

Tornado warning to snow dusting: A wrap-up of Sunday's wild winter weather

by Cory Davenport, Contributing Writer November 26 2018 11:52 AM



ST. LOUIS – Sunday night, many Riverbend residents were alerted to an impromptu tornado warning buzzing their phones and television sets – then they woke up to a dusting of snow.

So what went down?

National Weather Service (NWS) Meteorologist Gary Schmoker, who is based in St. Louis, said the seemingly irate weather comes directly from a low-pressure system headed by a cold front, which blanketed some areas in the Midwest with more than a meager dusting of snow, including Kansas City, Kirksville, Quincy and even Columbia, Missouri, which saw a few inches. The reason why the Riverbend did not find itself in the same predicament is what ultimately led to the tornado warning, which both seemed out-of-season and out-of-nowhere, but in reality, it was neither of those things.

High temperatures Sunday climbed toward the 60-degree mark. Low temperatures at midnight were hovering around the freezing point, and the massive gusts took it even deeper to the cold. This massive temperature fluctuation is why the Riverbend received both a tornado warning and a dusting of the cold stuff.

"Some of the worst tornadoes do happen in the fall and winter months in St. Louis," Schmoker said. "It is still far enough south to get warm humid weather in the area. Once the cold front moved through, temperatures dropped dramatically. We weren't in the right spot to get the heaviest snow. Some when a system like this is coming through get a thunderstorm and severe weather instead of heavier snow."

Schmoker noted no tornadoes were confirmed Sunday night, but a funnel cloud was spotted, and radar indicated it was barreling toward Jersey County – just north of Alton near the top of Clifton Terrace and Riehl Lane. Fortunately, the thunderstorms fell apart before a tornado could actually form. Schmoker said warmer temperatures or more atmospheric instability could have easily led to a tornado touchdown.

Along with the storms, which did bring pea-sized hail, and the snow, the and wind was a massive part of Sunday's weather events. Those gusts were caused by the huge temperature drop.

"For temperatures to drop 30 degrees in the span of two hours, it takes a lot of wind," Schmoker said. "You don't have temperatures drop that much that soon without a lot of wind."

As for how common these patterns are, Schmoker said the geographic location of the St. Louis area is conducive to spring-like temperatures yielding to massive cold snaps within a day or less during the late autumn and even winter months.