

CLIMATE SUMMARY

Vol. 1, Issue 3

July / 2021

Precipitation

According to the National Centers for Environmental Information (NCEI), the statewide average July precipitation was 5.42 inches, 1.32 inches **above** the long-term mean (1991-2020). This was 2.26 inches greater than July 2020 and 1.33 inches more than June 2021. July 2021 ranks as the 15th wettest on record (1895-2021; Table 1).

Table 1: Ohio July Precipitation Ranking

Period	Value	Average	Anomaly	Rank	Wettest/Driest Since	Record Year
July 2021	5.42"	4.10"	+1.32"	15 th Wettest	Driest since: 2020 Wettest since: 2017	1.64" (1930) 8.77" (1992)

July 2021 was extremely wet, with a large majority of the state receiving anywhere from 5 to 7.5 inches, with some areas receiving up to 10 inches of rain on average, as well as pockets to the far west and southeast receiving around 3 to 5 inches (Fig. 1). Ohio experienced mostly average precipitation (1991-2020), with many areas within central and northern Ohio receiving much higher than average precipitation. (Fig. 2).

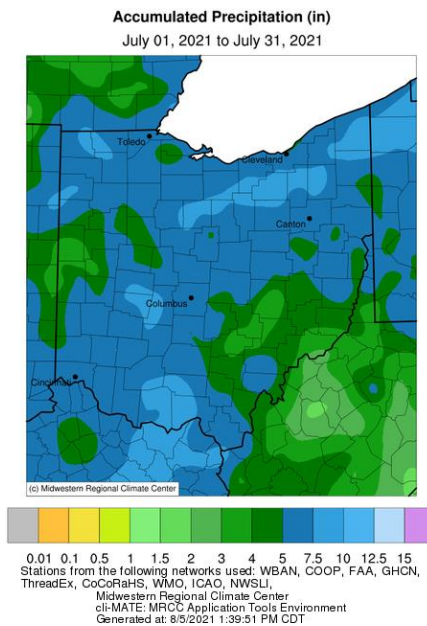


Figure 1: Accumulated July precipitation (inches). Courtesy of the Midwestern Regional Climate Center.

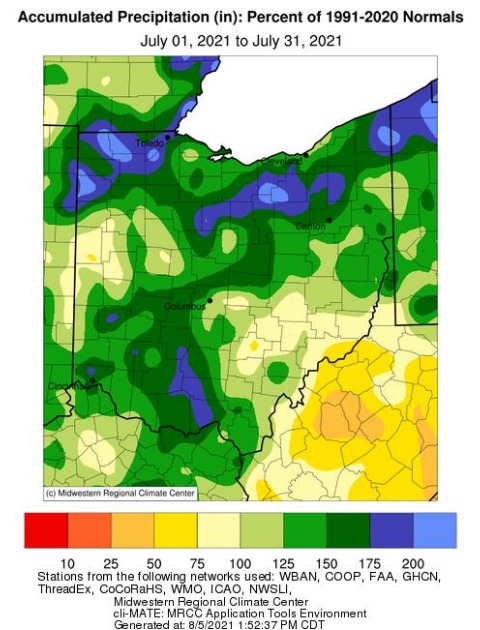


Figure 2: Percent of Normal Accumulated Precipitation in Inches for the Month of July. Courtesy of the Midwestern Regional Climate Center.

A partnership between OSU Extension, Byrd Polar and Climate Research Center, and the State Climate Office of Ohio

Madison County in central Ohio received the greatest precipitation accumulation in July, with 6.97 inches of precipitation, making this the 8th wettest July for that county in the 127-year period (Fig. 3). The driest county during July was Muskingum County in east central Ohio, with an accumulation of 3.46 inches of precipitation, making it the 44th driest July for the county. Historical statewide trends for the state show that 1895-2021, the lowest recorded precipitation during this period was 1.64 inches in 1930 as well as in 1944, with the greatest occurring in 1992 at 8.77 inches (Fig. 4).

Figure 3: Ohio County Precipitation Ranking (NCEI, NOAA)

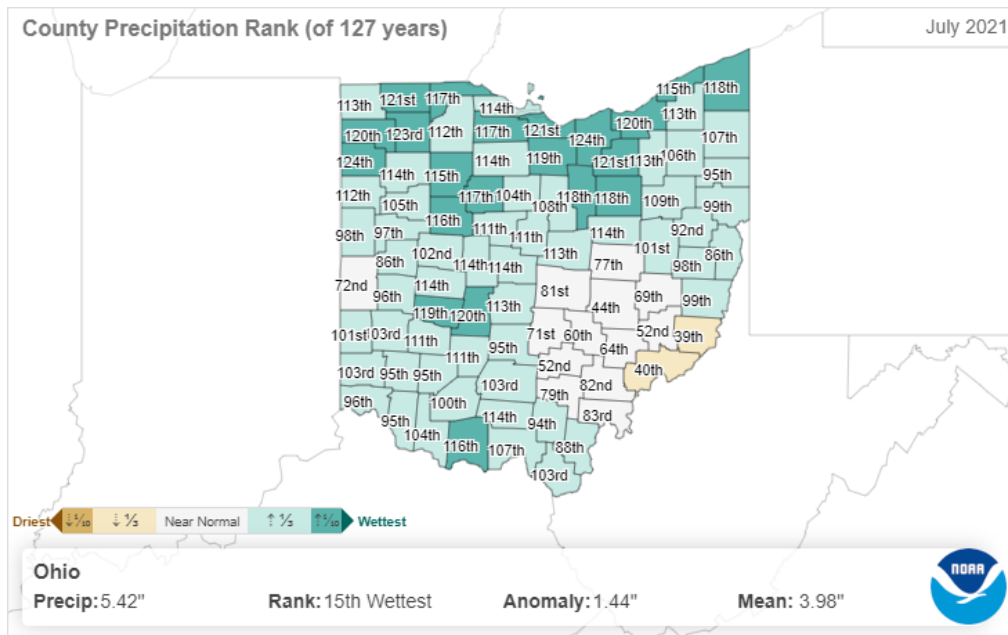
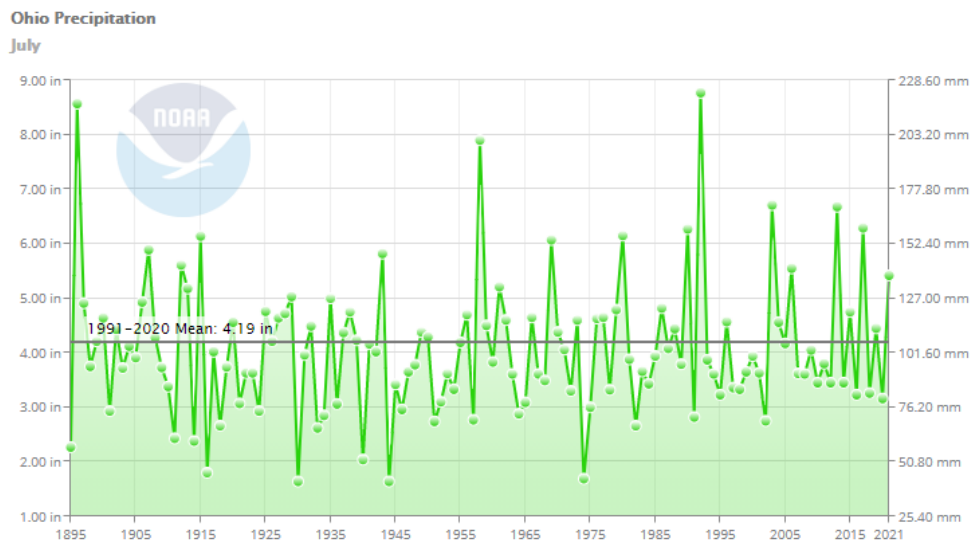


Figure 4: Ohio Historical Precipitation Time Series (NCEI, NOAA)



Temperature

The average state temperature for Ohio during the month of July was 73.1°F, which was 0.3°F **warmer** than the long-term mean (1991-2020). This was also 3.7°F cooler than July 2020 and is 1.4°F warmer than June 2021, helping to make July 2021 the 58th warmest July in the 127-year record (Table 2).

Table 2: Ohio July Temperature Ranking

Period	Value	Average	Anomaly	Rank	Coolest/Warmest Since	Record Year
July 2021	73.1°F	72.8°F	+0.3°F	58 th Warmest	Coolest since: 2017 Warmest since: 2020	68.5°F (2009) 78.0°F (1901)

Average temperatures for the month of July ranged 70-75°F (Fig. 5), which was close to normal compared to the long-term mean. This is a little deceiving, as Ohio experienced its 33rd coldest daytime highs but 27th warmest overnight lows. Only a few scattered areas around central and northern Ohio were cooler than normal (green shading; Fig. 6).

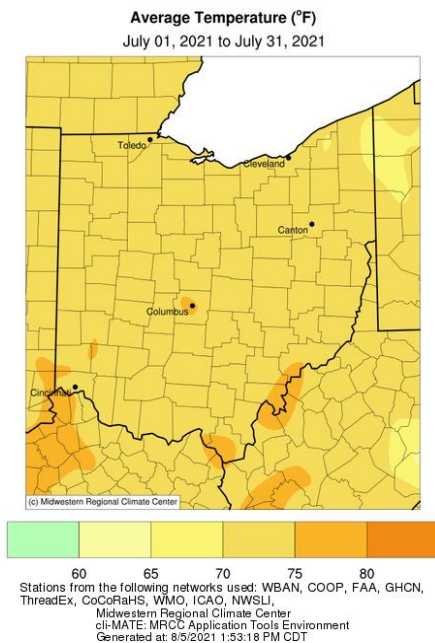


Figure 5: Average July Temperature in °F. Courtesy of the Midwestern Regional Climate Center.

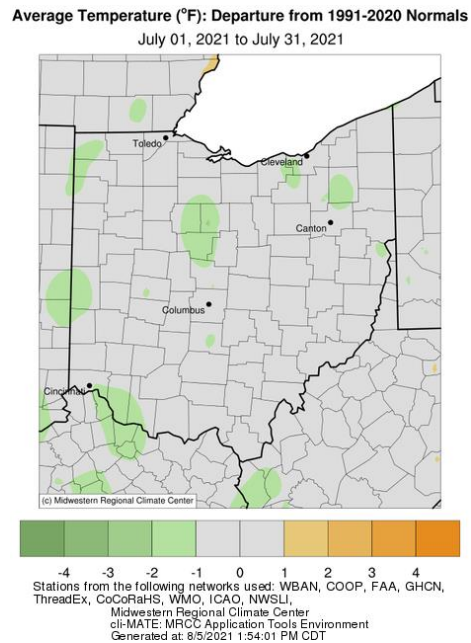


Figure 6: Departure from Normal Average July Temperature in °F. Courtesy of the Midwestern Regional Climate Center.

Hamilton County averaged the warmest during July, with an average temperature of 75.0°F, making it the 77th warmest July for the county. Ashtabula County on Lake Erie in northeastern Ohio was the coldest county, with monthly average temperature of 70.6°F, making it the 45th warmest July for the county (Fig. 7). Historically, the coldest July average temperature during the period was 68.5°F in 2009 and the warmest average temperature was 78.0°F in 1901 (Fig. 8).

Figure 7: Ohio County Temperature Ranking (NCEI, NOAA)

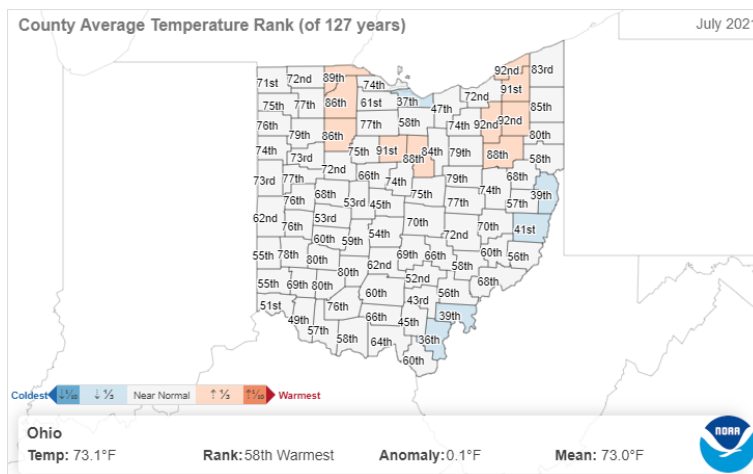
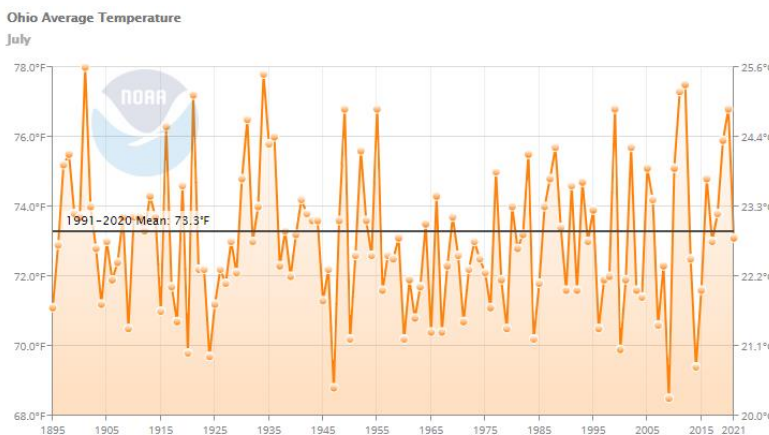


Figure 8: Ohio Historical Temperature Time Series (NCEI, NOAA)



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