# North Dakota Climate Bulletin

**Spring 2025** **Volume 19, No. 2**

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## From the office of the State Climatologist

The North Dakota Climate Bulletin is a quarterly publication of North Dakota's weather and climate from the North Dakota State Climate Office in the College of Natural Resource Sciences, North Dakota State University in Fargo, North Dakota.

Spring (March-May) 2025 was as fluctuant as a typical spring in the Northern Plains, hardly anomalous. Statewide precipitation varied greatly, but on average it was just above normal. Temperature was warmer than normal across the board, by about 2°F. This may have had to do with the fact that there was little to no snow cover throughout the season, which typically keeps temperatures cooler.

From a chilly and dry winter to a wet and mild spring, North Dakotans feel it all. Precipitation in Western North Dakota was a great relief from the exceptional drought conditions seen in the area, but Northeastern ND is still lacking.

*Figure 1: Excited calves enjoying a beautiful spring sunset in Sheyenne ND. Photo via Ian Gilley*

Detailed monthly summaries can be found at www.ndsu.edu/ndsco

Cassidy Holth, Assistant to the North Dakota State Climatologist.



**Only North Dakota stations used for NDAWN data. All MN and MT stations omitted.*

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# Seasonal Summary

## Precipitation

Despite some significant rainfall in the Western half of North Dakota, the total spring (March-May) precipitation measured only 0.85 inches above normal. A normal spring measures about 4.75 inches, and in 2025 received 5.61 inches. This is due to the fact that even though Western ND saw totals of up to 10 inches, Northeastern ND saw about half of normal. The maximum amount of precipitation recorded by NDAWN over the 3-month span was 10.41 inches at the Pretty Rock station in Grant County, over 200% of normal.

The lowest seasonal rainfall occurred in Pembina County at the Crystal NDAWN station, which received just 2.54 inches, about 53% of normal for the season. This has led to increased drought conditions in the area, where they had excessive precipitation in Fall of 2024. Overall, most of the state had a decent spring in terms of precipitation, as the slow, heavy rainfall was much appreciated by drought-stricken Western ND.

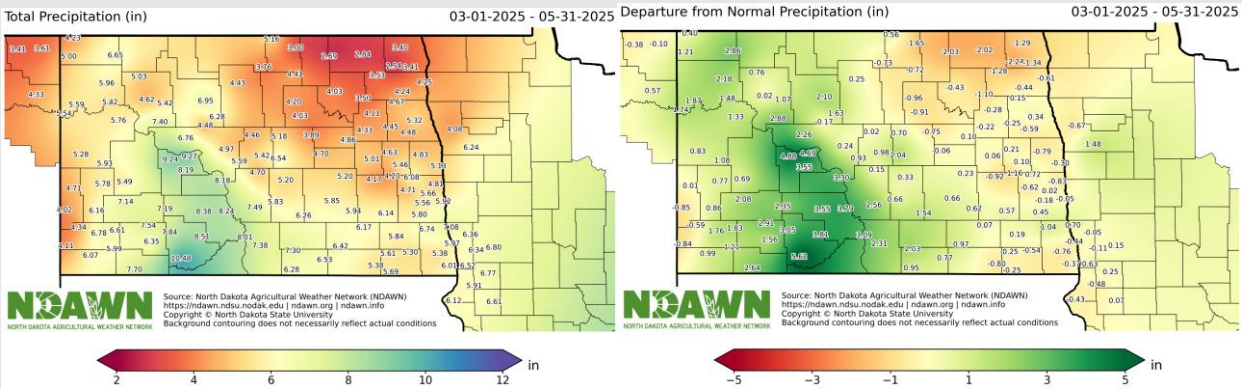


*Figure 2: Total precipitation (left) and departure from normal (right) recorded by NDAWN stations between 3/1/2025-5/31/2025*



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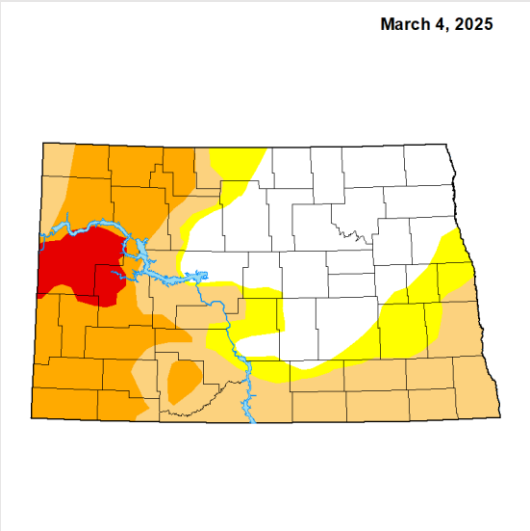
Drought has been significantly reduced by the National U.S. Drought Monitor since the beginning of spring. Much of Western and Southern North Dakota were in D1 drought, and a large area of Western ND was in D2 drought also. The counties in D3 drought have shifted southward to include Billings and Golden Valley, while McKenzie County has improved. More improvements were made in the first update of the summer season.



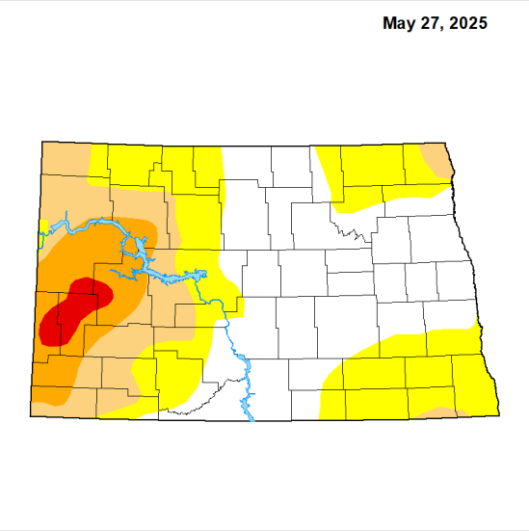




*Figure 3: First version of the U.S. Drought Monitor this spring 3/4/2025 (left) vs the latest 5/27/2025 (right)*

Though 2025 spring was very wet for most, and for the most part mirrored spring 2024, statewide it was dryer this year than last. Spring 2024 averaged about a half inch more precipitation than this year, thanks to some areas being on the dry side in ND in 2025. Though rain may have delayed planting operations, farmers statewide were appreciative of the benefits of widespread rainfall after a dry winter.



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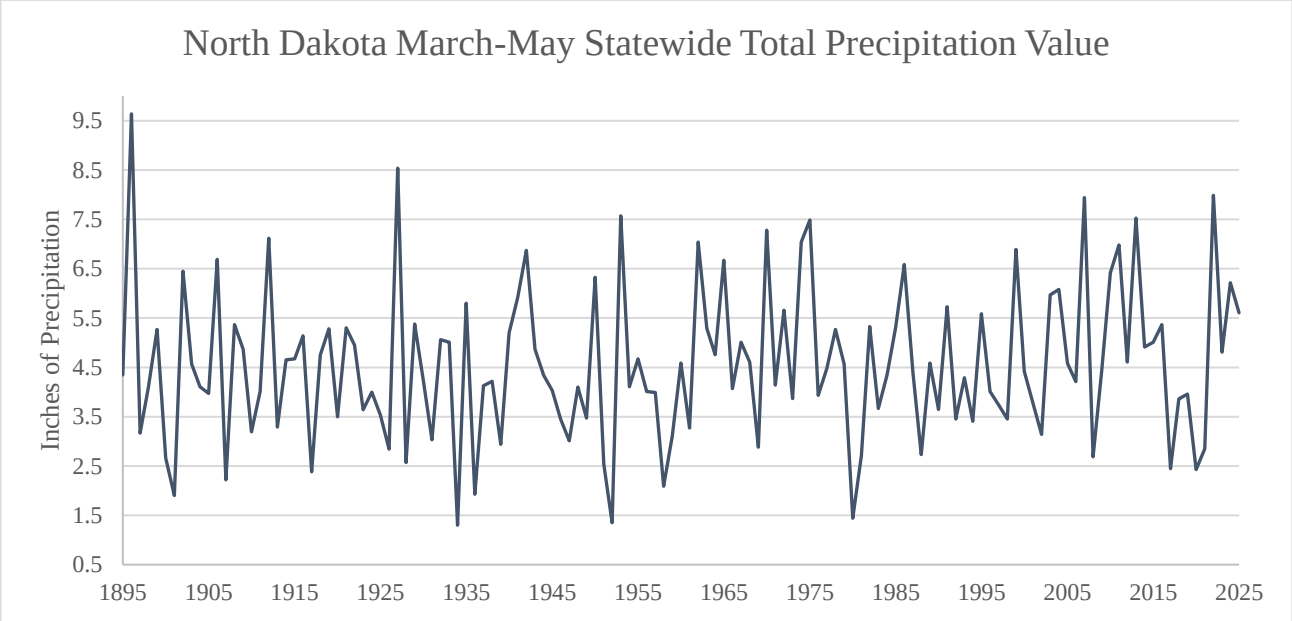


*Figure 4: Historical Average precipitation totals for the spring season in North Dakota*

## North Dakota Spring Precipitation Summary

| | Precipitation | Normal | Anomaly | Rank | Wettest/Driest Since | Record Year |
|---|---|---|---|---|---|---|
| ***Spring 2025 March-May*** | 5.61” | 4.76” | +0.85” | 28th Wettest | Wettest since 2024 | 1896 |
| | | | | 104th Driest | Driest since 2023 | 1934 |

*Table 1: Ranking from NCEI NOAA based on data for the spring season March-May 1885-2025. Precipitation amounts averaged from records at NDAWN stations in North Dakota.*



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## Temperature

Unlike the winter months, spring 2025 was warmer than average overall. This is thanks to the lack of snowpack that typically keeps temperatures much cooler. March was by far the warmest, with its average temperature measuring over 5°F warmer than normal. May and April were closer to normal, but still warmer. Over the 3-month span, the average temperature was 2.7°F warmer than normal at 43.3°F. Maximum temperatures were impressive, measuring 55.7°F, 3.4°F warmer than normal. More information about individual months can be found at www.ndsu.edu/ndsco

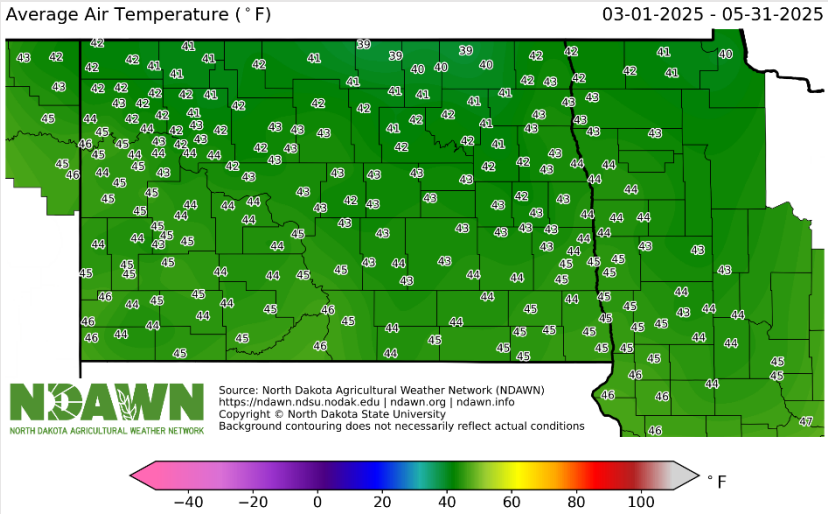


*Figure 5: Average temperature across North Dakota NDAWN stations from 3/1/2025-5/31/2025*

The average minimum spring temperature was 2°F warmer than normal at 30.9°F. For the most part, it was mild and dry weather that kept temperatures warm. There were plenty of periods of cold and wet weather, however it was not the majority. In May, temperatures reached triple digits in the Northeast! That area had very little snowpack throughout the winter months allowing it to dry out considerably in the sun and wind. The warmest temperature recorded in spring occurred at three NDAWN stations: Crystal and St. Thomas in Pembina County, and Forest River in Walsh County, all recorded a temperature of 100°F! The coldest temperatures of the season occurred just east, recording -11°F at the Wales station in Cavalier County.



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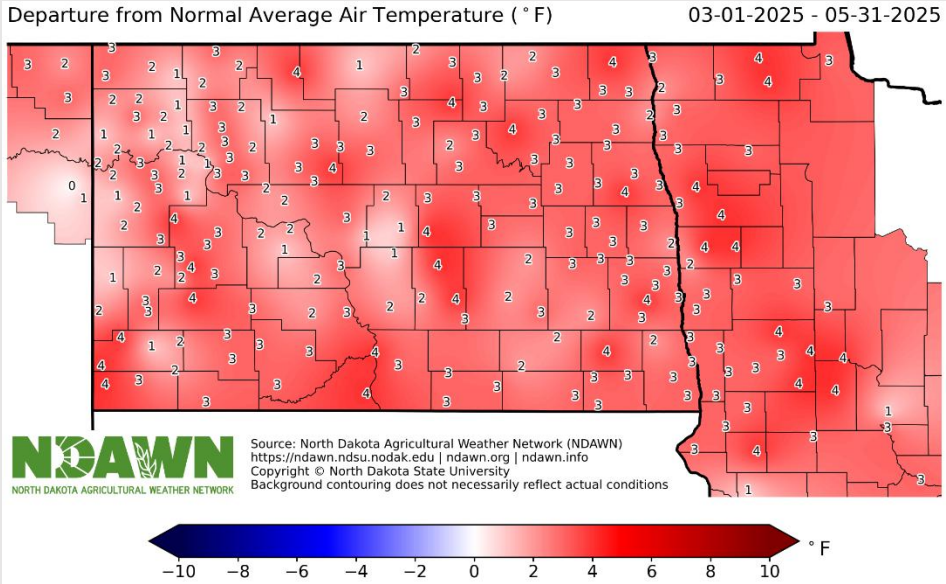


*Figure 6: NDAWN Departure from Normal Temperatures for each station from 3/1/2025-5/31/2025*

## North Dakota Spring Temperature Summary

| ***Spring 2025 March-May*** | **Average T** | **Avg max T** | **Avg min T** | **Maximum** | **Minimum** |
|---|---|---|---|---|---|
| | 43.3°F | 55.7°F | 30.9°F | 100°F | -11°F |
| **Anomaly** | +2.7°F | +3.4°F | +2.0°F | | |
| **Rank** | | | | | |
| **Warmest** | 59th Warmest | 66th Warmest | 57th Warmest | | |
| **Coolest** | 58th Coolest | 38th Coolest | 54th Coolest | | |
| **Record** | | | | | |
| **Warmest** | 48.1°F (1977) | 61.3°F (1977) | 34.8°F (1977) | 111°F (Langdon, 1934) | |
| **Coolest** | 31.5°F (1899) | 42.6°F (1950) | 20.3°F (1899) | | -48°F (Mohall, 1897) |

*Table 2: Spring temperature summary for North Dakota. 2025 statistics from NDAWN station data. Ranking and records based on NCEI climate data (1885-2025) (NOAA)*



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# Significant Weather

## NWS Issued Warnings

In early May, temperatures were warmer than average and drought conditions persisted from lack of spring and winter precipitation. This combination plus gusty winds statewide prompted the National Weather Service to issue a Red Flag Warning that covered the state. Multiple grassland fires ignited, with some in Rollette County becoming severe. Temperatures soared into the 90s to 100°F, with little precipitation to provide relief.

*Figure 6: Red Flag Warning issued by the NWS on 5/4/2025*

In Later in the month of May, a heavy round (or two) of precipitation fell across the state. This rain did wonders to improve vegetative conditions but stalled planting. Still, farmers and emergency workers were appreciated of the rain and the improved conditions. Even a little bit of snow fell during a precipitation spell, in and around McIntosh County.

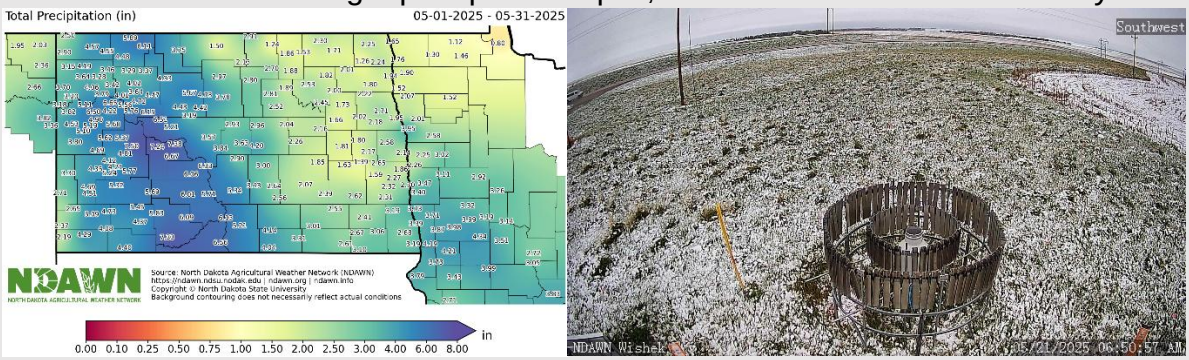


*Figure 7: Total precipitation amounts during the month of May (Left) and some snow dusting the ground at the NDAWN Wishek Station (Right)*



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## Image/Data Sources

Climate at a Glance | National Centers for Environmental Information (NCEI).

NDAWN Weather

Iowa Environmental Mesonet

U.S. Drought Monitor

SPC Storm Reports

NCEI Storm Events Database

NWS Grand Forks and Bismarck

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