if the needles are not firm and fresh.



#### Keep the Tree Fresh

Make a fresh cut on a slant about one inch from the butt end. This increases water uptake. Mount the tree in a container of water. Always keep the water level above the level of the cut. Place the tree away from sources of heat such as radiators, television set, fireplace, and so forth.

#### Beware of Fire Retardant Chemicals

Some chemicals cause discoloration and increase needle drop. Some new chemical solutions show promise of checking drying and needle drop, but standing trees in plain water is as good or better than any chemical treatments tested to date.

#### Metal, Plastic, and Flocked Trees

The new metal trees and trees made of plastic have their fire dangers too. Metal trees and strings of colored electric lights are a bad combination. A short can cause shock and fire. If you favor a plastic tree, be sure the plastic of which it is made is the slow burning type and also a nonconductor of electricity. Read the label!

If you go in for flocked Christmas trees, make sure

the flocking has been properly treated to flameproof it. Without such treatment, flocking could be more dangerous than a plain green tree. Here again fire prevention authorities state that the tree's own moisture content is of greater importance than "flameproofing" applications of one sort or another.

#### Lighting

• Don't use open-flame candles on the tree or nearby where there is a chance for the flame to touch off the tree or presents piled at the foot of the tree. Flammable decorations and gift wrappings and cigarettes carelessly handled are more of a nightmare to firemen than Christmas trees, although defective strings of lights are equally hazardous. Some plastic foam decorations, such as polystyrene foam used for candle holders, are flammable.

• Use only electric lighting sets that bear the UL (Underwriters' Laboratories) label. This means that they have been tested for fire and shock hazards and may be considered safe if properly handled and maintained. Check old cords each year for frayed wires, loose connections, and broken sockets. Some imported lights are not approved by the Underwriters' Laboratory.

• Don't plug too many cords into one outlet, and be sure you use no more than a 15-ampere fuse on the electrical circuit. The usual home electrical outlet is rated to handle at least 1,500 watts. Therefore it can safely carry 6 to 8 strings of 25 lamps on one outlet, provided the outlet is not being used to carry other lights and equipment at the same time. Use no more



This is one of a series of *Fact Sheets* reporting Cooperative Extension work in agriculture and home economics, Gene M. Lear, associate director. Printed and distributed in furtherance of Acts of Congress of May 8 and June 30, 1914. Oregon State University, Oregon counties, and U. S. Department of Agriculture cooperating. than six strings of lights connected to one another string fashion.

• Call a competent electrician if you plan any extensive wiring for Christmas lighting. Don't do it yourself unless you are qualified. If you go in for outdoor Christmas lighting, select only weatherproof cords and equipment approved for such use by UL. The State Electrical Code requires the above, and weatherproof outlets for outdoor use. Indoor wiring, if used outdoors, may lead to electric shock.

Place the lights on your tree or other decorated greens so that bulbs do not rest against surrounding foliage or other material whether you think it is combustible or not.

• Never leave the house or retire for the evening without making sure that all lighting is turned off.

• The State Fire Marshal recommends indirect lighting (a spotlight, for example) for metal trees, as strings of lights may lead to short circuits, increasing danger of fire and electrical shock.

• Have planned escape routes from each room in case of fire. This is not just a Christmas precaution, but it is an important year-round fire safety step. Hold practice drills in the home to be sure each family member is capable of taking routes mapped out.

### A Fire Retardant Coating

There is a simple fire retardant coating material which you can apply to your tree that will produce a transparent, shiny, colorless coating along with good protection. It consists of a combination of sodium silicate (water glass) and a wetting agent such as liquid detergent. Use nine parts by volume of sodium silicate to one part by volume of the wetting agent. Give tree and greens a heavy coating. One coat helps a great deal, but two coats are far more effective to prevent the possibility of flames spreading. You can apply the material by dipping or spraying. Thin the mixture with water to make it easier to spray on. However, thinning with water will call for additional applications. Many households have vacuum cleaners with spray attachments. This sort of sprayer or an insecticide or paint sprayer will do.

This coating seems to work better on the greens with more leaf surface to hold it. Better apply the spray and allow it to dry outdoors, since it stains paper brown when it drips and fabrics might also become stained. The formulation was suggested some years ago in a leaflet by the U. S. Forest Products Laboratory which also describes other similar formulations that produce cream-colored and frosty white coatings.

## CHRISTMAS TREE SAFETY CHECK

- Buy a freshly cut tree.
- Keep it standing in a container of water. Set it up so the butt end will not shift and secure the tree so that it will not tip.
- Place the tree away from heating units and open fireplaces—see that it does not block an exit.
- See that all Christmas tree lights, electrical connections and cords are in good condition and all tree decorations are flameproof.
- Do not allow paper or other flammable wrappings to accumulate.
- Remove the tree as soon as the holiday season is over.
- Plan what you must do if fire breaks out. Be sure children and baby sitters understand the plan. If fire strikes, first get everyone out of the house. Next, call the fire department and then try to fight it yourself.