May 2024
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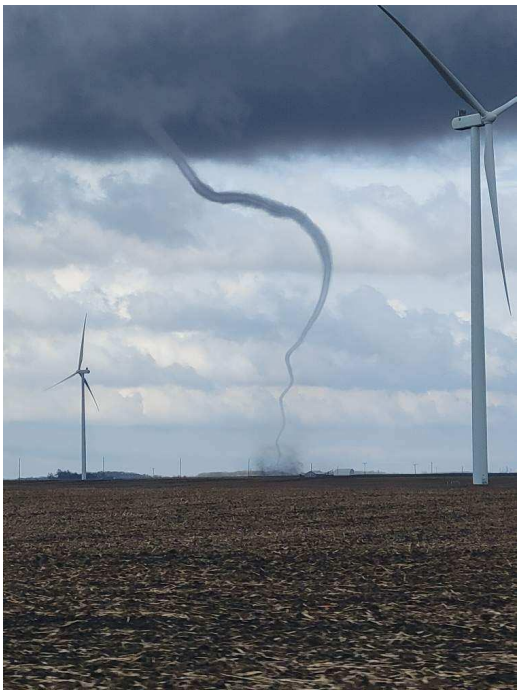
The Weather Whisper

WHAT'S INSIDE?

April 16th Tornado Outbreak

Brooke Hagenhoff, Lead Meteorologist

A strong low pressure brought multiple rounds of strong to severe thunderstorms to portions of central Iowa on Tuesday, April 16th, 2024. At least 8 short-lived tornadoes touched down, some causing damage in portions of central Iowa from late morning through the afternoon. A few of the severe thunderstorms also produced hail of 1-2" in diameter and wind gusts of 50-60 mph. Environmental winds behind the line of storms were quite strong as well, occasionally gusting in excess of 50-55 mph. Of the tornadoes that developed three were rated as EF-0, one as an EF-1, and 4 as EF-U or unknown given that the tornadoes remained in open land and did not damage anything, making a rating impossible. For full ratings, see our event review found HERE.

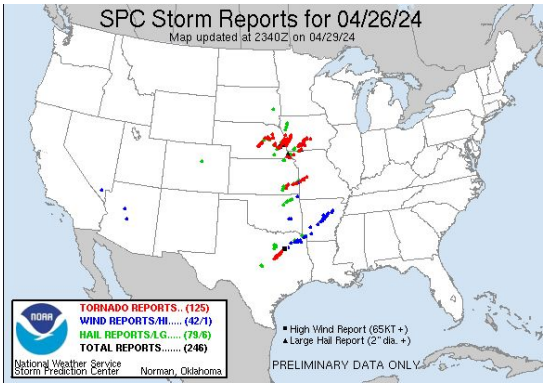


Tornado south of Manson, courtesy of Lt. Smidt of the Iowa State Patrol.

April 26th Tornado Outbreak

Brooke Hagenhoff, Lead Meteorologist

Not to be outdone, another, more robust tornado outbreak occurred on April 26th, impacting Iowa (plus Nebraska, Kansas, Oklahoma, and Texas). So far at least 24 tornadoes have been identified across Iowa with 19 of those within the NWS Des Moines service area. Of the 19, there were 7 EF-2s, 7 EF-1s, 1 EF-0, and 4 EF-Unknown. For additional details, visit our event summary HERE.



Spring IWT Meetings Held

Kristy Carter and Brooke Hagenhoff, Meteorologists

IWT panel discussion with Mike Fowle (NWS, left), A.J. Mumm (Polk County Emergency Management, middle), and Rebecca Kopelman (Chief Meteorologist KGAN-TV, right).

This April, NWS Des Moines hosted 2 Integrated Warning Team, or IWT, meetings. But what is an IWT? The IWT is a group representing the components most central to keeping us safe during severe weather. These three main groups include NWS, media, and emergency managers. In early April the first meeting was held with over 60 partners in attendance. The meetings included talks by the NWS, broadcast meteorologists, and emergency managers (EMs), a lunchtime panel discussion (seen on left), and afternoon tabletop scenarios of high-end events. The collaboration in the room helped prepare us all for the severe weather season and build upon existing relationships. When we work together we're best equipped to keep the public safe and this meeting was all about making that happen as smoothly as possible.

A second, more specialized IWT focused on flood concerns within central Iowa metro areas, followed in late April. This hydro IWT was attended by EMs, city managers, fire chiefs, flood protection engineers, public works officials, and the NWS with discussions including forecast development, urban sprawl and associated changes to basins, and various tools and resources to monitor water levels and any flooding.

Bouton Prescribed Burn

Ashley Bury, Meteorologist

On April 12th, 2024, our office provided on-site support for a controlled burn exercise that took place in Bouton, Iowa. This particular exercise involved Dallas County Emergency Management, Iowa Department of Natural Resources, Iowa Department of Transportation, a handful of local fire and EMS, Dallas County Sheriff's Office, as well as a few others, all which were vital to successfully carrying out this exercise. The Iowa National Guard also performed training during this burn which involved practicing water drops using a UH-60 Black Hawk helicopter. This burn took several weeks of planning and coordination among partners, which for our office involved providing daily email briefings and weekly virtual meetings to provide weather forecast information, pinpointing the most ideal day for burning. Ideal conditions needed for this burn were winds around or less than 20 mph out of the north/northwest (to avoid smoke transport over the nearby highway, as well as to provide for good fire spread) and dry conditions (lower relative humidity [RH] values and no anticipated rainfall on or just before the day of the burn). Our staff then deployed onsite to provide support during the burn, providing a pre-burn briefing and monitoring conditions throughout the burn. Weather observations such as relative humidity, wind speed and wind gust were relayed to the Incident Commander. Overall, RH values dropped into the 20s during the duration of the burn with sustained winds up to around 15 mph out of the northwest, gusting 25-30 mph. Though winds were a bit higher than thresholds, this actually helped spread the fire more efficiently, allowing the burn to progress as intended, if not a bit better.

Required briefing to discuss burn plan, expected weather conditions, and other important information. Photo credit to Mike Fowle.

Iowa National Guard performs water drop over ongoing burn. Photo credit to Mike Fowle.

Map of the planned burn site. Photo taken by Ashley Bury.

On the Cover:
A photo of a tornado near Afton on April 26, 2024 taken by Dean Baron.

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