

What Is “Normal” Weather?

AGRI-VIEWS

by Chuck Otte, Geary County Extension Agent

The most frequently asked question of me for the past couple of weeks has been, “Is spring ever going to get here?” Which then leads into a long discussion of what is normal weather. I have an ongoing debate (argument), with an acquaintance over “average” weather versus “normal” weather. He claims that Kansas has no normal weather because no two years seem to be alike. My response is always that we use the terms normal and average interchangeably.

Before we go any further we need to remember one very important fact. Kansas is in the middle of a large continent. Our climate is defined as a continental climate. Which means that our day to day weather is not moderated by any large body of water. We are subject to many weather extremes and annual temperature variation. Being next to an ocean, or even within a few hundred miles, can bring a great deal of moderation to the day to day weather. We don't have that large body of water in Kansas, so we are subject to large storm systems moving in from points north, south and west of us.

This is also one of the contributing reasons in the difficulty of forecasting severe weather, be it thunderstorms or snowstorms. Weather systems are large and very complex. Meteorologists are still busy studying and discovering the factors that impact how weather systems develop, function, move and dissipate. We've seen it several times this winter where a forecasted heavy snowfall event goes someplace else. That's due to the inability to know exactly where the center of the storm is going to travel. A move of just 20 or 30 miles can move a heavy precipitation band that far or further. While it seems like weatherman lie, that isn't the case at all. We simply still don't know exactly where storms are going to go until a few hours before they happen.

Unfortunately, we, as weather forecast consumers, demand to know exactly what's going to happen. So forecasts are fairly nebulous and they cover a large area. They do this to try to make as many people aware of potential weather extremes as possible in the hopes that we will be prepared for whatever does happen. So you need to do your part and BE prepared!

Normal weather in our area is the averages of the extremes. We sometimes have fairly close to average weather. Average daily highs for late March or early April are in the low 60's and overnight lows in the mid 30's. We tend to remember what happened last year though, and assume that that is what average is. Remember, March 2012 was almost 14 degrees above normal, the warmest March on record. March this year will have below normal temperatures, which is okay with me. The plants are holding on to their dormancy and that's a good thing!

If we go back to the average daily high for today, which, since 1949, is 60 degrees, and apply some simple statistics to it, we find that we have a standard deviation, a measurement of the variability, of 12.8. Generally in statistics, we assume that 68% of the measurements will fall within one standard deviation. Or another way to look at that is that while the average high for March 30th is 60 degrees, 68% of the time the actual high was somewhere between 47 and 73 degrees. So, 2 years out of every 3, we would expect the high on March 30th to be between 47 and 73.

So, yes, we have a heck of a lot of variability in our daily weather. We always have and we always will! But that's “normal”. As for this weekend's weather, it looks like it'll be, “about average!”