

Cold Weather's Impact on Plants

AGRI-VIEWS

by Chuck Otte, Geary County Extension Agent

A couple nights ago the temperature dropped into the upper teens, it warmed up and then another blast. In early April we should have overnight lows around 35. In 2007 in the first week of April, in fact Easter morning, it hit 20 degrees and did all sorts of damage to wheat and alfalfa, as well as to ornamental plants. So it got colder this week than it did then.

Here's where you need to look at the silver lining. March of this year had average temperatures. Plants have been, for the most part, moving along slowly, or at least slower than most home gardeners might prefer. March of 2007 we had two weeks of well above average weather that had accelerated plant development. I doubt that we had any crop damage this week and ornamental plant damage is going to be nominal as well. Let's dive deeper into some of these details.

We've had several species of trees already blooming and setting seed. If you'd noticed a hint of green on elm trees or maples trees, those weren't leaves, those were seeds. The temperatures may have been cold enough to freeze the seeds and knock them off before they were mature. Which means that a lot of them may not be sprouting and volunteering in your gardens, yards and gutters, which may be a good thing for a change.

Likewise, the ornamental pears (Bradford pears) had started blooming. This cold weather may have frozen quite a few of those blossoms. This will mean that they may be done blooming for the year or at least the rest of the blooming they do may be somewhat spotted and sporadic. It is always hard to tell for sure. It also means that they may not set very much fruit this year which also doesn't hurt my feelings. By the way, if you were thinking of planting an ornamental pear this spring, please don't. They have become an invasive pest and threaten to take over natural areas. You're better off to plant a flowering crabapple!

I had seen a lot of apricot trees in bloom. This is actually several weeks later than recent years, but still early enough that, you guessed it, the blossoms were likely frozen basically killing most any chance of fruit production again this year. This is an annual issue with apricots. Better placement of trees, where they'll stay colder and break dormancy later, will help, but ultimately, they just tend to be too precocious and break dormancy too early.

A lot of other fruit trees seemed to have been holding dormancy fairly well this spring. My apple trees are just now getting to the green tip stage so they should have been fairly immune to any freeze damage. The more blossom color that those buds are showing the more sensitive they are to freeze damage. With all these trees it is important to keep in mind that we are talking about damage to flower buds. Flower buds were formed late summer of last year and are only formed one time a year. Leaf buds can be formed any time in the growing season so frosted leaves are easily replaced. But you only have one shot at blooms and fruit.

Spring flowering bulbs were likely unaffected by this cold weather. You can go out on a very cold morning and have bud and blossom stems as well as leaves laying flat. But let the sun come out and the temperature warm up and they will be standing upright and blooming just fine!

Lastly, turf. I saw a lot of ice on lawns on that frosty morning. I personally think it was a little early to turn on irrigation systems, but ice won't damage turf. It may not do much for the sprinkler system, but that's another story. Anytime grass is greening up and it is cold you do want to stay off of it to avoid damage. But the damage is very superficial and it will grow out of it.