August Provides Fall Preview

Sept. 1, 2016

Autumn didn’t fully arrive during August, but it sure gave Oklahomans a nice preview for a week during the middle of the month. It was enough of a sneak peek to keep the month’s statewide average temperature at about a half-degree below normal. Unfortunately, the autumnal preview was flanked by some downright miserable summer weather. Those summer bookends came with plenty of triple-digit temperatures and even more triple-digit heat indexes. Grandfield led the state with 106 degrees recorded on the third. Meanwhile, it was jacket weather at Bristow with a low of 48 degrees on the 22nd. Oilton recorded a low of 49 degrees the previous day for the first 40s registered in the state since June 17. Broken Bow had the misfortune to claim not only the top heat index of the month at 116 degrees on the 11th, but they also came in second with 114 degrees a day later. The Mesonet reported 110 instances of heat index values of at least 110 degrees. The Panhandle was particularly fortunate to spend a significant amount of time during August behind stalled cold fronts. While those fronts often failed to progress too far southeast, they provided the Panhandle with its 32nd coolest August to date at 1.3 degrees below normal. The end of August also brought the climatological summer – June 1 through August 31 – to a close and this year’s ended as the 31st warmest since records began in 1895 at 1.4 degrees above normal, signifying the very warm June and July this year. For the January-August period, Oklahoma was again on the warm side at 1.7 degrees above normal, the 11th warmest on record.

As is often the case, the rainfall pattern was not quite as simple. The stalled fronts across the northwest provided frequent triggering mechanisms for showers and storms. The Panhandle and west central Oklahoma saw their 26th and 19th wettest Augusts on record, respectively. The far southeast was caught up in the tropical moisture that produced the historic flooding in Louisiana and Texas. The Mesonet gauges in McCurtain County recorded from 8-12 inches. That region’s average of 5.99 inches was more than 3 inches above normal and ranked as their 12th wettest August. Outside of those areas, however, Mother Nature was a bit stingier. From 1-2 inches was the norm, while several stations reported less than an inch. Overall, the statewide average came out just a bit above normal at 3.08 inches. Ringling had the Mesonet’s lowest total during August at 0.26 inches. Mt. Herman led all sites with 12.88 inches. The summer was also near normal but again the disparity between regions was quite stark. The northeast had the driest time at 3.4 inches below normal, their 28th driest summer on record. West central Oklahoma fared the best at more than 2 inches above normal to rank as their 17th wettest. The January-August statewide average came in at 23.89 inches, about an inch below normal.

While the rains across southeastern and northwestern Oklahoma helped prevent and eradicate drought, the dearth of moisture in other areas accelerated drought formation and intensification. The U.S. Drought Monitor map at the beginning of August showed eight percent of the state in at least moderate drought, with an additional 30 percent in abnormally dry conditions – a precursor to drought formation. By month’s end, those numbers had risen to 14 percent in at least moderate drought to 34 percent in abnormally dry conditions. The moderate to severe drought in the far southeast had shifted west, also intensifying across central and northeast Oklahoma. Heavy rains during the month’s final two days could signal drought relief on September’s first Drought Monitor report.

The Climate Prediction Center’s (CPC) temperature and precipitation outlooks for September give equal chances for above-, below- and near-normal values. That does not mean to imply that normal values are expected, rather that all three classifications have equal odds of occurring. A wet looking first two weeks of September prompted CPC’s Drought Outlook to show all the current drought areas in Oklahoma improving by the end of the month.

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