PLANTS ENDURE ICE, SLEET AND SNOW

by Ray Rothenberger

Though they are coated with ice, pelted with sleet and laden with snow, the trees and shrubs in our gardens will endure — we hope. But even plants that can endure the coldest temperatures can suffer breakage that may disfigure them and ruin their ornamental value.

Ice storms are by far the most damaging, although heavy, wet snows of late winter can also take their toll. Ice coatings may increase the weight of a branch up to 40 times. Efforts to remove ice by shaking or hitting branches may increase damage rather than improve the situation.

If a tree or shrub becomes ice covered, it is better to allow the ice to remain until it melts off naturally. If possible, branches that appear to be splitting or breaking should be given extra support. Branches of trees known to have brittle wood should be propped with stout lumber if an ice storm is known to be approaching. Two by four boards make good props. Several may be needed for adequate strength for large branches.

Many fast growing trees have relatively weak wood, and are often the ones most severely damaged by ice and snow. Such trees have flexible wood when young, and show little damage. As they become larger and more mature, severe breakage results. The Siberian (Chinese) elm is normally one of the most heavily damaged trees during ice storms. Other types of trees that are subject to breakage include weeping willow, Russian olive, hackberry, box elder, silver maple, tree-of-heaven and cottonwood. When strong wooded trees are allowed to develop narrow, upright branching, such branches may split off under heavy weight.

Shrubs and evergreens with multiple stems such as arborvitae, juniper and yew may be spread and broken apart under the weight of ice. Plants used close to the home may be located beneath gutters. Snow and ice on the roof may slide into gutters causing them to be blocked and overflow. This overflow may freeze on the plants beneath, causing them to be weighted down. Upright plants are usually more subject to being deformed or broken under these conditions. Prevent this type of damage by fastening heavy twine to the base of the plant, and wind it spirally upward to the top and then back down in a reverse spiral. If damage or bending has already occurred, cut out any broken parts, and pull the plant back into shape with the same method. Do not try to wrap a plant together while it is still coated with ice.

Trees that have had limbs broken should be repaired as soon as weather conditions permit. Remove any broken branches by making a smooth cut at the point where the broken branch joins another branch or the main trunk. If a branch is only split slightly, it may be possible to repair the branch so future ice or winds will not break it again. This type of repair may require special bolting and bracing.

Small branches with splits may be repaired if the work is done before the broken tissue has dried. Bind the split with soft cotton twine. Do not use metal wire or materials such as nylon cord that do not deteriorate. As a branch heals and grows, it will expand in diameter. Such materials will strangle a branch during expansion and result in weakening and death. Cotton cords slowly deteriorate. Branches bound in this way should be coated wth grafting wax or wrapped with burlap or tree wrap paper to prevent drying during the healing process.

Extension Horticulturist
University of Missouri
Columbia, Missouri