

OKLAHOMA WEATHER HISTORY
Monthly Climatology Series
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Monthly Climate of Oklahoma – April
Part 4 of a 12 part Series

NORMAN - April is the first full month of spring- the season of newly green trees and grass, redbud trees in bloom, and wildflowers aplenty. Baseball, romance, and pollen permeate the air, creating the dizzying mixture of joy and misery that marks the season. Most of April features exceedingly pleasant weather, much like that on April 22, 1889. According to the weather report submitted by the observer at Fort Reno, the day of the first great land run featured a high temperature of 80 degrees Fahrenheit, sandwiched between overnight lows of 46 and 54 degrees. Winds were northeasterly and light. Clouds were few. Modern-day Oklahomans like to think of that day as typical. Oklahoma's turbulent spring weather, alas, adds more to the story.

Late afternoon on Sunday, April 14, 1935, a wall of dirt moving from the north and northeast plunged the tiny Oklahoma panhandle town of Kenton and many other northwestern Oklahoma communities into total darkness. Dramatic photographs of that wall of dust, which originated in Colorado and Kansas, have come to symbolize depression-era Oklahoma and the "Dust Bowl" that was the High Plains during the mid-1930s. The April 14th storm followed closely on the heels of a widespread dust storm that, on the 11th and 12th, covered all but the southeastern corner of Oklahoma, reducing visibility to one-and-one-half blocks in the northeastern Oklahoma town of Cleveland. Later that week, a hailstorm at Braman produced hail stones 13 to 14 inches in diameter.

On the evening of April 9, 1947, a series of violent tornadoes struck along a curved path that extended from White Deer, Texas to St. Leo, Kansas. An F5 tornado (nature's strongest) struck Woodward, Oklahoma at 8:43 P.M., Central Standard Time, destroying more than 4,000 structures and killing 107 people. The final death toll for the day (counting fatalities in all three states) was 181.

The tragedy of the Woodward tornado was a grim reminder of the series of related events of April 12 and 13, 1945. A spate of tornadoes on the 12th killed 102 Oklahomans, including 69 at Antlers and 13 at Muskogee. The latter tornado did extensive damage to the state school for the blind. A tornado that swept through southeastern Oklahoma City killed eight more people and injured at least 200. A dam failure at Wewoka, occasioned by nearly 15 inches of rain that fell near Seminole, led to a flood on the 13th that killed

10. Ironically, the series of tragic events were virtually blown off the front pages of state newspapers by news of the death of President Franklin Roosevelt on the 12th.

During an otherwise dry month within a devastating drought, more than 14 inches of rain fell on Cheyenne, Oklahoma, in only six hours on April 3, 1934. Subsequent flooding in the upper Washita river basin killed 17 people. Hammon, a few miles downstream from Cheyenne, was the hardest hit community, but flooding extended northward into the drainage basin of the North Canadian River near Woodward.

April is the state's 5th wettest and 7th warmest month, establishing it clearly as part of the spring transition season. The statewide-averaged normal precipitation, based on the 30-year record compiled from 1971 through 2000, is 3.32 inches. The average monthly temperature, compiled from observations over the same period, is 59.8 degrees.

Precipitation generally increases from southeast to northwest. Monthly normal precipitation for individual stations ranges from 1.40 inches at Oklahoma's driest observing station, Goodwell (in the central panhandle), to 5.13 inches at Daisy, on the western edge of southeastern Oklahoma's Ouachita Mountains. A statewide-averaged precipitation of 8.50 inches rates 1942 as the wettest April in the state's annals. The driest April, statewide, was in 1989 when the state's reporting stations received an average of just 0.58 inch for the month. The greatest April precipitation at any reporting station was 17.78 inches recorded at Okemah in 1945. Snowfall is rare in April, except in the panhandle. Boise City averages 2.5 inches of snow during April. Goodwell reported 17 inches of snow during April 1988, and Fargo received 14 inches during that month in 1973.

Normal monthly temperatures decrease from south to north. Waurika is the state's warmest location during April with a normal temperature of 63.9 degrees. Boise City ranks as the coolest site with a monthly average temperature of 54 degrees. Normal daily maximum temperatures range from 77 degrees at Waurika to 67.8 degrees at Newkirk. Normal daily minimum temperatures range from Okemah's 52.3 degrees to Boise City's 37.3. Temperatures drop below the freezing mark an average of nearly 8 times during April at Kenton, but freezes are uncommon across most of the main body of the state. Except in the panhandle, any sub-freezing temperatures after mid-April would constitute a late freeze and would be harmful to plants, especially fruit or pecan trees. Southwestern Oklahoma experiences temperatures in the 90s on an average of three days each April. Hot and cold do manage to creep in, however. On April 12, 1972, Mangum recorded a high temperature of 106 degrees, the highest of the 15 temperature reports of 102 degrees or more across the state that day. Conversely, Hooker's daily minimum temperature on April 4, 1979 was 7 degrees, thereby establishing the other extreme temperature for the month.

Spring brings with it Oklahoma's noted severe weather season. April is Oklahoma's windiest month and ranks second among the 12 months in the number of tornadoes observed across the state. The state has averaged 10.6 tornadoes each April since 1950, a monthly average exceeded only by May. Eight years of wind observations from the

statewide Oklahoma Mesonet have revealed an average April wind speed, statewide, of 10.6 miles per hour, which barely edges March for windiest month honors. South winds prevail in most areas, although passing cold fronts are still capable of turning winds to northerly for a day or so at a time.

Comprehensive records of tornado occurrence are available from 1950 to the present. A total of 564 tornadoes are listed as having struck within Oklahoma during April from 1950 through 2002. Forty of those tornadoes were reported in 1957, easily the most of any April during the period. Other years with 20 or more April tornadoes were 1991 (24), 1984 (23), 1995 (23), 1965 (21), and 1956 (20). Deadly April tornadoes not listed already include April 18, 1947 near Fort Towson (10 killed) and April 27, 1942 at Pryor (52 killed, 181 injured). The April 10, 1979 tornado that devastated Wichita Falls, Texas, spared Oklahoma, but three people were killed in Lawton by a separate tornado on the same day. On a positive note regarding tornadoes, April 26, 1991 marked the National Weather Service's first operational use of Doppler radar for the issuance of severe thunderstorm and tornado warnings. The modern radar has, many times since, proven its worth as a warning tool during periods of threatening weather.

Floods, especially flash floods, were all too common during the state's earlier years. At least 8 inches of rain near Clinton in six hours, beginning on April 4, 1921, led to flash flooding that washed out roads, bridges, and railroad tracks in addition to drowning several hundred cattle. Flow on the Arkansas River below its confluence with the Neosho (Grand) and Verdigris rivers from April 6th through the 19th in 1927 was the greatest since 1833 (as measured at Fort Smith, Arkansas). In the incredibly wet April of 1942, over 100 city blocks in Kingfisher were flooded on the 19th, and flooding was reported on both arms of the Canadian River. Even at that, a dust storm reduced visibility at Altus to 400 feet on the 4th and to one-to-two miles at Camargo, Clinton, Crescent, and Geary on the 30th. Improved farming techniques, land management practices based on hard-learned lessons, and the construction of lakes and ponds along both major rivers and smaller streams appear to have greatly alleviated problems arising from both the flooding and blowing dirt.

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