IOWA DEPARTMENT OF AGRICULTURE & LAND STEWARDSHIP

**Mike Naig**
Secretary of Agriculture

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# IOWA MONTHLY WEATHER SUMMARY – APRIL 2025

General Summary: Statewide temperatures averaged 50.0 degrees or 1.4 degrees above normal while precipitation totaled 3.33 inches, 0.34 inch below normal. April 2025 ties 1913 and 1952 as the 57th warmest and ties 1877 as the 55th wettest/98th driest in 153 years of statewide records; 2024 was warmer and wetter, while 2023 was drier.

Temperatures: Overall, temperatures for the month were near average across northeastern Iowa, due to more cloud cover and rainfall. The rest of Iowa was slightly above normal. April's statewide average maximum temperature was 61.6 degrees, 1.5 degrees above normal, while the average minimum temperature was 38.3 degrees, 1.1 degrees above normal. Several northwestern stations reported the month's high temperature of 89 degrees on the 28th, 24 degrees above normal. Elkader (Clayton County) reported the month's low temperature of 13 degrees on the 8th, on average 18 degrees below normal.

Heating Degree Days: Home heating requirements, as estimated by heating degree day totals, averaged 4% more than last April and 9% less than normal. Heating degree day totals are running 10% more than last year at this time and 8% less than normal.

Precipitation: Precipitation totals were at an inch or less below normal for a majority of Iowa's National Weather Service (NWS) and Community Collaborative Rain, Hail and Snow (CoCoRaHS) network gauges. Much of northeastern Iowa reported above-normal totals, on the order of one to two inches above the 30-year climatology. Monthly precipitation totals ranged from 1.41 inches near Council Bluffs (Pottawattamie County) to 6.24 inches at a CoCoRaHS gauge in Cedar Falls (Black Hawk County).

A few waves of moderate rain showers crossed the state early on the morning of the 1st with stronger thunderstorms firing in western Iowa just after midnight, producing scattered large hail reports. Rain persisted just before noon with a narrow line of thundershowers in northeastern Iowa during the early afternoon. Event rain totals registered at 7:00 am on the 2nd showed that most Iowa stations observed at least 0.50 inch with over 70 locations receiving an inch or more. The highest totals were found in northwest eastern Iowa with the Davenport NWS office measuring 1.44 inches. In the northwest, Fonda (Pocahontas County) collected 1.53 inches with an overall statewide average of 0.76 inch. Clouds held over northern Iowa through the afternoon and evening hours with daytime temperatures in the 40s; sunshine across southern Iowa pushed temperatures into the low 50s with light winds. Winds swung around to the east into the 3rd with showers filtered into southern Iowa on the backside of a low pressure center over the Ohio River Valley. Rain continued during the afternoon hours and lingered into eastern Iowa through late evening. Rain amounts were generally light with the highest totals ranging from 0.20 inch in Mount Union (Henry County) to 0.34 inch in Bloomfield (Davis County). Parts of western Iowa experienced light rainfall as a cold front crossed the state into the 4th.

Cloudy skies developed through the morning of the 10th with patchy fog in eastern Iowa. The atmosphere over southeastern Iowa became unsettled through the afternoon hours, allowing scattered thundershowers to pop up. These cells moved from northwest to southeast, producing some moderate rainfall accumulations; Salem (Henry County) observed 0.17 inch while Morning Sun (Louisa County) reported the week's highest total of 0.39 inch. Scattered showers with a few rumbles of thunder pushed across northern Iowa on afternoon of the 13th. Several stations reported at least a trace with 0.11 inch in Osage (Mitchell County) and 0.15 inch in Algona (Kossuth). The next day, spotty, light showers moved southeast through the state during the afternoon hours as an upper-level disturbance transited the Upper Midwest. Over 60 stations receiving measurable amounts reported under 0.10 inch except for Lake Park (Dickinson County), which observed 0.12 inch.

The 17th was an active weather day across the Midwest as scattered thundershowers that formed before sunrise in central Iowa continued through eastern Iowa before dissipating after noon. As a strong low pressure system moved across northern Iowa, the attendant cold front fired the first round of strong to severe thunderstorms. Severe super cells formed in southwestern Iowa and held together into central and eastern Iowa, though losing a great deal of strength. Additional severe thunderstorms with strong winds and large hail formed over northern Iowa and moved over the length of the state. Event rain totals reported at 7:00 am on the 18th had nearly 75 stations at or above 0.50 inch with 20 stations collecting an inch or more. The highest totals were southwest and north central with 1.49 inches at Mason City Municipal Airport (Cerro Gordo County) to 2.42 inches in Corning (Adams County), the highest total of the week.

A low pressure center moving northeast through Iowa on the 20th brought widespread, moderate showers over much of the state. More than 200 stations reported at least 1.00 inch of rainfall with nearly 25 eastern Iowa stations at or above 2.00 inches; the statewide average rainfall was 0.99 inch. A complex of showers and a few thunderstorms crossed the Nebraska border and pushed across central and northern Iowa before expanding over eastern Iowa toward sunrise on the 22nd. Light showers moved over southern Iowa through the day; several hours later, isolated strong thunderstorms with some hail and heavier rain popped overnight in north-central Iowa. Moderate rainfall held on in eastern Iowa through late morning on the 23rd with two gauges in Tipton (Cedar County) registering 1.83 to 2.05 inches at 7:00 am. Severe-warned thunderstorms fired later in the afternoon in southwestern Iowa and then over northcentral Iowa into the nighttime hours. There were several reports of larger hailstones with 1.50-inch hail observed in Fort Dodge (Webster County) and Tama (Tama County). Waterloo Municipal Airport (Black Hawk County) measured 2.48 inches of rainfall from stronger cells. A swath of rain totals above 0.50 inch was also found from southwest to northeast; Sidney (Fremont County) collected 1.16 inches, Webster City (Hamilton County) hit 1.52 inches, while Elkader (Clayton County) observed 1.49 inches.

Widespread rain fell across the state on the 24th, particularly in western Iowa as another disturbance pushed through. An unstable atmosphere over southwest Iowa supported severe thunderstorms that crossed the Iowa-Nebraska border during the early evening hours; a brief tornado was spotted in Council Bluffs (Pottawattamie County). The aerial coverage of moderate rainfall increased into the nighttime hours and pushed across the state into the morning of the 25th. Rain amounts were above an inch at more than 50 stations with the highest totals in west-central Iowa; Kirkman (Shelby County) registered 1.99 inches while 2.03 inches was reported in Jefferson (Greene County). Amounts tailed off in eastern Iowa to a few tenths of an inch with an overall statewide average at 0.54 inch. Strong to severe thunderstorms fired on the 28th across broad portions of Iowa, though a more widespread severe weather outbreak never materialized. Rain totals at 7:00 am the 29th were highest along the Iowa-Minnesota border with many stations registering at least 0.50 inch; two Worth County locations, Grafton and Northwood, observed 0.52 inch and 0.91 inch, respectively.

Severe Weather: May 17th was an active weather day across the Midwest as a strong low pressure system moved across northern Iowa, the first round of strong to severe thunderstorms formed along the attendant cold front. During the evening hours, two supercell thunderstorms formed in eastern Nebraska and moved into southwest Iowa. These cells had a history of producing large hail and tornadoes; McClelland reported 4.00-inch hail with 2.75 inches observed in Essex (Page County). This storm had a long-track, wedge tornado that moved from Tabor (Fremont County) to Essex, where a Tornado Emergency was issued. Another tornado was reported by a trained spotter in Oakland (Pottawattamie County). The storms held together into central and eastern Iowa, though losing a great deal of strength. Farther northwest, severe thunderstorms with strong winds and large hail moved over the length of the state. Reports of hail and some wind damage came in from Sioux City (Woodbury County), Storm Lake (Buena Vista County) and Waverly (Bremer County).

Winds increased overnight into May 28th with ample moisture transport into the Midwest ahead of a potent low pressure system. Morning temperatures were unseasonably warm with a statewide average low of 50 degrees, eight degrees above normal. With afternoon conditions in the upper 70s and low 80s and abundant atmospheric instability, isolated severe thunderstorms fired along the low's attendant dry line; this surface feature is a boundary between very moist air to the east and drier air farther west. Additional storms developed later in the evening along the cold front trailing the dry line with some stronger cells moving through southwest Iowa. Luckily, a warm, stable layer in the lower levels of the atmosphere prevented a more widespread severe weather outbreak. Large hail was observed from Sioux City (Woodbury County) to Osage (Mitchell County) with the largest report being egg-sized hail in Lyon County. The strongest wind gusts were 62 to 64 mph from Ames (Story County) and in Sibley (Osceola County).

US Drought Monitor: The US Drought Monitor showed improvement across Iowa's northern two-thirds in April. As of the first week of April, 79% of Iowa was rated at some level of dryness or drought. Abnormal Dryness (D0) encompassed much of the northern three-quarters of Iowa, with an overall coverage of 46%. Areas of Moderate Drought (D1) were found in northeast, northwest and southwest Iowa, covering 34% of the state. By the end of the month, D0-D1 conditions diminished by 29% with drought improving by 27%; the categorical breakdown is as follows: D0 - 43% and D1 - 7%. According to Iowa Drought Plan (IDP) trigger tables updated on May 8th, all Drought Regions are classified as "Normal."

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# April 2025

## WEATHER BY DISTRICTS

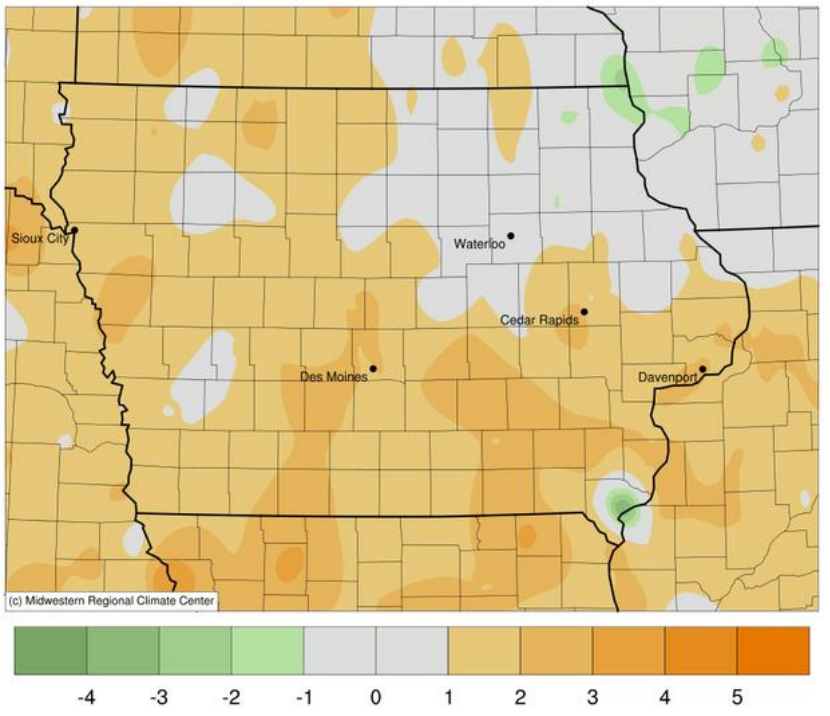
| DISTRICT | TEMPERATURE (F) | | HEATING DEGREE DAYS | | | | PRECIPITATION (inches) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | April 2025 | | April 2025 | | Since Jul., 1, 2024 | | April 2025 | | Since Jan.1, 2025 | | SNOWFALL Apr 2025 |
| | Average | Departure* | Average | Departure* | Average | Departure* | Average | Departure* | Average | Departure* | Average |
| Northwest | 48.0 | +1.2 | 510 | -39 | 6559 | -600 | 4.62 | +1.37 | 5.31 | -1.16 | 0.0 |
| North Central | 47.8 | +1.1 | 516 | -36 | 6618 | -598 | 4.32 | +0.55 | 8.51 | +0.88 | 0.0 |
| Northeast | 46.8 | +0.2 | 546 | -6 | 6534 | -550 | 4.11 | +0.20 | 7.91 | -0.39 | 0.0 |
| West Central | 50.0 | +1.2 | 450 | -40 | 6069 | -538 | 2.93 | -0.51 | 6.18 | -0.81 | 0.0 |
| Central | 50.3 | +1.4 | 441 | -45 | 6023 | -572 | 3.61 | -0.18 | 7.25 | -0.58 | 0.0 |
| East Central | 51.0 | +1.8 | 420 | -57 | 5875 | -553 | 4.79 | +1.01 | 6.72 | -1.93 | 0.0 |
| Southwest | 51.9 | +1.3 | 398 | -38 | 5639 | -440 | 2.60 | -0.91 | 5.26 | -2.17 | 0.0 |
| South Central | 52.5 | +1.8 | 380 | -52 | 5556 | -497 | 3.92 | +0.03 | 6.37 | -1.94 | 0.0 |
| Southeast | 52.9 | +1.9 | 369 | -55 | 5513 | -449 | 6.79 | +3.08 | 6.64 | -2.34 | 0.0 |
| STATE | 50.0 | +1.4 | 447 | -42 | 6032 | -546 | 4.16 | +0.49 | 6.72 | -1.08 | 0.0 |

* Departures are computed from 1991-2020 normals.

The weather data in this report are based upon information collected by the U. S. Dept. of Commerce, NOAA National Weather Service.

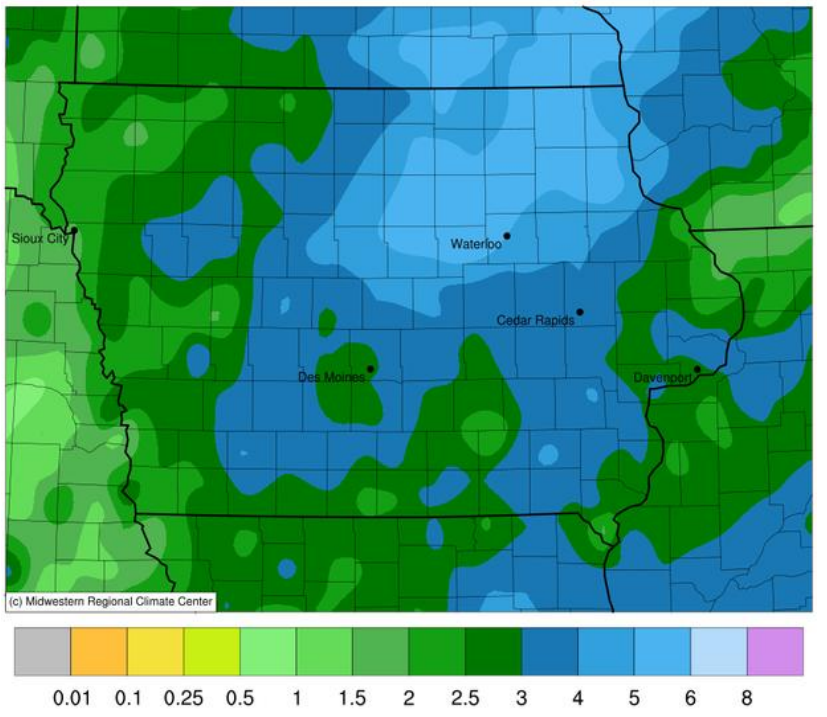
**Average Temperature (°F): Departure from 1991-2020 Normals**

April 01, 2025 to April 30, 2025




**Accumulated Precipitation (in)**

April 01, 2025 to April 30, 2025

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