National Weather Service Spring 2021

The High Plains Drifter

NATIONAL WEATHER SERVICE
NORTH PLATTE, NE

http://www.weather.gov/

What's Inside

NOAA Weather Radio Information

By Jaclyn Gomez-Meteorologist

What is a NOAA weather radio you may be asking? Well, a NOAA weather radio is a special radio that can alert you to hazardous weather conditions or other hazards that may pose a threat to life and property. NOAA weather radios are similar to smoke detectors in that they are silently monitoring, but ready to rapidly provide warning information direct from the source.

Weather radios provide you with routine weather broadcast but National Weather Service personnel can interrupt these broadcast during severe weather when warning messages concerning immediate threats to life and property are issued.

Most weather radios receivers are equipped with Specific Area Message Encoding, or SAME technology, which allows the listeners to choose a specific county and what hazardous events their radio will sound an alarm for when official NWS watches and warnings are used.

To find a list of SAME codes for the state of Nebraska visit: https://www.weather.gov/NWR/county_coverage?State=NE. Here you can find the information to program which county or counties you would like to receive alerts for on your radio.

Not only do NOAA weather radios alert for watches and warnings but they also broadcast information for technological (hazardous material spills), non-weather (amber alerts and 911 outages), and national emergencies (civil emergency). This makes the NOAA weather radio an "all hazards" radio network and the single source for the most comprehensive weather and emergency information available to the public.

For more information please visit the National Weather Service's NOAA Weather Radio All Hazards web site: http://www.nws.noaa.gov/nwr

Severe Weather Safety
By Sam Meltzer–Meteorologist

Spring and summer are known for severe weather in Nebraska. While dangerous weather can seem chaotic and frightening, you can be safe and Weather-Ready by knowing what to do when it comes your way. **Be sure to always have a way to receive National Weather Service warnings!**

Tornadoes

- Before a tornado, know where to go in your home, workplace, or school.
- When a tornado warning occurs go to the basement or lowest level of a building, to an interior room without windows, or to a designated safe room.
- If outside or in your vehicle, seek a sturdy building immediately.
- If there are no sturdy buildings nearby, seek shelter in a low-lying area, like a ditch or ravine.
- After the tornado passes, stay away from damaged buildings and downed power lines.

Lightning

- Be aware: If you are close enough to hear thunder, you are close enough to be struck.
- Seek shelter in a building or an enclosed hard-top vehicle.
- Avoid open fields, elevated areas, and tall objects or structures.
- Stay out of water and away from wet items.
- If indoors, avoid touching electronics and plumbing and stay away from windows.

Hail

- Seek shelter inside a sturdy building immediately and stay away from windows.
- Do not go back outside until the hail has ended.

Flooding

- Move to higher ground and stay out of flood prone areas including rivers, washes, and ditches.
- Do not drive into flooded roadways—just a foot of water can carry away most vehicles.
- Do not walk or swim in the water—a few inches can sweep you away and downed power lines pose a threat of electrocution.

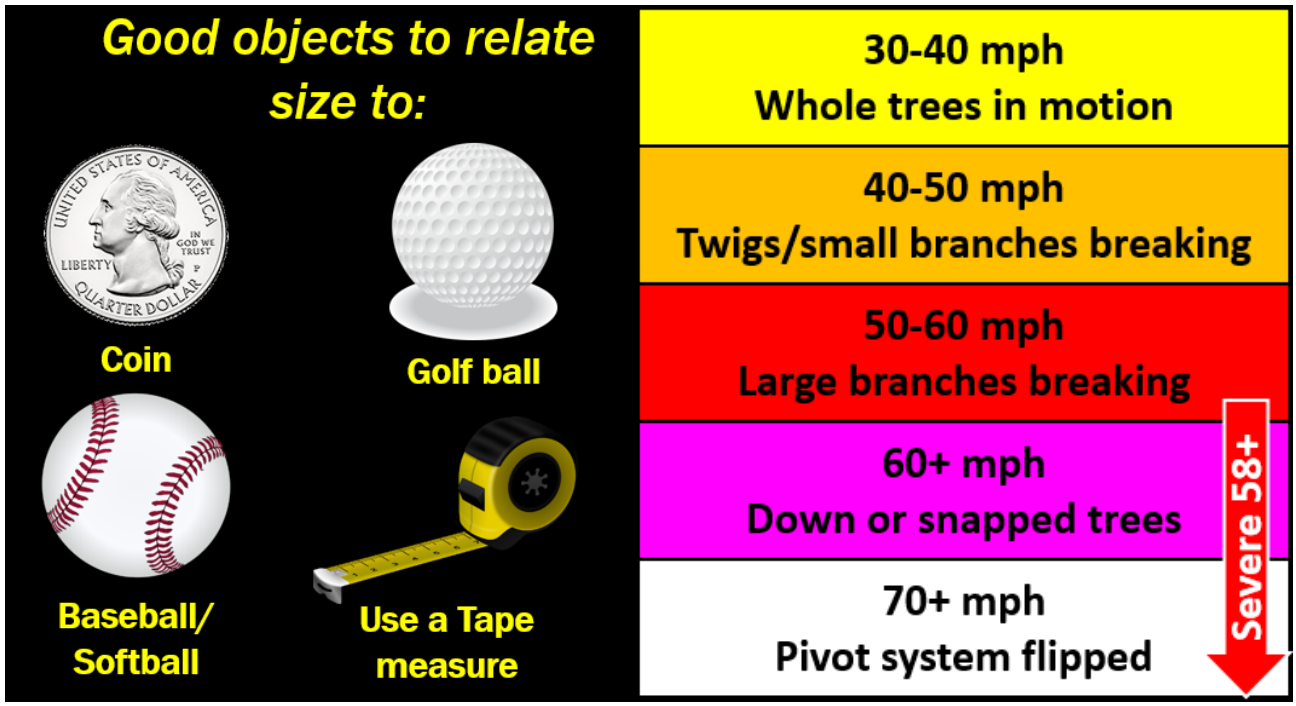
For more information on severe weather safety, visit www.weather.gov/safety/.

Severe weather Criteria
By Jaclyn Gomez-meteorologist

As we head into that time of year where we have severe thunderstorms, you may be asking "what exactly makes a thunderstorm severe?" Is it the fact that the thunderstorm contains hail or lightning? Yes and no. A thunderstorm requires lightning in order to be called a thunderstorm, however, lightning will not make a thunderstorm severe since this occurs with all thunderstorms. A storm may contain hail, but just hail in general doesn't make the storm severe. It depends on the size of the hail. The same holds true for strong gusty winds. Winds may be strong with any storm, but winds need to reach a certain speed to meet severe criteria.

For a thunderstorm to be considered severe it must contain hail that is one inch in diameter or greater, or contain winds gusting 58 mph or greater. A severe storm may also contain a tornado or flash flooding.

Below is a example of objects to compare to when reporting hail size and reporting wind.



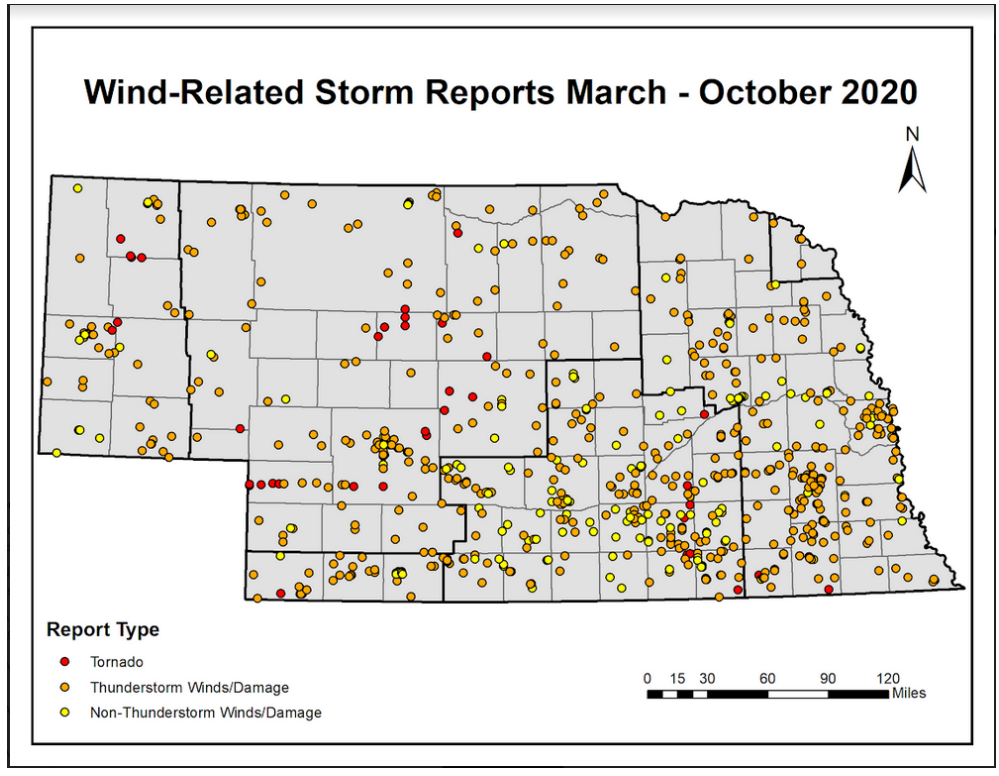
2020 Severe Weather Season Review
By Sam Meltzer—Meteorologist

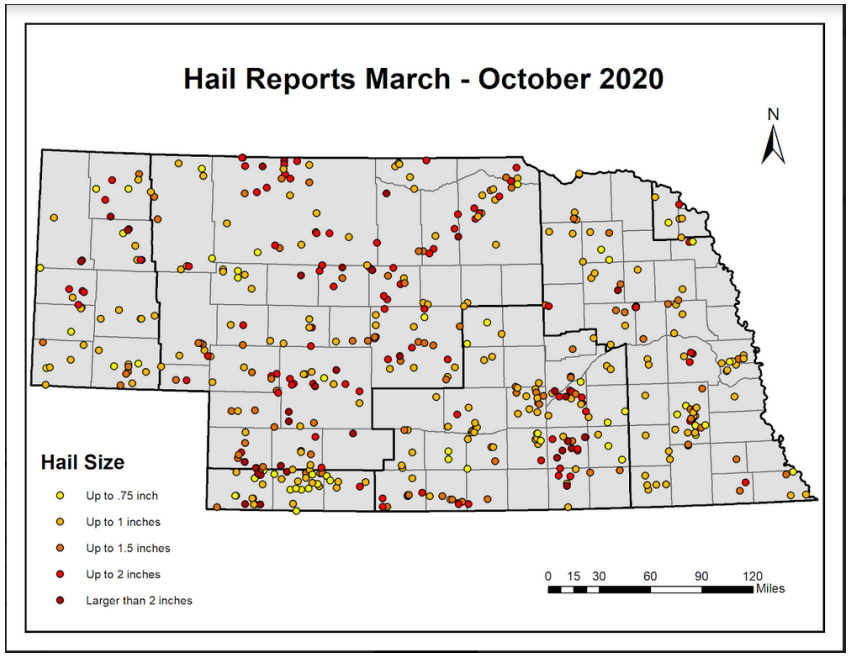
Did you know that 2020 was a below average year for tornado activity across the state of Nebraska? Only 21 tornadoes were reported which is 30 less than the 30 year average of 51 tornadoes per year. The most intense tornado was an EF-2 in Dawes County on July 2nd. Custer and Perkins Counties tied for the most in a county with 3 tornadoes each last season. The dates of June 8th and July 8th tied for the most tornadoes in a day, with 5 tornadoes each. No injuries or fatalities were reported with any tornado for the year.

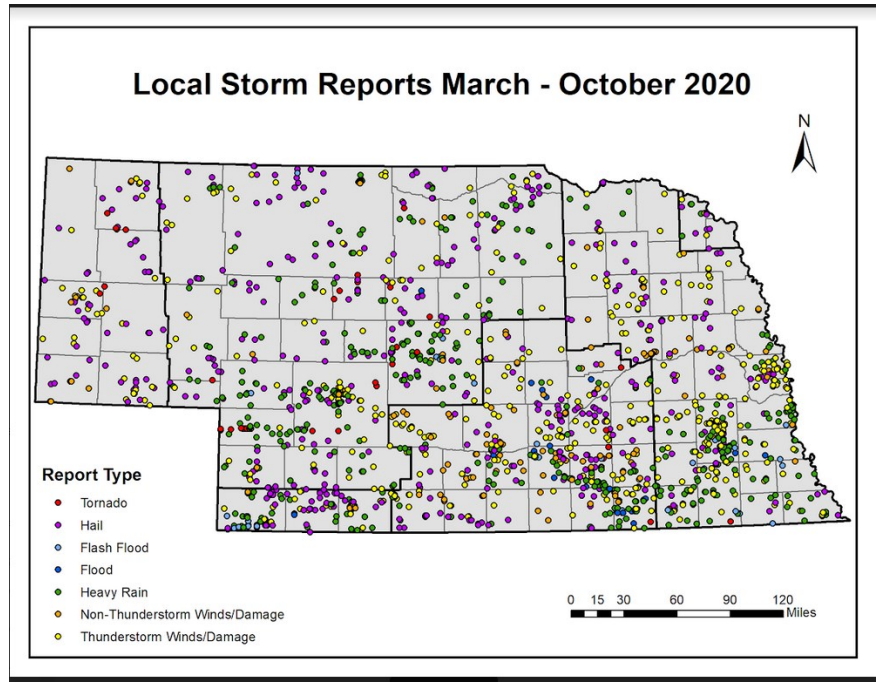
2020 Tornadoes by Month

May	June	July	August
2	8	6	5

Regarding hail and wind, 2020 was a fairly normal year. There were a total of 566 severe hail reports across the state of Nebraska. The largest hail-stone reported was 3.25 inches in diameter near Hemingford on August 15th, which is about the size of a large apple! There were 1127 strong wind or wind damage reports, not including tornado reports. The strongest measured wind gust was 94 mph on July 8th at Sidney Airport.



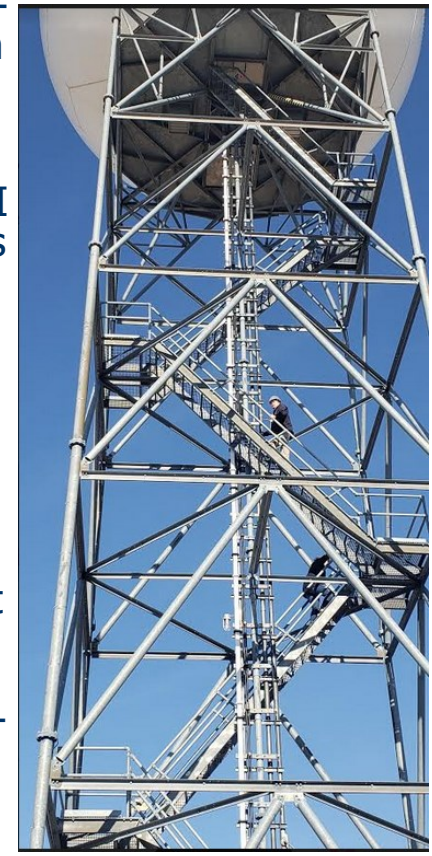




What does severe season 2021 have in store for Nebraska? Overall, warmer and dryer conditions are forecasted for the next few months. However, the current La Niña pattern will begin to change to a neutral pattern during the summer. As this happens, a shift in moisture transport may support the development of severe weather in some parts of the state.

National Weather Service Radar
By Jaclyn Gomez-Meteorologist

Ever wonder how our weather radar is maintained? Each NWS weather office including here in North Platte have a staff of two electronic technicians (ET) and a Electronics Systems Analyst (ESA). This staff works together to make sure the radar is maintained and in good working order by performing monthly maintenance. This preventative maintenance helps to minimize the chances of the radar breaking down, similar to preventative maintenance on a car.



So you may be wondering where the radar is located? Is it the big golf ball looking equipment I see by Wellfleet, NE? Although that is a radar, it's is a different type of radar that tracks airplanes and is owned by the FAA. The National Weather Service radar is actually located in the Sandhills, near Thedford, NE. The radar is located off of Highway 83.

Our radar, with the identifier KLNX, is 75 feet from the bottom to the platform. The radar stands a total of 110 feet high from the ground to the top of the dome. Pictured at right, the technician must climb several flights of stairs to reach the dome at the top of the radar.

When the electronic technicians perform their routine maintenance they have to climb to the top of the radar platform. If they need to fix lights they have to climb to the top of the dome. The picture on the left shows a view of the technician inside the radar. They perform routine maintenance at least 12 times a year.

How to Make a Hail Pad

By Rich Lamb—Observations Program Leader

With severe weather season getting underway in western and central Nebraska, I would like to spend some time discussing an observation tool that can be used to help verify our severe weather warnings. This tool is called a "Hail Pad", and is normally used with the CoCoRaHS volunteer program. A Hail Pad is a homemade device that is placed outside before severe weather develops in hopes of catching hail imprints for more accurate measurements of hail size.

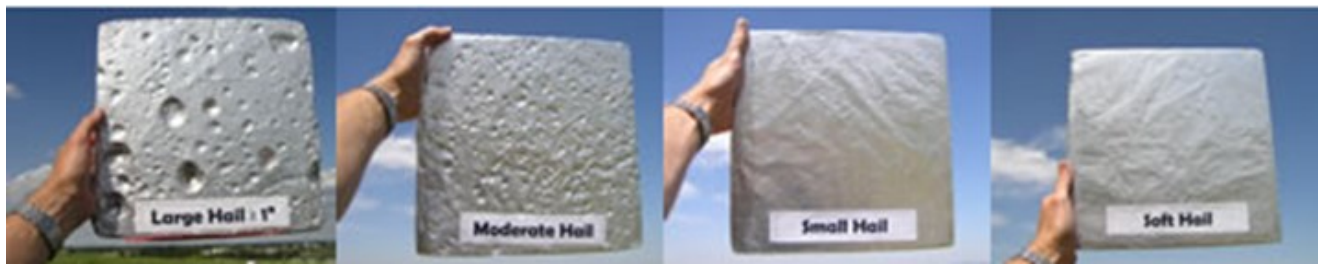
Constructing a Hail Pad is fairly straight forward and simple. You will need a couple of simple materials and an open area to increase chances of hail impacts. Materials required will be a 12 inch long, 12 inch wide and at least 1 inch thick piece of Styrofoam, some heavy duty aluminum foil, and 2 stakes or thin tent pegs to fasten the pad into the ground.

Wrap a single layer of foil around the Styrofoam pad, ensuring a tight fit on the foam.

How to Make a Hail Pad(Continued)
By Rich Lamb—Observations Program Leader

Bring the pad to an open area in your yard, and place 2 stakes or pegs through the pad and into the ground to ensure the pad will not blow away from the site. After a severe thunderstorm which produced hail has moved through the area, return to the pad and check the results.

Hail impacts that show up on the pad can be measured for diameter. These measurements can help us verify severe storm warnings issued for your location. Pictures of the hail pad with impacts, along with dates and times of the storm, ensures a more accurate assessment of hail size. These reports can help to verify thunderstorm warnings for the forecast area. Remember reports can also be posted to our social media pages. Our Facebook page is: facebook.com/NWSNorthPlatte and Twitter page: twitter.com/NWSNorthPlatte



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Comments and suggestions are always welcome. Your feedback is very important to us!

http://www.weather.gov/northplatte