

## Five Important Steps to Winter-Protecting Your Roses

There is a continuing misconception among many folks who grow roses in the "cold zones" (i.e. USDA zones 3, 4, 5 and 6), that "winter protection" means protection against freezing. That's not right in zones where the ground freezes solid. No matter how much protection you add to your roses (and that includes the "Minnesota Tip"), it's impossible to stop them from freezing when the ground freezes down one or two feet (or sometimes more here in Minnesota).

So, it's not the freezing that kills roses, it's the repeated thawing and re-freezing at the surface, when temperatures go above freezing in the daytime and fall back below freezing at night. So our winter-protection objective must be to stop repeated freezing and thawing. By the way, this principle applies equally to more temperate zones where the ground doesn't consistently freeze, but winter temperatures hover around freezing for weeks at a time. In a way, I think that the winter-cover methods described below, or some variant thereof, may be at least as important (or perhaps even more so) for gardeners in zones 6 and 7, where the ground often doesn't stay frozen and freezing and thawing is very fickle. Don't forget the "Polar Vortex" of a couple of years ago (and act accordingly)!

For example, here is a beautiful picture of Teresa and Greg Byington's home and garden at the height of the "Polar Vortex", near Indianapolis (zone 6, per National Arbor Day 2015 data), in January 2014. The extreme minimum temperature (EMT) in Indianapolis was -15, i.e., right in the middle of zone 5 that year. That means that the ground froze solid in Indiana, during that period, and likely thawed out and froze again, judging from the bright sunshine in this picture. In St. Louis, zone 7, their EMT was -8, putting them in zone 6, so the ground froze solid, before thawing, there too. That's why some form of aggressive winter protection is also important in both zones 6 and 7.



## Here are my five important steps to stop the killing effects of freezing and thawing:

1. Always plant the bud unions of your grafted roses, or the crowns of your own-root roses, at least three inches below the ground. Not only does this help insulate the bud unions from freezing and thawing, but it's also good horticultural practice, no matter whether you garden in a cold zone or a warm zone.

2. In the six weeks prior to the first hard freeze in your area (25 degrees f. or below), harden off the canes of your roses by giving them a weekly potassium feast. See my blog:  
<http://theminnesotarosegardener.blogspot.com/2014/09/potassium-feast-for-your-roses.html>

3. A couple of weeks before the first hard freeze, mound your roses, up ten inches or so, with several shovels of compost or black dirt. This cone of soil, which should be frequently watered and is the first to freeze, further insulates the bud unions and crowns of your plants (which should already be below ground level). In zones 6 and 7 (where I grew up), the extent of mounding might be reduced somewhat, perhaps to just a heavy mulching that stays put over the winter and is naturally worked into the soil in the spring. Again, however, remember what happened with the "polar vortex" and act accordingly. It can't hurt to use more mulch.

4. Next, at about the time the soil freezes (late November or early December in Minneapolis) or, in the warmer zones, when you anticipate consistent night-time temperatures below 25 degrees (probably early January), put some leaf or hay cover over your mounded roses. I like half-filled bags of mulched leaves, which I slit open on the bottom and push down over my plants. At this point, the plants have been cut back to about 18 inches and bundled up with twine, so as not to hinder placement of the bags. You can also use wire fence cylinders filled with leaves but I think the slitted leaf bags work better; a practice that has been used in the Chicago area for many years. In Detroit (zone 6), where my parents grew roses, we simply raked leaves over our rose beds, without mounding, for winter cover. I also remember that they replaced several roses each year, so it must have not been quite sufficient. However, I believe that the combination of mounding and generally covering your beds with leaves or hay would probably work just fine in zone 6, as long as your bud unions are planted below ground level. For much greater detail, please see my blogs "Winter Protecting Your Roses" and "The Big Coverup":  
<http://theminnesotarosegardener.blogspot.com/2013/09/winter-protecting-your-roses.html>  
<http://theminnesotarosegardener.blogspot.com/2012/11/the-big-coverup.html>

5. Finally, if this isn't already enough, you must now protect your roses from voles, those voracious rodent pests that are to winter gardening what japanese beetles are to summer gardening. This must be done just before you place leaf cover on your plants, i.e. just before they freeze. Castor oil and rodent bait should be strategically applied, as described in these two Minnesota Rose Gardener blogs:  
<http://theminnesotarosegardener.blogspot.com/2015/11/protecting-roses-from-vole-damage.html>  
<http://theminnesotarosegardener.blogspot.com/2012/10/voles-and-roses.html>

Here is a picture of my Earth Song bed, all put to bed on Christmas day 2013, with each of the five steps above performed, plus a natural eight inches of snow for added insulation. The now-dreaded Polar Vortex would begin in the next month, with more than 50 nights below zero and a one-night EMT of -23 (zone 4), but I suffered no losses in 2014.



So now your fall work is cut out for you! Please let me know if you have a question.

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