

Central Indiana

April 2020

Climate Summary

Tied for 44th Coldest on Record at Indianapolis

15th Driest on Record at Indianapolis

Temperatures

After the relative warmth of the late winter and early spring through March, an overall cooler pattern took hold for stretches of April as consistent warmth remained a challenge all month.

April began cool with highs primarily in the 50s and lower 60s through four of the first five days of the month. Temperatures turned warmer as strongly southerly flow developed beginning on the 6th with highs topping out in the upper 70s and in some spots, the lower 80s on the 7th and 8th. These two days would be the warmest of the entire month. A strong cold front brought a line of severe storms through the region on the evening of the 8th, with a return to much cooler temperatures on the 9th and 10th that saw highs fall back into the lower and middle 50s with the first of what would become multiple days through the month with lows near or just below freezing.

Temperatures briefly rebounded on the 11th and 12th before the coldest weather of the month arrived with several days of highs in the middle 40s to middle 50s. With the growing season already far enough along by the middle of April, a hard freeze occurred for much of the area on the mornings of the 15th and 16th as lows fell into the 20s. Warmer weather would return beginning on the 19th with most days rising into the 60s and 70s for much of the rest of the month. April would end on a cool note as clouds and light rain in the wake of a cold frontal passage would keep daytime temperatures largely in the 40s over much of the area on the 30th.

Temperatures averaged up to 2 degrees below normal for the month across central Indiana during April. The 5 days during the month with highs at or above 70° at Indianapolis tied 2018 for the least amount of April days to reach 70° since 2000.

| Site | April 2020 Avg Temp | April 2020 Difference from Normal | Highest Temperature | Lowest Temperature |
|-------------------|------------------------|---|------------------------|-----------------------|
| Indianapolis | 50.8 | -2.2 | 79 on 7, 8 | 24 on 16 |
| Lafayette | 51.1 | -0.8 | 82 on 7 | 24 on 16 |
| Muncie | 51.1 | -0.3 | 80 on 7 | 27 on 15 |
| Terre Haute | 51.6* | -1.7 | 82 on 8 | 24 on 16 |
| Bloomington | 51.6 | -2.0 | 82 on 8 | 23 on 16 |
| Shelbyville | 52.3 | -0.5 | 81 on 7,8 | 26 on 16 |
| Indy – Eagle Crk. | 50.8 | -2.3 | 80 on 7,8 | 25 on 16 |

*-Temperature data for Terre Haute was missing on April 9

At Indianapolis, there were 11 days with above normal average temperatures, 16 days with below normal average temperatures and 3 days with normal average temperatures.

April 2020 was tied for the 44th coldest in the Indianapolis area since 1871.

Precipitation

The first two thirds of the month of April were drier than normal, with only small rainfall amounts and below normal temperatures across the area. This initially allowed any ongoing flooding at the beginning of the month to subside, and then as it continued brought streamflow levels to well below normal for this time of year. A more active and wetter pattern arrived for the last week to bring multiple rainfall events back to back and bring some minor flooding to a spot on the Wabash to end April. Northeastern portions of central Indiana saw one to two inch rainfall totals for the month, with central portions seeing two to three inches and southern and western counties receiving three to four inches. While the northern Wabash Valley was near normal in rainfall for the month, the rest of central Indiana was one to three inches below normal.

A line of severe thunderstorms moved through central Indiana on the evening of April 8th. The storms moved quickly at speeds of over 55 mph, and this helped to keep total rainfall amounts from getting too high. Most of the area received around a quarter of an inch to half an inch, with higher amounts approaching an inch. A weak system moving through on April 11th brought around a quarter inch of rain to much of the area. Another system on the 17th brought a quarter inch to half an inch with it. For the Indianapolis

area, the 0.67 inches of rain the first 22 days of April this year tied for the 6th driest since records began in 1871.

The wetter pattern to end the month began on April 23rd as a low pressure system tracking through the Ohio Valley brought around a tenth to a quarter inch of rain to the northeast counties, with a quarter to half an inch across central counties, and up to an inch and a half to the southern counties as well as a swath in the west over the Wabash Valley. On the 25th, a tenth to a half inch across central and eastern counties, with half an inch to an inch across western counties (with a few locally higher amounts) and an inch to two inches south along the Ohio River.

The slow movement of another low pressure system through the Great Lakes brought rainfall to the area near the end of the month. On the 28th, most of the area didn't see much measurable rain, but an area northwest of a line from Terre Haute to Lafayette saw from half an inch to over an inch. Then on the 29th, most of central Indiana saw a quarter inch to half an inch. With all the rain events over the last week of April bringing some rain into parts of the Wabash basin, minor flooding developed at Montezuma on the Wabash, with a few sites downstream still rising at the end of the month and likely to get near or just below flood stage to start May.

| Site | April 2020 Precipitation | April 2020 Difference from Normal | Wettest Day | Longest Dry Stretch |
|-------------------|--------------------------|-----------------------------------|-------------|----------------------------------|
| Indianapolis | 1.72 | -2.09 | 0.51 on 23 | 2 days 2-3, 6-7, 18-19 and 21-22 |
| Lafayette | 3.28 | -0.26 | 0.59 on 25 | 3 days 1-3 and 5-7 |
| Muncie | 0.76 | -2.91 | 0.32 on 29 | 2 days 2-3, 6-7, 18-19 and 21-22 |
| Terre Haute | 1.94* | -2.21 | 0.46 on 23 | 3 days 1-3 and 6-8 |
| Bloomington | 3.01 | -1.69 | 0.79 on 23 | 2 days 2-3, 6-7 and 18-19 |
| Shelbyville | 2.13 | -2.19 | 0.54 on 23 | 3 days 1-3 |
| Indy – Eagle Crk. | 0.86 | -3.04 | 0.20 on 8 | 3 days 5-7 |

*-Precipitation data for Terre Haute was missing on April 9

April 2020 was the 15th driest in the Indianapolis area since weather records began in 1871.

Severe Weather

A strong cold front brought severe thunderstorms to central Indiana on April 8th. The storms first produced large hail, then transitioned into damaging winds and a tornado. An EF-1 tornado struck downtown Mooresville, damaging several buildings. Damaging winds elsewhere brought down trees and power lines. Details can be found at <https://www.weather.gov/ind/Apr082020SvWx>

For information on severe weather in other areas during April, 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 72 mph out of the northwest on the 8th during a severe thunderstorm. Fog or haze was reported at Indianapolis on 15 days during the month. Thunder was reported on 3 days in April.

May 2020 Outlook

The official outlook for May 2020 from the Climate Prediction Center indicates a greater chance for below normal temperatures. Northern parts of central Indiana will see a greater chance for below normal precipitation, while the remainder of the area sees equal chances for above normal, normal, and below normal precipitation. At Indianapolis, the average temperature for the month is 62.7 degrees. The average precipitation for May at Indianapolis is 5.05”.

Data prepared by the Indianapolis Forecast Office.