

# Central Indiana

## September 2019

### Climate Summary

*Warmest on record at Indianapolis*

*3<sup>rd</sup> Driest on record at Indianapolis*

## Temperatures

Cooler than normal temperatures were hard to find throughout the month of September that goes down as the warmest September in recorded history at Indianapolis. This was largely due to a persistent upper level ridge over the Ohio Valley for much of the month and progressively drier ground conditions with many areas receiving less than 2" of rain through September. The bulk of the coolest temperatures coming through the first week of the month with multiple days enjoying highs in the mid and upper 70s and overnight lows in the upper 50s and lower 60s.

Beginning on the 9<sup>th</sup> a broad upper level ridge expanded across the eastern part of the country and for the most part, would remain over the area through the end of the month. Highs in the lower 90s returned for several consecutive days from the 10<sup>th</sup> through the 13<sup>th</sup> with lows in the upper 60s and lower 70s. Temperatures would cool down slightly over the following week but still remained well above normal in the 80s. A frontal passage early on the 23<sup>rd</sup> knocked temperatures back closer to late September normals with highs primarily in the 70s through the 26<sup>th</sup>. The coolest morning lows of the entire month in the upper 40s and lower 50s occurred during this period. The return of the upper ridge for the last few days of the month brought well above normal temperatures back to central Indiana including highs into the lower 90s on the 27<sup>th</sup> and again on the 30<sup>th</sup>.

Average temperatures ended up running 5-7° above normal across central Indiana for September with Indianapolis experiencing their warmest September on record with an average temperature of 73.7° which was a full half degree warmer than the previous warmest September in 1925. The addition of 6 more 90°+ days during the month brought the 2019 total to 24 days with highs of 90° or warmer in Indianapolis.

Site	September 2019 Avg Temp	September 2019 Difference from Normal	Highest Temperature	Lowest Temperature
Indianapolis	73.7	<b>+6.7</b>	92 on 10 and 30	52 on 24
Lafayette	70.7	<b>+4.5</b>	92 on 12	49 on 24
Muncie	72.5	<b>+7.0</b>	93 on 12	50 on 26 and 27
Terre Haute	72.6	<b>+6.7</b>	92 on 10, 12 and 30	49 on 24
Bloomington	72.3	<b>+6.7</b>	93 on 30	49 on 24 and 27
Shelbyville	72.4	<b>+6.9</b>	93 on 30	49 on 26 and 27
Indy – Eagle Crk.	72.8	<b>+5.7</b>	91 on 10 and 12	51 on 27

At Indianapolis, there were 24 days with above normal average temperatures, 4 days with below normal average temperatures and 2 days with normal average temperatures.

September 2019 was the warmest in the Indianapolis area since 1871.

## Precipitation

September began with a brief wet note for much of central Indiana as a round of thunderstorms brought between a quarter of an inch to as much as an inch to the area. Most of the state remained fairly dry for the following two weeks with isolated showers occasionally bringing localized relief to the very dry conditions.

A large heavy rainfall event on the evening of Friday the 27th and early morning of the 28th brought significant rainfall amounts to parts of northwest and northern Indiana. These rainfall amounts of two to almost five inches, generally over six hours or less, produced some flash flooding over northern Indiana, but also provided some relief to the drought in that area..

Rainfall maps for the month show a big gradient from northwest to southern Indiana. Over northwestern parts of the state, six to ten inches of rain fell over the month, while along the Ohio River amounts were generally less than a quarter inch. Two to three inches of rain was common along an area from southwest of Lafayette to Fort Wayne, and this was the area that received near normal precipitation for the month. Northwest parts of Indiana wound up with over 5 inches above normal rain for the month, while southern parts of the state including parts of the Hoosier National Forest ended the month three to four inches below normal.

Over the course of the month, the severity and extent of the drought expanded with widespread abnormally dry conditions and pockets of moderate drought spreading. Across southern Indiana near the Ohio River, conditions kept getting drier with no rain and hot temperatures. Severe drought levels developed in a small area near the Ohio

River at the end of the month. By the end of September, several counties across southern Indiana had declared burn bans.

Site	September 2019 Precipitation	September 2019 Difference from Normal	Wettest Day	Longest Dry Stretch
Indianapolis	0.47	<b>-2.65</b>	0.27 on 23	10 days 12-21
Lafayette	2.30	<b>-0.36</b>	0.65 on 1	5 days 16-20
Muncie	1.16	<b>-1.80</b>	0.33 on 1	6 days 16-21
Terre Haute	1.13	<b>-2.29</b>	0.36 on 22	6 days 2-7 and 9-14
Bloomington	1.21	<b>-2.14</b>	0.87 on 1	7 days 9-15
Shelbyville	0.75	<b>-2.42</b>	0.52 on 1	12 days 10-21
Indy – Eagle Crk.	0.92	<b>-1.33</b>	0.42 on 23	6 days 2-7 and 16-21

September 2019 was the 3<sup>rd</sup> driest in the Indianapolis area since weather records began in 1871.

## Severe Weather

Strong thunderstorms with gusty winds occurred on a few days during the month, otherwise no severe weather occurred in central Indiana in September.

For information on severe weather in other areas during September, visit the Storm Prediction Center “Severe Weather Event Summaries” website at <http://www.spc.noaa.gov/climo/online/>.

## Miscellaneous

The maximum wind gust at Indianapolis International Airport was 37 mph out of the south on the afternoon of the 27<sup>th</sup>. Fog or haze was reported at Indianapolis on 8 days during the month with dense fog occurring on the 2<sup>nd</sup>. Thunder was reported only on September 1.

# October 2019 Outlook

The official outlook for October 2019 from the Climate Prediction Center indicates a much greater chance for above normal temperatures for central Indiana. At Indianapolis, the average temperature for the month is 55.0 degrees. The outlook also suggests equal chances for near, above or below normal precipitation. The average precipitation for October at Indianapolis is 3.12" and average snowfall is 0.4".

***Data prepared by the Indianapolis Forecast Office.***