Arkansas’s Climate

THE COCORAHS ‘STATE CLIMATES’ SERIES

Arkansas Razorback Report

By Michael J. Borengasser, Arkansas State Climatologist

While the climate of Arkansas is classified as humid subtropical, such a description fails to indicate the variety within the state. The more interior locations and higher elevations in the north produce a noticeably drier and cooler regime. Lower relative humidity in the northern part of the state makes the temperature extremes feel greater than they really are. For example, the average July maximum temperature in Harrison (Boone County) in northern Arkansas is 88.9°F, compared to 92.1°F in Crossett (Ashley County) in southern Arkansas. For January, mean minimum temperatures for the same stations are 25.4°F and 29.5°F. The record low temperature for Arkansas is -29°F in 1905 at Gravette (Benton County) in the northwest; the record high temperature is 120°F at Ozark (Franklin County) in the Arkansas Valley.

Unfortunately, the Ozark and Ouachita mountains do not provide a barrier to either outbreaks of polar air in the winter or tornadoes in the spring. Arkansas is well within "Tornado Alley." The state averages 25 tornadoes per year. 51% occur from March through May; there is also another peak from November through January (26.5%). In 2009, 45 tornadoes were tracked across the state.

Annual average precipitation varies from 40 to 60 inches, with higher amounts in the south or where there is significant orographic effect in the Ouachita Mountains. In 2009, a new state record was established at Leola (Grant County) of 100.05 inches, surpassing the 98.55 inches for Newhope (Pike County) in 1957. Statewide, 1963 was probably the driest year on record. Large areas of northern Arkansas recorded precipitation amounts of only 20-30 inches. More recently, 2005 was exceptionally dry, with some stations recording record lows. The Little Rock airport recorded only 28.26 inches of precipitation (55% of normal). Precipitation during the fall, winter and spring is produced by a series of low pressure and frontal passages. Summer precipitation is dominated by convective showers. Heavy rainfall from stalled frontal passages or intense thunderstorms occasionally causes widespread flooding. As hurricanes move inland, flooding, severe weather and tornadoes are often a result.

Snowfall averages approximately 5 inches per year statewide. The greatest concentration appears in the north and west. The greatest one-day snow accumulation was 18 inches at Bee Branch (Van Buren County) in the north central region in 1921.

For more information on Arkansas's Climate, please visit the Arkansas Climate Office website at:
http://www.climate.ar.gov/