Care of Freeze-damaged Plants

Texas A&M AgriLife Extension Service — Galveston County Office

PHOTO CREDIT: Linda Barnett

January 3, 2018

Dr. William Johnson is a horticulturist with the Galveston County Office of Texas A&M AgriLife Extension Service. Visit his website at http://aggie-horticulture.tamu.edu/galveston.

News column printed in the Galveston Daily News, The Post, and other Galveston County Newspapers.

The unexpected snowfall on December 8 was a harbinger of more unexpected winter conditions. Temperatures dipped low enough and for long enough to exact a toll on cold-sensitive landscape plants in Galveston County.

When did our landscapes move north? Are we not situated on the balmy Gulf Coast of Texas? Should our USDA Plant Hardiness Zone Map rating be changed?

Our area received an unexpected snowfall on December 8. Linda Barnett, a Galveston County Master Gardener, shared a photo (shown at right) that she had taken of one of her roses with fallen snow on the petals. The cooler temperatures since that brief snow have helped condition cold-sensitive plants in landscapes to better withstand the cold temperatures that have set in for the week.

What's a gardener to do? It's easier said than done but do not panic at the miserable appearance of cold-sensitive plants just after a hard freeze.

Several factors will influence the extent of cold injury suffered by ornamentals and even certain types of fruit, especially citrus. Such factors include variety (some may be more cold tolerant than others), and age (recent plantings that are not well-established are

more susceptible to freeze injury). A very important factor is the general health of a plant.

However, homeowners can take steps now to help reduce the occurrence of additional injuries to ornamental and fruit plants resulting from this week's series of cold snaps. These activities include the following:

• Keep plants well-watered. Watering is an extremely important plant-saving practice for winter. It is very important that plants—those in containers, as well as in the soil—be provided adequate soil moisture throughout the winter season. The wind in the winter, like the sun in the summer, will dry soils.

• Even though woody plants may appear to be in poor condition, do not do any pruning until late winter or early spring—this applies to all citrus and ornamentals, including palm trees. Heavy pruning now can stimulate new growth which could easily be burned back if another cold snap occurs. Also, it is easier to prune and shape ornamentals after the full extent of damage is known.

• Proper fertilization is a key to winter hardiness for many perennial landscape plants. Our local soils are usually low in nitrogen and potassium, the elements plants use to boost their cold protection defense during winter. Even if it's been a while since you fertilized your perennial landscape plants, do not start fertilizing cold-stressed plants until they have resumed active growth in the spring. The use of fertilizer now may stimulate new growth which is very susceptible to cold injury. Also, fertilizer salts may cause further injury to stressed root systems.

• Damage to most citrus fruit occurs when temperatures fall below 28 degrees for at least four hours. Grapefruits are the most cold-hardy citrus fruit in part because of their thick skins, followed by oranges, mandarin types, lemons and limes. Large and thick-skinned fruit are more cold tolerant than small, thin-skinned fruit. When fruit freezes, it can still be used for juice if quickly harvested.

• Do not be in a hurry to prune plants like hibiscus, pentas, lantana and plumbago. They can be cleaned up a little if they look unsightly or the neighborhood association sends a letter, but don't cut these plants all the way back unless you're willing to give up a security layer for the plant. Leave some of the damaged material intact.

• Try to be patient and, where feasible, don't remove dead leaves and twigs of bananas, umbrella plants, etc. until at least mid-March. Should yet another cold snap occur, the dead foliage can help protect the rest of the plant from cold temperature damages and can aid the plant in a quicker recovery.

• Plants with thick, fleshy roots like cannas, firespike, four o'clocks and gingers can be cut all the way to the ground, and they will regrow next spring. Even after severe freezes, most plants like bougainvillea and hibiscus come back from the roots, so don't give up on them.

• Cool season vegetables have been subjected to cool temperatures for a few weeks before this week's cold snap and that is a good thing because they are better able to withstand cold snaps when they occur. Most cool season vegetables will not likely be killed by the cold night time temperatures though leaves may sustain some measure of freeze damage. The real cold weather champs are beets, Brussels sprouts, carrots, collards, kale, parsley, and spinach. I expect that cool season plants that are burned by this week's cold snap will put out new growth upon the return of warmer weather.

• Some plants, of course, won't stand any freezing weather regardless of how many toughening techniques you employ. That's one of the reasons for using only thoroughly hardy plants in the basic framework of your landscape (such as for shade trees, and screening and foundation plantings). Use the less hardy, more tender plants (i.e., flowering annuals, bougainvillea, hibiscus, etc.) as filler to add interest to entryways, flower beds or borders.

The full extent of injury to many plants may not become apparent until summer. It will be of utmost importance that cold-stressed plants also be provided good care throughout the 2018 growing season to safely achieve a full recovery.