

Monthly Climatology Series
By Howard L. Johnson
Associate State Climatologist for Service
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Monthly Climate of Oklahoma-November
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NORMAN - Oklahoma's weather descends rather rapidly during November from the pleasantry of autumn into the chill of early winter. The state's normal temperature (averaged statewide) during the month, 49.0 degrees Fahrenheit, is the 4th lowest of any of the year's 12 months. Based on monthly averages across the state, November is 13 degrees cooler than October, easily Oklahoma's largest temperature difference between consecutive months. The increasingly frequent intrusions of cooler (and sometimes frigid) air, frequently accompanied by some dreary, dismal weather, are usually separated by interludes of gorgeous autumn days. The pleasant interludes provide farmers with an opportunity to complete the harvest of peanuts, cotton, and sorghum, or to finish drilling the new wheat crop. The statewide-averaged November normal precipitation is 2.78 inches, making November the 6th wettest of the months in Oklahoma. Snow, sleet, and ice are frequent late-November visitors to the state, too often creating travel hazards during the long Thanksgiving weekend.

Statewide-averaged monthly temperature extremes for the Novembers since 1892 have varied between 56.2 degrees in 1989 and 42.6 degrees in 1929. The range of normal daily average temperatures across the state, as published by the National Climatic Data Center, is from 53.4 degrees at Waurika to 42.8 degrees at Turpin. Normal daily maximum temperatures fall between Waurika's 65.3 degrees and Newkirk's 56.6 degrees. Normal daily minimum temperatures range from 42.9 degrees at Okemah to 28.4 degrees at three panhandle reporting stations (Turpin, Boise City, and Beaver). Hot weather is rare, but not absent, during the month. Mutual set a state record for November's highest temperature when the thermometer registered 95 degrees on November 1, 1914. That record was tied at Coalgate 23 years later on November 1, 1937. November's coldest day, according to the Oklahoma record book, occurred on November 28, 1976 when a temperature of 15 degrees below zero (-15) was reported at Kenton.

Sub-freezing daily minimum temperatures are reported at Kenton on an average of 21.7 days during November, as compared to only 4.7 days at Eufaula. Even locations in extreme southern Oklahoma are likely to experience their first freezing temperatures of autumn by late November. Kenton holds the distinction of recording Oklahoma's earliest sub-zero temperature on November 2, 1951 when the thermometer registered a crisp 9 degrees below zero (-9). Oklahoma's greatest known range of temperatures from one day's high to the next day's low was recorded on November 11, 1911 when a "blue norther" lowered temperatures by as much as 69 degrees with most of the heat being lost

in 2 or 3 hours. Oklahoma City's extreme temperatures on the 11th (83 degrees shortly before noon and 17 degrees at midnight, about 12 hours later) are station records for that date. The low temperature on the morning of the 12th was only 14 degrees (also a record for that date).

November precipitation is highly variable from year-to-year. The state's driest recorded November, a statewide averaged precipitation of 0.12 inches in 1910, followed the record wet one (5.72 inches in 1909) by exactly one year. During much of the state's history, November was thought of as a much drier month than it is today. During the period from 1931 through 1960, the statewide-averaged precipitation during November across Oklahoma was only 1.87 inches, nearly a full inch less than the currently established monthly normal (compiled from 1971 through 2000). Annual precipitation across Oklahoma compiled from the earlier was a full 3.25 inches less than the value currently in use. Increased precipitation during November has contributed more to the recent increases in annual precipitation than any other month. At individual locations within Oklahoma, November normal precipitation ranges 5.64 inches at the Carnasaw Fire Tower in McCurtain County to 0.61 inch at the panhandle's Goodwell and Regnier. Stilwell averages 9.6 days with measurable precipitation (at least 0.01 inch), whereas Leedey averages a mere 2.4 such days. Ponca City holds the record for most precipitation in one day at a recognized reporting site during November: 11.11 inches on November 20, 1979. Idabel recorded 17.01 inches of precipitation during November 2000 to establish the record for total precipitation during the month at a regular reporting station.

Severe and dangerous weather takes on a myriad of forms during November. There were 75 November tornadoes reported in the state from 1950 through 2001. Twelve of those were recorded on November 17, 1958 to establish the state record for most November tornadoes, both during a month and on a day. A tornado that struck Camel Creek School and the town of Bethany on November 19, 1930 killed 23 people. On November 4, 1922, a tornado between Shamrock and Drumright resulted in 11 deaths. The most recent November tornado fatalities occurred on November 19, 1973 when five people were killed in Blanchard. There were no tornadoes reported within the state during 31 of those 52 Novembers. Hailstorms on November 13, 1985 caused extensive damage in central and northeastern Oklahoma. Baseball-sized hailstones driven by 60 mile-per-hour winds battered parts of Tulsa County, resulting in damages estimated to exceed \$37 million, including \$24 million worth of damage to automobiles.

Locally heavy rains in the warm, moist air ahead of developing winter storms can lead to floods. The 1979 Ponca City storm that established the one-day precipitation record for November (11.11 inches) fell during two separate intervals over a 12-hour period. The spillways of Lake Ponca were damaged and dozens of homes and businesses were flooded. On November 1 and 2, 1998, the Chikaskia River at Blackwell crested at a record 34.40 feet. Excessive rain, possibly as much as 13 inches, fell during the same period near Burlington, leading to severe flooding along the Salt Fork of the Arkansas.

Snow, sleet, and freezing rain are each common during November, especially during the last half of the month. Boise City's 30 inches of snow in 1948 is the state record for

November snowfall. Twenty-eight inches of that total accumulated from the 3rd to the 6th, but the snow all melted within a few days. Gate just missed tying that record in 1992 when 21 inches of snow reported on the 25th brought the storm total since the 22nd to 29 inches. Measured snow depth after the storm ended on the 25th was 22 inches. History recounts that on November 26 and 27, 1868, elements of the 7th U.S. Cavalry, commanded by George A. Custer, marched overnight under cover of a snowstorm from Fort Supply to the Washita River in extreme western Oklahoma to launch a sunrise attack on a village of Cheyenne Indians. Black Kettle, the Cheyenne chief who considered his band to be at peace with the Army, was killed in the assault for which his village was unprepared. A sleet storm on November 13, 1916 left all but the extreme northwest covered with ice. Freezing rain and sleet from 27th to the 29th in 1919 covered southwestern, central, and northeastern Oklahoma with ice that, in some locales, exceeded one inch. A similar storm on Thanksgiving Day in 1993 prevented many travelers in southern and eastern Oklahoma from reaching their holiday destinations.

Miscellaneous impacts of November weather include an icy fog on November 28, 1986 that led to a 12-car pileup on a highway bridge near Claremore. On November 26, 1965, strong winds associated with a cold front lifted dirt from plowed fields, reducing visibility to as little as 30 feet along some highways, and supported hundreds of grass and timber fires across the state. During a very dry November 1949, instruments in Oklahoma City and Tulsa recorded 92 and 87 percent of possible sunshine, respectively. Sixty-two and 56 percent, respectively, are the associated average monthly values. Oklahoma's admission to the Union as the 46th state was celebrated at Guthrie on November 16, 1907 with a high temperature of 58 degrees after an overnight low of 29. No precipitation was reported in Oklahoma's first capital on that notable date.

Media Contact:

Cerry Leffler
Oklahoma Climatological Survey
100 E. Boyd, Suite 1210
Norman, OK 73019-1012
405-325-2541
405-325-2550 (fax)
cerry@ou.edu

For Additional Information:

Howard Johnson
Associate State Climatologist for Service
100 E. Boyd, Suite 1210
Norman, OK 73019-1012
405-325-2541
405-325-2550 (fax)
hjohnson@ou.edu