Winter Storm of the 'Century' Catches Many With Fall Grounds Maintenance Chores Unfinished

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While it's only early November at the time this article is being written, we have already had half of our yearly average snowfall amount over much of Minnesota. In addition to the snowfall creating a number of inconveniences and poor road conditions, many grounds maintenance staff, including golf course superintendents, were caught with a variety of landscape and turf winter preparation projects unfinished. Following are some courses of action which may be possible to help further protect some of the landscape plant material. *(See the article by Dr. Ward Steinstra for a discussion of turf snow mold strategies.)*

First, the severely cold temperatures and the rapid temperature drop experienced on the heals of this storm, may in itself, be a source of winter injury. Even though mid-winter temperatures are likely to be lower than those experienced so far, our trees and shrubs usually have not achieved maximum cold tolerance so early in the fall. Thus significant cold injury may occur at somewhat warmer temperatures. One plus is that some parts of the state were relatively dry during the fall. This may have given some plant materials better cold tolerance levels.

Garden roses, excluding the hardy shrub types of roses, should have already been tipped or mounded and waiting for their winter mulch covering of leaves or possibly covering hay. However, if the garden roses were not tipped or mounded and still standing, there may still be time to mulch them further.

If we begin to lose snow cover due to warmer temperatures, the potential for cold injury to the bud union and root system will significantly increase. Most of the top growth (canes) will likely be lost down near the bud union. The bud union, if it survives, is capable of regenerating new shoots the following spring. As snow cover is lost and you have the possibility of applying a leaf mulch or covering hay such that the mulch depth can be maintained at 1 to 2 feet, winter injury likely will be minimized. Trim the existing canes back to accommodate covering with additional mulch. Garden roses are really quite tender.



Even with the best of protection efforts under the present conditions, there is the potential for significant damage and/or loss.

Where deeper snow levels remain even after meltdown occurs, an additional concern may be mice damage to roses, as well as other woody shrubs and young trees. This will be especially true if the area around the base of the shrubs had grass growing around it. This provides mice with an easy source of food as well as good cover. With the amount of snow cover now present, it may be too late to do much about potential mice damage.

However, for the more valuable landscape plants, several mice protection efforts could still be tried.

First, snow can be excavated from around the trunk or base of the plant and a ¼-inch hardware cloth cylinder extending 12" - 18" high or up to the first branch can be placed around it.

Second, again excavate the snow from around the plant to ground level. Place a small amount of a mice "bait" in a small container such as a soup can that is open on one end and the bottom has not been removed. Lay the container on its side; place near the base of the plant and recover.

Third, ready-made mice bait stations could also be placed near the base of the plant and recovered. Always follow label directions for any rodenticides that you will be using.

Woody branches and stems exposed above the snow level may be subject to deer and rabbit feeding. Commercially available repellents for deer and rabbits could still be applied. Product effectiveness can be somewhat variable. Be sure to thoroughly cover the exposed portions of the plant, and retreatment likely will be necessary during the winter months. Also, only the treated portions will have some protection. If the snow levels melt down, exposed plant parts lower than the originally treated area may be vulnerable to their feeding unless treated. Again, follow label directions for proper use and how often applications need to be repeated. These applications may be more practical and economical if used primarily on the more valuable landscape plantings.

Where possible, young thin-barked trees can still be wrapped to help protect them from sunscald injury. Simply remove the snow away from the trunk down to the soil surface, and wrap the tree with some type of protective tree wrapping. This may also give some mice protection as well. Be sure to wrap the tree down to the soil surface and not just down to the existing snow surface. Sunscald may occur below the wrapping later in the winter as the snow melts and settles, exposing unprotected bark surfaces.

By the time you read this article, there may still be time to apply some of the procedures. For others or in other parts of Minnesota, it may be too late to take any corrective or precautionary action. A lot of what we may or may not be able to do will depend on what nature provides us in the way of weather. The degree of winter injury, if any, to our landscape plant materials may not fully be known until spring.