Managing Winter Injury to Trees and Shrubs
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The best way to reduce winter injury to trees and shrubs is to plan ahead. Being prepared will save you endless grief over lost trees, not to speak of the hours you may spend trying to correct problems that might have easily have been prevented.

Proper plant selection, pruning techniques and regular maintenance will go a long way toward keeping your trees and shrubs alive and healthy.

Shallow-rooted plants are often pushed out of the ground when it freezes and thaws, a condition called frost heaving. We’re likely to see a great deal of this after our harsh Transylvania County winter. If the root system is small enough, push it back down into the soil, otherwise replant and mulch the root zone to reduce temperature fluctuations.

Frost cracking is caused by sharp temperature changes between day and night that freeze the water within the trunk of a tree, causing it to split open. If the cracking is not too severe, these cracks will close when warm weather arrives. Wrapping trunks with burlap strips or commercial tree wrap may prevent bark splitting. Remove wraps in the spring to prevent insect or moisture damage.

Root injury may occur on container plants left in the open during the winter. Move containerized plants to protected areas, sink pots into the ground, group them very closely together or mulch heavily to reduce the likelihood of low temperature injury to roots.

Snow and ice on branches can cause them to break or bend from the extra weight as we sadly discovered during last winter’s ice storm. High winds will compound the damage. Remove snow from your trees using a
broom and sweeping upward to lift the snow off. Little can be done about removing ice from plants, and when the branches are frozen, they are quite brittle, so it is usually better to let the ice melt. Do not be in a hurry to prune to correct plants bent out of shape by snow or ice, often the plants will straighten up in a few days by themselves. Broken branches should be pruned as soon as possible.

After a particularly severe winter like this one, plants may show substantial injury. During the winter, remove only those branches that are broken or so brown that they are obviously dead. Do not remove branches is you find a green layer underneath the bark when you gently scrape it. The extent of winter damage and pruning needed can best be determined after new growth starts in the spring.

Voles may cause serious damage to trees or shrubs by chewing off the bark at ground level or below. They sometimes completely girdle a tree, causing it to die. Keep mulch pulled at least 6” away from the base of trees and examine them frequently for the presence of voles. Rabbits may also damage or kill a tree by chewing the bark. One method to prevent chewing damage is the use of a mechanical guard made from a piece of 36” tall 1/4” hardware cloth. Form a cylinder with the hardware cloth and place it around the trunk, pushing it firmly into the ground to deter burrowing animals.

Road salt damage shows itself most often on the shoot tips and young leaves of plants that show dried, burnt areas on leaf edges. Do not pile snow that contains salt around plants or trees, and instead of spreading rock salt on slick surfaces, use sand or sawdust to improve traction on slippery sidewalks.

**Garden Box for February**

- Fertilize cool season lawns. Apply pre-emergent herbicide for crabgrass prevention.
• Plant ornamental trees and shrubs.
• Prune overgrown plantings: Burford holly, Japanese holly, privet, etc.
• Shade trees may be pruned if needed with the exception of bleeders such as maple, birch, dogwood, which can be pruned from mid-late summer.
• **DO NOT PRUNE EARLY SPRING FLOWERING SHRUBS UNTIL AFTER BLOOMING.**

*Do you have a question for the Transylvania Extension Master Gardeners or a subject you’d like to see addressed in this column? E-mail us at manymoons@citcom.net. Our garden clinic is closed for the winter, but it is open on Wednesdays, March through October.*