## **Dealing with Drought**

## **AGRI-VIEWS**

by Chuck Otte, Geary County Extension Agent

Drought is a two headed monster. Lack of rainfall and above average temperatures frequently go hand in hand. While we have had the lack of rainfall part already this year, up until recently we haven't had the above average temperatures. That's changing. We went from early spring to early summer in about two days! We should be having temperatures in the mid 70s at this time. The temperatures we have been having, and are forecasted to have, are more like late June, early July temperatures.

We are at a serious rainfall deficit that stretches back nearly a year now. Soil moisture reserves are very limited to non-existent. Rainfall chances keep popping up in the forecast but they always seem to be a low percentage and even if we were to get a big rainfall in one event, it's going to take time to replenish soil moisture reserves.

Higher than normal temperatures cause plants to use more water. It's simple plant biochemistry. So every plant that you have in your garden, your flowerbeds your landscape, even your lawn and potted plants, will be using water at a faster rate than we would normally expect for mid May. With flowerbeds and vegetable gardens we want to make sure that they receive enough moisture to grow well and produce. But with many other plants around the landscape, the lawn specifically, we need to make a decision if we want to have plants thrive, or survive. There is a difference.

Fescue and bluegrass lawns will naturally go dormant in the summer with high temperatures and especially low rainfall. To keep them from going dormant you need to apply one to one and a half inches of irrigation plus rainfall. That's the thrive portion of the equation. But it's perfectly acceptable to let this cool season turf go dormant. However, those dormant lawns need about an inch of rain or irrigation every four weeks to keep from excessive dehydration of the plant crowns and possible death. This is the survive part. Fescue is slower to go dormant than bluegrass, but this monthly watering is probably more important with fescue than bluegrass.

But ultimately, even if a lawn dies, we can get a new lawn up and going in just a few months. Trees are another story though. Trees can take a lifetime to get to the size we want them and we want to take the necessary measures to make sure that they don't become too moisture stressed. There is far too much mis-information out there about trees and the biggest one is about their root system.

Trees are not that deeply rooted. The vast majority of the crucial roots of the tree are in the top 12 to 18 inches of soil but the roots go out far further than the ends of the outermost branches. Sprinkler systems are designed for lawns, not trees. Most lawn irrigation systems only water the top six inches and the way most timers are set up, only the top two inches, which is not the best way to water a lawn either.

Young trees, less than three years in the ground, need to be watered about once a week (but don't drown them.) Trees older than that, especially spruces or pines, need a deep soaking once a month if it doesn't rain. Use an open garden hose running a stream about the size of your little finger for several hours, even all day. Junipers are more drought hardy but I would still water them once a month too. Larger deciduous trees don't need once a month watering, but a couple of times during the summer would certainly help reduce stress in the absence of adequate rainfall!