

A Greener View: Timing of cold spell took its toll

by Jeff_Rugg

Q: Wow, what a cold spell we have had the past couple of weeks. I have a lot of perennials in my yard and the worse looking ones are nearest the house. I thought they would get the most protection, but I must be wrong. What can I do for them now and what can I do to keep them from having problems next time?

A: The problem for many early blooming plants and buds wasn't the cold spell itself, but the timing of it. The previous couple of weeks had been very warm. Not just seasonally warm, but very warm. This caused many plants to speed up their growth since plant growth speed is related to air temperature. As plants begin spring growth, they lose their ability to resist the cold as the antifreeze sugar chemicals that were protecting the cells all winter are consumed.

Plants near buildings or in sunny spots progressed faster and lost more of their ability to resist cold. They were in effect farther into spring than the calendar. If the night and daytime temperatures had gone back into a normal cool spring range, the plants would have been fine. Instead, they plunged well below freezing not just at night but all day, every day for over a week.

The areas that received snow were the lucky ones as far as the plants were concerned. Snow acts as an insulating blanket that stops the cold at around 30 degrees instead of the air temperature that dropped below 10 degrees in some areas.

At this point, all the damage is done. There could be another warm and cold spell, but let's hope that doesn't come. Very few gardens would have any annuals planted this early. If they did, then they can follow the old gardener's adage of "plant early and plant often." All the other plants, such as bulbs, perennials, shrubs and trees are long-lived and will bloom again next year. The few stems that were damaged may need to be pruned, but let's wait until mid-May or so to see how the plants cope with the damage before we do too much pruning.

Plants that were just installed last fall or earlier this spring will be the hardest hit. They have the smallest reserves to use in replacing the damaged growth. Just watch them over the rest of the spring and into summer. They may need more watering, fertilizer and weeding to get established.

Next time we have an early warm spell remember that weather tends to even out to the average. It could be cold the next day or it may be cold the next spring, but overall it will average out. If there is a cold spell predicted and you have tender plants growing, there are several things that can be done to protect them.

The easiest is to cover them. Plain old plastic doesn't protect very well. It can be used over a blanket to keep the blanket dry, but by itself it isn't good. Clear plastic will heat up the plants in the sun like a greenhouse and warm plants grow too fast. Black plastic does the same thing. Your local garden centers might have what are called "row covers." They are designed to let in the moisture and help keep in the warmth. They can be used for many years. They are used in the spring to get early vegetable garden growth and in the fall to extend the season a few weeks longer. In some regions, they can be used all summer long to keep out pests like Japanese beetles. If your local garden center doesn't have them, check www.gardensalive.com.

Another method of protecting the plants is to use water. There are plastic cones or teepees that fill with water and warm up during the day and release their heat at night. Gardener's Supply has red ones for tomato plants that help speed up the tomato growth. You can find them at www.gardeners.com if your local garden center doesn't have them. Filling plastic milk jugs with warm water and placing them under the blankets will help too. They will need to be refilled with warm water when the cold lasts more than just overnight.

If you are going to get snow, the blanket might become too heavy and smash the plants, so they might be better off without the blankets for that night. You can support the blanket with hoops or stacks of stones.

Another way to use water is to spray it on. This is commonly used by commercial growers. The irrigation water must release its heat before it can freeze. This warms the surfaces it coats. Then, the ice insulates the objects from the colder air. This method can be costly and it needs large pipes or moving water, so the pipes don't freeze and break causing even more problems. A lot of ice will be heavy and so it could cause branches to break.

When an early warm spell is predicted, you could try to shade the plants closest to your house, to slow their

growth. This year, the warmth was too much too soon, so I am not sure you can expect to see this again next year. If it does happen again, you may need to replace them with plants that bloom on new growth later in the summer, so the flowers are not harmed or replace them with annuals that would get planted later in the year.

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