

Does a Warm February Mean a Warm Spring and Summer?

AGRI-VIEWS

by Chuck Otte, Geary County Extension Agent

I am not a meteorologist nor a climatologist. I am a weather historian and a statistician. Which may be just as bad from some perspectives! I am frequently asked what the weather is going to be like for the coming month, several months ahead, summer, winter, whatever. At which point I always have to remind people that I am neither a meteorologist nor a climatologist! Recently, after having one of the warmest Februarys in some time, everyone has been asking if that means we'll have an early spring, a hot or dry spring and summer, etc. etc. So I decided to have a little fun and look back at those past warm February years and what the following months were like.

February 2016 tied for the 7th warmest February on record and keep in mind that our local temperature records only go back to the 1940s. I took those seven other years and looked at the monthly temperatures for the six months following (March through April) and then looked at rainfall deviation through that six month period as well as when the average last spring frost was in those years with a very warm February. What I'll tell you up front is that there may be some weak trends, very weak, but no definitive indication of what the next six months will be like based on a much warmer than average February.

For the record, the seven years when we had monthly mean temperature as warm or warmer than this year were, in order from the warmest: 1954, 1976, 1953, 1999, 1992, 2000, 1991. The month of March following those Februarys was generally average to above average temperatures; four years above average, two years average and one year below average. A little over half way through March it looks like this will be holding true this year as well. If you go on to April, five of the years had average temperatures and two years were above average. Often the further away from the unusually warm or cold month you get, patterns start to change and that would seem to be the case here.

The further away from the anomalous month we get, the less of a pattern we detect. The months of May through August, following that very warm February, showed no specific patterns that correlated with that unusually warm weather. For those six months of those seven years, 42 months total, we had 19 months that were above average, 13 months that were average and 10 months that were below average. Statistically, this isn't significant so we can just say, there's even probabilities of the temperatures being average, above or below!

When we look at the rainfall for those six months we see a very similar non-significant trend. Comparing the six month rainfall totals to six month long term average rainfall, it's fairly evenly split. Four of the seven years had below normal rainfall, two years were above and one year was average. Is there a trend towards being drier following a warm February? Possibly but a very weak one.

So finally, did a very warm February lead to an early spring based on date of last killing frost in the spring? Our long term average last frost date is April 15th and guess what we find? Three years the last frost was later than average (clear into May), three years it was earlier than normal and one year it was normal. Again, no trend.

Bottom line, a warm February is often followed by a warm March. But that's all the further that we can project, or predict, what the weather is going to do based on one warm month!