Yard and Garden – 04-04- 2015 -Ted Griess / Extension Horticulture Assistant

While backing out of my driveway, I was recently reminded of phenology. What is phenology, you ask? Phenology is the study of recurring plant and animal life cycles, such as mating, migrations, and budding and flowering in relationship to the weather and climate. Certainly not new, this type of study probably dates back to when humankind first began paying attention to the life cycles of living organisms and their relationships to Mother Nature. In the 1800's phenology was popular and contributed to many of the philosophies we gardeners ascribe to today. Although considered an old science, phenology is once again attracting new interest. Around the world, researchers are turning to old journals of phenological observations to learn more about climate change and global warming, another very important topic —perhaps for a future date.

Growing next to our garage, in the neighbor's yard, is an old established forsythia shrub. Each spring I look forward to its stunning display of beauty. A few days ago, this particular shrub began to bloom and should continue to do so for another week. Forsythia shrubs bloom before any leaves appear, thus creating a living mound of bright yellow flowers. For me, witnessing a forsythia in full bloom is much like seeing the first robin — both are harbingers of spring. Did you know according to phenology, seeing a forsythia in bloom is an indicator that it's time to treat for crabgrass control? Since childhood, I've heard that one should treat for crabgrass before the last forsythia blossom falls. I've also heard that forsythia blossoms foretell when frost is over. When you have no more blossoms, it is safe to plant outdoors for the threat of frost is gone. The

question might be, “How much stock can we place in these phenological predictions?”

Since I am an advocate of research-based facts only, I say, don’t ignore them; but, at the same time, don’t subscribe completely to phenological predictions. For example, the U.S. Department of Agriculture states that the last expected frost date for USDA Zone 5 is May 15th. We all know that such a statement is not an absolute. It’s up to Mother Nature. Some years, the last frost date can extend well into June; whereas, in other years the last frost date may occur in April.

Although I’ve recently witnessed forsythia in full bloom, I should interpret this phenomenon only as an indicator that crabgrass prevention treatment is near at hand. Interestingly, UNL’s turf specialists suggest treating for crabgrass in Central Nebraska no sooner than May 10th. Statistically, even that statement is not etched in cement.

The fact is science has proven that crabgrass seed will not germinate until soil temperatures have reached a constant 55° F continuously for 7 days or more. Although air temperatures, sunshine and moisture have stimulated forsythia shrubs to bloom (perhaps a little earlier than normal), it is essential we also know the exact soil temperatures to determine the best time to treat for crabgrass. Fortunately, the University of Nebraska carefully monitors soil temperatures throughout the state and posts that information daily on its website called *Crop Watch*. As of Monday, March 30, 2015, soil temperatures in the Kearney area have averaged 47.6°F over the past seven days. When and how soon soil temperatures will average 55°F remains to be seen.

According to the science of phenology, the important thing to remember is now that we’ve seen forsythia in full bloom, we should interpret this as a beautiful sign from Mother Nature that treatment to control crabgrass is at hand, but in reality, more data is needed. Knowing the current soil temperatures will give us a better indication when to treat for crabgrass prevention. Even then, only Mother Nature knows the exact time.