

Decorah Weather - September 2025 Summary

by Richard Bernatz

Weather data available online at <http://faculty.luther.edu/~bernatzr/DecWx/>

1. TEMPERATURES

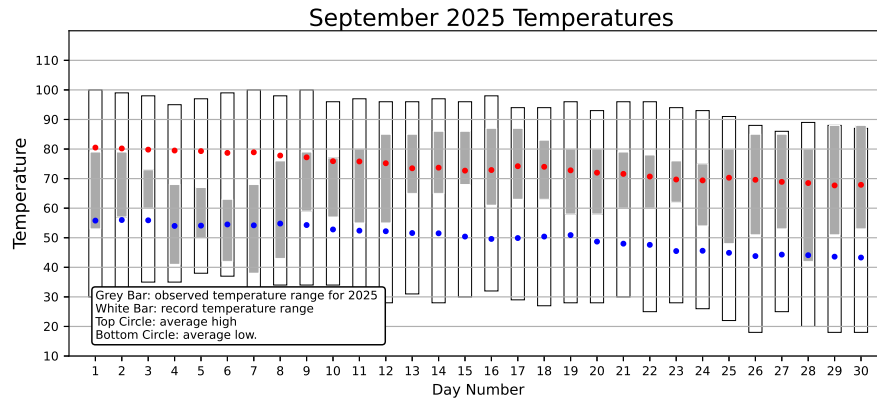


Figure 1: **Grey Bar:** Observed temperature range for 2024, **White Bar:** Record temperature range, **Average temperature range:** Red circle for average high, blue circle for average low.

Item	2025 Average	Historical Average	Deviation
High temperature (°F):	79.4	74.2	5.2
Low temperature (°F):	54.8	50.4	4.4
Daily temperature (°F):	67.1	62.3	4.8

Table 1: September 2025 Temperatures compared with September History.

- **SEPTEMBER 2025**
 - Record Temperatures: Maximum of 88°F on the 29th ties with the same date in 1953,
 - Average temperature : 67.1°F (4.8°F warmer than average)
 - Above average maximum temperature recorded on the last 21 days of the month.
 - Warmest temperature : 88°F on the 29th and 30th
 - Coldest temperature : 38°F on the 7th
 - Cooling degree days : 116, 43.0 greater than average
 - Heating degree days : 52.5, 100.4 less than average
- **ALL SEPTEMBERS SINCE 1894 (132 years - no missing years)**
 - Compared with September 2025, 9 Septembers were warmer, and 122 Septembers were cooler
 - Warmest average : 69.3°F in 1931 and 2024
 - Coldest average : 55.0°F in 1924
 - Warmest temperature : 100°F on the 1st of 1913, 7th of 1939, and the 9th of 1955
 - Coldest temperature : 18°F on the 26th of 1926, the 29th of 1949, and the 30th of 1899

2. PRECIPITATION

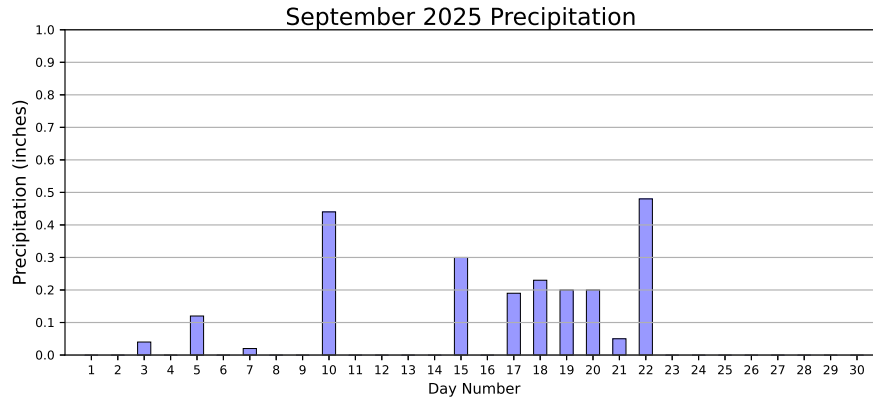


Figure 2: Precipitation for Decorah.

- SEPTEMBER 2025
 - Total precipitation for September 2025: 2.27 inches, 1.39 inches less than average
 - Greatest 24-hour total: 0.48 inches on September 22nd
 - Eleven days with measurable precipitation (average is 9 days).
- ALL SEPTEMBERS SINCE 1894 (132 years - no missing years)
 - Compared with September 2025, 85 Septembers were wetter, one was the same, and 45 Septembers were drier
 - Wettest September : 11.66 inches in 2016
 - Driest September: 0.30 inches in 1979

3. TWELVE-MONTH SUMMARY

Month	Year	Ave Temp (°F)	Deviation (°F)	Rank† (#/Total)	Precip (inches)	Deviation (inches)	Rank‡ (#/Total)
October	2024	57.3	+6.9	4/131	1.61	-0.71	89/131
November	2024	40.4	+4.1	15/132	3.70	+1.85	12/132
December	2024	26.7	+5.6	24/132	1.62	+0.41	36/132
January	2025	19.3	+2.9	44/132	0.06	-0.96	132/132
February	2025	19.7	-0.5	67/132	0.30	-0.65	114/131
March	2025	43.0	+10.0	3/133	3.08	+1.16	14/133
April	2025	49.3	+2.0	26/132	5.90	+2.76	12/132
May	2025	59.7	+0.7	55/130	2.46	-1.79	107/130
June	2025	72.9	+4.6	8/131	6.26	+1.47	34/131
July	2025	75.2	+2.6	26/131	5.21	+1.13	35/132
August	2025	71.4	+1.0	41/133	13.61	+9.50	2/133
September	2025	67.1	+4.8	10/132	2.27	-1.39	86/132

Table 2: A summary of the last twelve months. †- The smaller the number (#), the warmer the month. ‡- The smaller the number (#), the wetter the month. Boxed entries are within the historical top or bottom ten.

- Eleven of the last 12 months have been warmer than average.
- September 2025 and three other months of the last twelve rank among the top ten warmest for their respective month.
- September 2025 is one of five, of the last twelve months, with a below average precipitation total.
- Precipitation deviations (in inches) from average. last three months: +9.22, last six months: +11.67, last nine months: +11.21, last twelve months: +12.78 These significant positive deviation from their respective averages are due, mostly, to the 2nd wettest August on record.

4. | | |-----------------------------| | SEPTEMBER NARRATIVE SUMMARY | |-----------------------------|

September 2025 in Decorah, Iowa, continued the strong warming trend observed throughout the past year, while precipitation was below average for the month.

The average daily temperature for September was 67.1°F, a substantial 4.8°F warmer than the historical average of 62.3°F. This ranks the month as the 10th warmest September in the 132 years of available data. The warmth was particularly notable in the daily high temperatures, which averaged 79.4°F (a deviation of +5.2°F), with the maximum temperature being above average for the last 21 consecutive days of the month. The month's warmest days reached 88°F on the 29th and 30th, with the 88°F on the 29th tying a record set in 1953. The month's coolest morning was 38°F on the 7th. The warmer conditions resulted in more cooling degree days (116, which is 43.0 greater than average) and fewer heating degree days (52.5, which is 100.4 less than average), reflecting an extended summer-like period.

In contrast to the high temperatures, September 2025 was a relatively dry month. Total precipitation measured 2.27 inches, which is 1.39 inches less than the average of 3.66 inches. Despite the below-average total, there were 11 days with measurable precipitation, two more than the average of 9 days, suggesting more frequent but lighter rain events. The greatest 24-hour total was only 0.48 inches on September 22nd. Compared to historical data, 85 Septembers have been wetter, placing the month in the drier third of the record.

The weather for the last year has been defined by exceptional warmth and a recent shift to record-setting wetness, primarily due to one extreme event in August (8.64 inches were recorded on the 18th). Eleven of the last twelve months have been warmer than average, with September 2025 (67.1°F), June 2025 (72.9°F), March 2025 (43.0°F), and October 2024 (57.3°F) all ranking among the top ten warmest for their respective months.

In terms of precipitation, the annual trend is currently dominated by the extreme rainfall in August 2025, which totaled 13.61 inches, a massive 9.50 inch deviation that made it the 2nd wettest August on record. This very wet month has resulted in a significant precipitation surplus for the region across multiple periods: +9.22 inches for the last three months, +11.67 inches for the last six months, and a substantial surplus of +12.78 inches for the entire last twelve months. September 2025, being one of only five months in the last year with a precipitation deficit, did little to counteract the historic August rain. The twelve-month period also included the driest January on record (0.06 inches in January 2025). This yearly summary illustrates a clear pattern of persistently high temperatures and an increase in rainfall based on the very wet August.