

# Ice Damage to Landscape Plants

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The ice from the latest storms has caused some extensive damage to trees in our landscapes as well as along roads and in forest areas. Before I get to the information about how to care for these plants, I would like to start off with a little bit of a botany lesson on what happens when the ice accumulates on the branches of these plants.

When branches on trees and shrubs start to bend from the weight of the ice, the first reaction most of us have is to knock the ice from the plants. This is a big no no. Plants are naturally able to withstand a certain amount of bending and usually Mother Nature can restore them to their original state for the most part. When an ice storm occurs, the rain turns to ice and begins to hang from the branches, at this point the stems of plants are not frozen, just caked in the ice. Xylem is the part of a plants vascular system that is responsible for transporting water and minerals from the soil to the stems and leaves. It is also known as “wood”. When the branches have bent over from the ice collection is when the conductive tubes of the xylem freeze. If the ice is removed quickly so the branches can spring back up, then the cells in the conductive tubes shatter and rupture the cell walls. It is the same thing that happens when you try to straighten a bent straw that has ice in it. Then if you begin to shake the plant to get the rest of the ice off the branches, this only aggravates the situation. The plant will really suffer when the summer months hit, and it becomes hot and dry. With many of these conductive tubes shattered the plant is not able to move enough water and minerals, mainly water, up from the roots to the foliage, thus you get leaf scorch and twig death.

There are times, however, where it is better to lose a few branches by removing ice, so you do not lose the whole plant or the main leader. Often shrubs will recover quicker from ice damage if you are to cut those broken branches to the ground and allow them to sprout back. If in the future if you decide it is necessary to remove ice and snow, so you do not lose the whole plant or it does not fall and cause other damage, it is better to use cold water from a water hose to melt the ice rather than shake the limb. In cases where the air temperature is close to freezing, the water out of your water hose is generally warm enough to melt some of the ice load. Never use hot water because this will damage the plant.

If you need to deal with broken branches, it is better to look at the whole tree, instead of just the part that is damaged. Once a tree has suffered significant damage it may be better to completely remove it instead of just trying to trim out the damaged areas and hope for the best. This is especially true if the tree is located near a play area, home, or driveway to avoid the potential for future failures that may occur. If only a side branch is broken it can usually be removed without causing the risk for future failures, however, the tree may look deformed, but in certain situations a deformed tree is better than no tree. Seeking the advice from a professional arborist is useful, but the final decision rests on the owner of the tree.