

Composite of Brown County

Drought and periods of extreme heat create risks to life and property in Brown County. Periods of extreme heat pushes the human body to its limits. Under normal conditions, the body's internal thermostat produces perspiration that evaporates and cools the body. However, in extreme heat and high humidity, evaporation is slowed and the body must work extra hard to maintain a normal temperature.

A prolonged drought can have a serious economic impact on a community. Increased demand for water and electricity may result in shortages of resources. Moreover, food shortages may occur if agricultural production is damaged or destroyed by a loss of crops or livestock.

Types of Drought

Meteorological drought refers to regional climatology and is defined as a departure from normal precipitation over an extended period of time. *Agricultural drought* occurs when there isn't enough soil moisture to meet the needs of a particular crop at a particular time. Agricultural drought happens after meteorological drought, but before hydrological drought. A *Hydrological drought* refers to deficiencies in surface and subsurface water supplies. The time lag between decreased precipitation and its impact on streams, rivers and lakes is an indicator of a prolonged drought.

History

Data information compiled from the National Weather Service for the period between January 1950 and April 2004 indicates two instances of severe drought. Additional records obtained by the Brown County Agriculture Center reflect USDA – Flash Situation Reports detailing crop losses of soybeans, corn, hay, wheat, oats and tobacco related to unusually low precipitation in July 1999 and May 2001. Additionally, the 1999 report indicated there had been an unusual liquidation of livestock to market for the time of year due to a shortage of feed and water.

Vulnerability and Risk

Periods of extreme heat could impact special needs populations such as the elderly. Droughts happen regularly and can impact much of Brown County; however they take some time to develop. The economic impact to agricultural business could be severely affected by a prolonged dry period.