

What's This Weather Doing to my Plants?

AGRI-VIEWS

by Chuck Otte, Geary County Extension Agent

Average, or normal, daily highs for late February should be in the upper 40s, basically 48 or 49, not the upper 70s. With just a few days left in the month, we are likely going to have one of the hottest February's on record. Which then brings the inevitable question of what is this going to do to the wheat crop, trees, fruit trees especially and all those spring flowering bulbs that are already out of the ground and possibly even blooming?

Colder weather, albeit much more seasonal weather, has returned. We should still be expecting lows in the mid to upper 20s well into March. This past week I've seen shade trees starting to bloom. Alfalfa and wheat were clearly breaking dormancy and starting to grow, basically three weeks early. Buds on all trees were swelling as the abnormally warm weather has been the order through the month. So what has happened and what can we expect to happen?

Cold weather damage following early warm weather depends on many factors. First of all is how far out of dormancy did the plant in question get. Plants establish maximum cold tolerance in late December and early January following the normal and expected cool down. Following that, extended warm weather, like we've seen this month, starts to bring them out of dormancy. It is normal for this to happen in fits and starts with warm spells followed by cooler cycles. But each warm spell brings the level of dormancy, or perhaps better stated, the plant's cold tolerance, up and it can not return to the previous level this winter.

Some plants break dormancy much more easily than others. Apricots are notoriously precocious and come out of winter dormancy far too easily to be consistent bearing. Peaches are slightly better, but not a lot. Plants native to our climate are generally less likely to be fooled by early season warm spells.

Secondly, how cold did it get for how long. If it cools off at night and for an hour or so before dawn it gets down to say, 25 degrees, that's one thing, especially if it quickly warms back up above freezing soon after sunrise. But if it gets down to 25 degrees before midnight and then stays there for six or eight or ten hours, then even though the minimum temperature was the same, you're more likely to see adverse effects from the 25 degrees for several hours. The sensitive plant parts have more time to get cold and the more likely that ice crystals formed within the cells causing damage.

Our crop plants, alfalfa and wheat, are still pretty cold tolerant. Yes, they've broken dormancy, but wheat heads, at least in our part of Kansas, are still below ground. I'm far more concerned about what the weather in March will be than what we've already had in February. A warm March poses a much greater risk than a warm February.

It is likely that peach and apricot trees have already advanced too far for there to be much hope. Apples, pears and tart cherries are probably still okay. Ornamental trees can generate leaf buds if they get frozen off. Some maples were already blooming and those buds may not make those little helicopter seeds, darn it! Most flowering shrubs are probably still okay. And you need not worry about all of those spring flowering bulbs. These things are incredibly tough and can often be in full bloom and take temperatures in the low 20s without damage.

Climate change is happening and weather patterns like we've seen are exactly what we can expect. Damage, so far, has been pretty minimal, which is good. But don't get too comfortable. There's still a lot of winter left!