

## Natter's Notes

# Cold Weather: A Few Reminders

Jean R. Natter

Likely you'll agree that this year's weather has been a bit off. Warm when it should have been cool and vice versa. So, because we haven't had seriously cold winter in about 10 years, I figure we should refresh what we need to know if we do have winter weather harsh enough to damage plants. Some local areas have already had a minor taste of cold with dips to 30F or slightly lower.

### Group and water containers

In an emergency, as in you were caught off guard, realize that container-grown plants are more sensitive to cold than the same kind of plants in the ground. It's because roots are more sensitive to cold than top growth. Roots are essentially exposed when in pots but are protected by the large soil mass in the ground.

The first things that need attention are container-grown plants. Set them pot-to-pot tight, in a sheltered place, then throw frost-blanket or an old blanket over the group. You can protect hanging baskets similarly, by setting each one on an up-turned pot or bucket. Then, too, a large cardboard box will shelter an individual specimen nicely. Such emergency covers can protect against several degrees of cold.

But don't use plastic sheeting unless you prop it above the plants. The reason? When the freeze arrives, any plant tissue touching the plastic will die.

If you have sufficient time to think ahead, make certain all the containers are well-watered, even those you're unable to move because of their size or weight. Even though it may be hard to believe, moist growing media is less likely to freeze than if it's dry. (That's true for all plants, whether in a container or the ground.)

And if you forget to set the plants in a sheltered site, you may still be able to protect them if you act just before dawn, the time when the lowest temperature occurs.



*Camellia sasanqua*, a winter-flowering shrub with flower damage from freezing temperatures several days prior. The freeze-damaged tissue is somewhat brown and appears moist; the petals flop. Numerous buds froze, too, and failed to open. (J.R. Natter; Dec.2009)

### The effects of a freeze

Frozen plant tissue turns dark and becomes soft to mushy. The reason, in most cases, is that ice crystals form inside the plant cells during a freeze and, then, perforated the cell walls. If you see minor freeze damage on a treasured plant early in the day, you may be able to limit potentially serious damage by shading the damaged area from direct sunlight. With shade, the intracellular ice crystals thaw slowly and will be less likely to rupture cell walls than if they thawed rapidly.

### Some generalizations

- Get ahead of the game by adding several inches of mulch on the soil around cold-sensitive plants.
- In general, recently installed plants, even if a kind that's normally hardy, are more likely to be

frost-damaged than those planted a year or more previously.

- If a shrub or tree is seriously damaged during a freeze event, wait to remove damaged wood until after new growth begins in the spring. Then, cut at least an inch below the dead section. In the meantime, the damaged parts will provide a small amount of frost protection to the plant.

- If a hard frost, extended or not, is predicted, move sensitive plants into a shed or garage for the duration. Water, if needed, during their stay. (One year, several of my plants were still in good condition after 10 days in an attached garage with only one small window.)

- For trees planted this fall, paint the trunks with white, indoor latex paint, diluted by half with water. On very cold days, the matte white paint reflects bright sunlight which has the potential to damage bark on the trunk's sunny side.

- Knock/brush/sweep heavy snow loads off deformed woody plants as soon as possible.



January 2017; 8.5 inches of snow in a day. Woody shrubs that are weighted down by snow may never recover normal form unless the snow is removed as soon as possible. Neighbor's juniper (in background, at center) was bent to the ground for several days; once cleared of snow, it was only able to lift itself about a foot off the ground. (J.R. Natter)

## Resources

- Winter Injury of Landscape Plants in the Pacific Northwest: (PNW Plant Disease Handbook; <https://pnwhandbooks.org/plantdisease/pathogen-articles/nonpathogenic-phenomena/winter-injury-landscape-plants-pacific>)

- *Abiotic Disorders of Landscape Plants* (A copy of this book is in each metro MG office; pages 133-138 and 175-176.)

- The following two Natter's Notes have many images of cold damage but, unfortunately, are old enough that some of the listed references no longer exist:

- Natter's Notes: "Cold Damage – Lessons from the Garden" (In metro Mg Newsletter, January 2011. pages 4-5) <http://www.metromastergardeners.org/files/news/January2011.pdf>

- Natter's Notes: "December's Cold Damage to Plants" (In metro Mg Newsletter, February 2010, pages 8-9) <http://www.metromastergardeners.org/files/news/February2010.pdf>

- Freezing winter weather takes toll on home landscape plants: OSU eNews, (Reprinted in metro Mg Newsletter, February 2010, page 10) <http://www.metromastergardeners.org/files/news/February2010.pdf>