

# Central Indiana

## July 2019

### Climate Summary

*Tied for 28<sup>th</sup> Warmest on record at Indianapolis*

*64<sup>th</sup> Wettest July on record at Indianapolis*

#### Temperatures

It was a hot start to July as temperatures rose into the lower and mid 90s on multiple days through the first week of the month. With a humid airmass over the Ohio Valley, lows frequently fell only into the low 70s. More days in the 90s came from the 10<sup>th</sup> through the 15<sup>th</sup>. After a brief cool down that lasted just a day or two as the remnants of Hurricane Barry passed through the region, the hottest, most humid weather of the month arrived over a five day stretch that lasted through the 21<sup>st</sup>. A deep tropical airmass was left in the wake of Barry's remnants, resulting in dewpoints that soared into the mid and upper 70s. A few locations were even able to reach an 80° dewpoint for a short time, a rare occurrence in central Indiana. While high temperatures themselves were primarily in the lower 90s, the addition of such high dewpoints produced heat indices peaking at levels not seen in several years, at 105° to 110°. Lows remained above 70° for 6 to 7 days straight and in some areas, never dropped any lower than the mid and upper 70s. Indianapolis fell only to 79° on the morning of the 19<sup>th</sup>, tying a record warmest minimum temperature for the date originally set in 2011.

A cold front swept through the area late on the 21<sup>st</sup> with a line of strong thunderstorms. The front also pushed the hot and humid air well south of the region, ushering in a stretch of multiple days with highs in the upper 70s and lower 80s and lows in the upper 50s and lower 60s along with much more tolerable humidity levels. Over the last several days of July, temperatures rose back up into the upper 80s but without the excessive humidity levels experienced earlier in the month.

Average temperatures were generally about 2 to 4° above normal at all of the primary climate stations across central Indiana. Indianapolis would finish with 13 days at or

above 90° for the month, the most in July since 2012 when a whopping 28 days were at or above 90°.

Site	July 2019 Avg Temp	July 2019 Difference from Normal	Highest Temperature	Lowest Temperature
Indianapolis	78.2	<b>+2.8</b>	93 on 18 and 20	58 on 23
Lafayette	76.3	<b>+1.7</b>	94 on 10	52 on 24
Muncie	79.2	<b>+4.8</b>	96 on 2	57 on 24
Terre Haute	77.6	<b>+2.6</b>	95 on 10	57 on 24 and 25
Bloomington	76.4	<b>+2.5</b>	91 on 20 and 21	54 on 25
Shelbyville	78.4	<b>+4.3</b>	95 on 2	56 on 24
Indy – Eagle Crk.	78.4	<b>+3.2</b>	94 on 10 and 18	58 on 25

At Indianapolis, there were 24 days with above normal average temperatures, 6 days with below normal average temperatures and 1 day with normal average temperatures.

July 2019 was tied for the 28<sup>th</sup> warmest in the Indianapolis area since 1871.

## Precipitation

A rain event with scattered slow moving showers and thunderstorms ahead of a slowly approaching cold front on July 10<sup>th</sup> dropped a quick two to over four inches of rain in both the Muncie area as well as just east of Frankfort, prompting a few flash flood warnings and resulting in some water rescues in Muncie. Much of the rest of western Indiana and eastern Indiana saw one to two inches of rain with these storms, while several areas including much of the Indianapolis metro saw little to nothing.

Much of the area saw mostly dry weather for several days after that. There was a widespread rainfall event the 16<sup>th</sup> lasting into 17<sup>th</sup>, with one to three inches across much of central and southern Indiana, but the north and northwest parts of the area missed out.

The arrival of a cold front on July 21<sup>st</sup> brought rainfall and a few severe storms to the area. Rainfall amounts from the 21<sup>st</sup> across northern, southwestern, and southeastern Indiana were one to two inches, while much of the central part of the state saw less than half an inch.

The approach of a cold front on July 29<sup>th</sup> brought an end to the dry period across central Indiana. A line of showers and thunderstorms formed well ahead of the front and moved through the area, followed by some more widely scattered showers and thunderstorms that lasted through the night and into the day on the 30<sup>th</sup>. Rainfall amounts of 0.5 to 1.5

inches were common across Indiana, but there were also swaths that received less than a quarter inch.

Site	July 2019 Precipitation	July 2019 Difference from Normal	Wettest Day	Longest Dry Stretch
Indianapolis	3.86	<b>-0.69</b>	1.10 on 17	5 days 24-28
Lafayette	3.07	<b>-0.90</b>	1.26 on 5	5 days 23-27
Muncie	7.54	<b>+3.16</b>	3.45 on 10	6 days 23-28
Terre Haute	3.95	<b>-0.84</b>	1.20 on 16	5 days 24-28
Bloomington	2.62	<b>-2.27</b>	1.03 on 16	6 days 23-28
Shelbyville	3.18	<b>-1.53</b>	1.22 on 17	6 days 23-28
Indy – Eagle Crk.	2.31	<b>-1.95</b>	1.13 on 17	5 days 11-15 and 23-27

July 2019 was the 64<sup>th</sup> wettest July in the Indianapolis area since weather records began in 1871.

## Severe Weather

After the busy May and June that saw several bouts of severe storms, the pattern quieted in July. Scattered storms were a common occurrence on multiple days throughout the month but generally remained below severe levels. The biggest event of the month occurred on the afternoon and evening of the 10<sup>th</sup> as slow moving storms produced scattered wind damage and gusts in excess of 60 mph along with flash flooding focused across northern portions of central Indiana. Several water rescues took place in Muncie as thunderstorms dumped 3 to 4 inches of rain across Delaware County in a short time.

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

## Miscellaneous

The maximum wind gust at the Indianapolis International Airport was 55 mph from the southwest on the afternoon of the 29<sup>th</sup> as thunderstorms moved through the Indianapolis metro area. Fog or haze was reported at Indianapolis on 14 days this month. Thunder was reported at Indianapolis on 9 days in July.

# August 2019 Outlook

The official outlook for August 2019 from the Climate Prediction Center indicates a greater chance of below normal temperatures and precipitation across central Indiana. At Indianapolis, the average temperature for the month is 74.2 degrees. The average precipitation for August at Indianapolis is 3.13”.

*Data prepared by the Indianapolis Forecast Office.*