



The High Plains Drifter

Cooperative Weather Observer Spotlight By Rich Lamb-Observation Program Leader

NATIONAL WEATHER SERVICE
NORTH PLATTE, NE



<http://www.weather.gov/northplatte>



Pictured left to right, Gerald and Beverly Osborn

Mr. Gerald "Gerry" Osborn has been a cooperative weather observer in Ainsworth, Nebraska, for 75 years. Mr. Osborn first began taking observations as a child, he was the backup cooperative weather observer for his father at the age of 12. In October of 1946, Gerry became the primary cooperative observer for Ainsworth. Known in Ainsworth as "Mr. Weatherman" for reporting his observations to the radio station, KBRB, and the Ainsworth Star Journal. Gerry has been awarded both the Holm and Jefferson awards in 1993 and 1999 respectively. Both of those being prestigious awards.

Along with his weather observations, he has also been extensively involved in the Ainsworth and Brown County communities. He served as the postmaster, on numerous community and state boards, President of the Ainsworth School Board, and 2 terms as mayor of Ainsworth. Gerry has decided to step down as the COOP Observer for Ainsworth, but wanted to stay on until he reached the 75 year milestone. Mr. Gerald Osborn, congratulations and thank you for your dedication to the National Weather Service Cooperative Observer Program.

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WINTER WEATHER SPOTTER TRAINING
By SHAWN JACOBS— WARNING COORDINATION METEOROLOGIST

As the days continue to get shorter and temperatures cool, thoughts of pumpkin spice, harvesting, and falling leaves occupy our thoughts, but we must also remember that winter is coming. Western and North Central Nebraska typically doesn't see the brutally



cold temperatures and impactful snows until the holiday season or thereafter, but winter can come early. If you've lived in Nebraska long enough, you might remember October of 2009. The city of North Platte recorded a year's worth of snow (30.3") in just one month! Snow isn't the only scary weather that we can see in October, just ask any-

one from Oconto. On Halloween night back in 2000, a strong tornado damaged or destroyed every building along Main Street. A Halloween party was being held at the community center when the tornado hit, 19 children and 4 adults sought shelter in the basement. Thankfully no one was injured by the F-2 tornado.

The National Weather Service relies heavily on reports of impactful winter and severe weather when such events occur. Given the rural setting of Western and North Central Nebraska that lies in our area of forecast and warning responsibility, it's crucial that we have a large cadre of citizen observers to report what is actually happening at the ground. We call this "ground-truth," and it enables us to effectively communicate weather-related hazards and concerns to others when such events occur. Additionally, storm reports assist the National Weather Service in the verification of storm warnings, which ultimately improves the quality and timeliness of future warnings.

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WINTER WEATHER SPOTTER TRAINING (CONTINUED)

So how does one learn about hazardous weather and reporting observations to the National Weather Service? How do you know what's worth reporting? Luckily, the National Weather Service in North Platte offers Winter and Severe Weather Spotter Training. Our winter training will be held virtually this year. Details on the winter registration will be found on our website early this October at <https://www.weather.gov/lbf/>. The Severe Weather Spotter Training will be offered early next year, so please continue to check back on our website in January, 2022. Each session typically lasts an hour or less.

For the Winter Spotter training, we will teach you all the basics of winter weather, how to measure snowfall and ice accumulations, and



how to stay safe. By the end of our training, you will be a certified citizen observer and not only will you be a real asset to the National Weather Service, you will serve your community. We offer two courses for the Severe Spotter Training, basic and advanced. Both will teach you the mechanisms of severe thunderstorm development with an emphasis placed on

tornadoes. Situational awareness and safety is paramount in severe spotter training, we spend a good amount of time educating spotters on severe weather safety.

We look forward to your participation. If you have any questions, please reach out to us at nws.northplatte@noaa.gov.

**DECISION SUPPORT PROVIDED BY NATIONAL WEATHER SERVICE
By Jaclyn Gomez—Meteorologist**

You may not be aware, but the National Weather Services provides decision support services to our partners at their request. A partner, such as the Emergency Manager of a county can request decision support for events such as concerts, rodeos, parades, etc. We have also provided support to local state parks.

So you might be wondering what exactly is decision support? Decision support services include tailored forecast for the specific location of the event, along with monitoring the site for any weather hazards our partners request. These hazards could include excessive heat, lightning, thunderstorms, strong winds and wind chills just to name a few. The support can be done off-site at the National Weather Service office, located in North Platte, or it can be provided on-site at the event.

At the end of July myself and meteorologist Rachel Kulik provided on-site support for the Burwell Rodeo. This rodeo is one of the oldest in the nation, with this year being the 100th anniversary. Attendance at the rodeo is approximately 5000 people a day, with the event being all outdoors.



Pictured left to right is Rachel Kulik and Jaclyn Gomez, providing on-site support.

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**DECISION SUPPORT PROVIDED BY NATIONAL WEATHER SERVICE
(CONTINUED)**

Rachel and I arrived to Burwell late afternoon. When we arrived at the site, we met with the Point Of Contact (POC) for the event, who happened to be the Emergency Manager, Alma Beland. After talking with Alma she informed us that staff would be showing up for a meeting soon and that she would like us to give everyone a weather briefing. On this day, one of the concerns was excessive heat, so we made sure to cover the heat index in our briefing with the partners along with timing of when we thought the heat index would drop below heightened health concerns.



Pictured is Rachel Kulik taking a weather observation using the Kestrel

While we were at the event, we were located at a facility near the rodeo arena with Alma, who had walkie talkies to remain in contact with those partners who were located at various parts of the rodeo grounds. These walkie talkies would be used to communicate to the partners in the event there was a weather hazard. Rachel and I also performed several weather observations using a weather instrument called the Kestrel to get current heat index readings, which we then briefed to Alma. We provided on-site support through the evening, then off-site support was provided from the meteorologist who was

working at the National Weather Service office for the remainder of the night.

What Will Winter Hold for Western and North Central Nebraska?

By CHRIS BUTTLER-LEAD METEOROLOGIST

The winter of 2020-21 started out warm across western and north central Nebraska. November, December and January saw above normal temperatures across the area. February however, was very cold and snowy. For North Platte, February 2021 was the 6th coldest February on record and 2nd snowiest. For the 2020-21 winter season, 39.0 inches of snow fell in North Platte. This was nearly 10 inches above the normal of 29.6 inches. Nearly half of this recorded snow, fell in February.

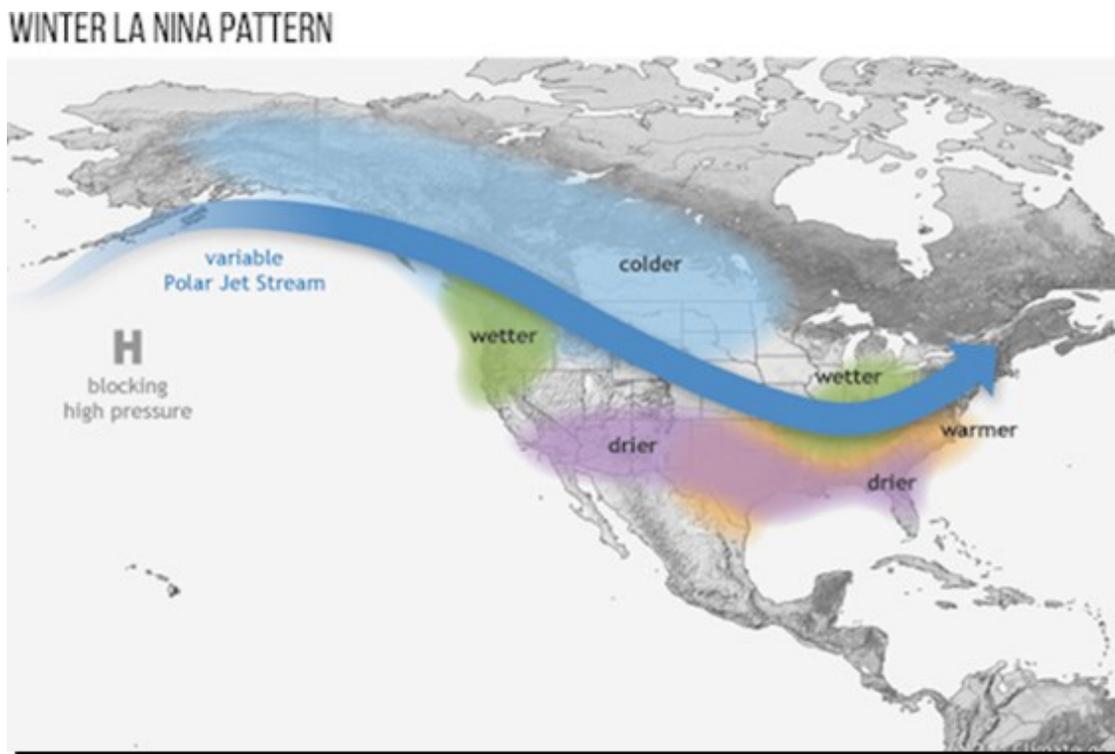
Winter patterns across the United States are most affected by El Nino or La Nina conditions in the Equatorial Pacific. In an El Nino, water temperatures in the Equatorial Pacific are 0.5 degrees C above normal or warmer. In a La Nina, water temperatures in the Equatorial Pacific are 0.5 degrees C below normal or cooler. When El Nino or La Nina conditions are forecast, forecast skill in the long term winter forecast increases. For this winter, a weak La Nina is forecast for the Equatorial Pacific. The current forecast is for a ONI index of -0.7 to -1.2 this winter or a weak to moderate La Nina. Last year, the ONI index during the winter was -1.3 or a moderate La Nina. What does the ONI forecast of -0.6 to -1.2 mean for western and north central Nebraska this winter?

Research has shown in La Nina conditions, persistent northwesterly flow aloft dominates the winter pattern across the western part of the country.

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What Will Winter Hold for Western and North Central Nebraska?

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Local research has shown, in La Nina conditions, persistent northwesterly flow leads to drier and warmer than normal conditions across western and north central Nebraska for winter. This forecast signal is strongest in southwestern Nebraska. The official outlook from the Climate Prediction Center for November, December and January calls for above normal temperatures and near normal precipitation. Toward the end of winter including January, February and March, La Nina conditions will weaken so there are equal chances for above, below or near normal temperatures and precipitation. Taking into account local research, warmer and drier than normal conditions are forecast for the early part of winter (November-December). As we head into January and February, the forecast is more uncertain. Based on a forecast ONI index similar to last winter, more "normal" winter conditions are expected for January into March. That being said, expect a warmer and drier than normal first half of winter with more normal conditions setting in for the second half of winter.

A Day in the Life of a NWS North Platte Meteorologist *By SAM MELTZER-METEOROLOGIST*

When I read our forecast discussion and looked at the Storm Prediction Center (SPC) outlook on May 26, it became clear that it would be a very active weather day. The SPC had the bullseye of a moderate severe weather outlook in our forecast area (western and north central Nebraska), which usually only occurs 1 to 2 times a year. This threat included an increased potential for significantly strong or long lasting tornadoes in the southern half of our forecast area as well. The forecast said that severe thunderstorms would fire along a stalled frontal boundary later that day. Sure enough, I was called in that morning to help out.

When I walked in the door around 9:00 AM, the day shift was already very busy. They were setting up a live webinar to brief our partners about the storm potential for the day, commonly done on days with a very serious severe weather outlook. It allows our partners to get the most recent forecast directly from our office and the opportunity to ask questions to our forecasters. While they handled that, I took care of the everyday tasks we have to do whether there is severe weather or not, such as sending out daily observations, issuing the Hazardous Weather Outlook, and updating the aviation forecast.

Not too much later that morning, signs of activity began to appear on satellite and radar. Because storms were expected to impact our entire forecast area, the two day shift meteorologists split the forecast area in half, and each of them would watch the radar in their perspective area and issue warnings as necessary. Meanwhile, I posted weather updates to social media and called weather spotters. Spotter reports help verify warnings and give the radar operator more information on what storms are doing on the ground. Here in North Platte, it was also the day of the Nebraska high school golf championship. As part of our decision support to partner agencies, we were asked to notify them if lightning will strike within 20 miles of the golf course. One of the meteorologists was constantly on the phone with the athletic manager in charge of the event, letting him know where the storms were and whether they posed a threat to the golf tournament. Sure enough, lightning did get close to the golf course, which was vital safety information for the golfers.

Additional staff arrived to the office to help out as the afternoon wore on and the situation intensified. Our Science and Operations Officer came in and helped out with Mesoanalysis. This involves taking a closer look at meteorological factors across the region to see how favorable the environment is for storm development. (continued on next page)

A Day in the Life of a NWS North Platte Meteorologist (CONTINUED)

When the afternoon shift arrived, the day shift remained to help as storms intensified, posing threats for flash flooding, hail, wind, and tornadoes. After collaboration with the Storm Prediction Center (SPC), they issued a Tornado Watch in the afternoon for our southwest counties, which included Imperial, Ogallala, and North Platte. I was still taking phone calls and got a call from a local radio station asking for a live on-air interview about the storms headed towards North Platte. I was happy to help out and talked about where the storms were currently, where they were going, and what threats they posed to people in their path. This was my first live radio interview since starting with the NWS!

Usually our office launches weather balloons twice a day – once in the morning at 7:00 AM, and once in the evening at 7:00 PM CDT. Sometimes on severe weather days, we will perform an additional launch in the afternoon to feed more data into computer models, which improves their performance. Given the precarious environment that day, we launched not one, but two additional launches at 1:00 PM and 4:00 PM CDT that afternoon. In addition to these two extra balloon launches, I also did the regular balloon launch that evening, making a total of three launches in a row for me that afternoon. As far as we knew, that was an office record!

After a long day, the day shift went home and the evening shift took over the radar. Another meteorologist arrived to help out along with our Observation Program Leader, who just got back from working on a co-op site across the state. They helped handle the uptick in storms at that time. Storms continued to develop in our area to the east, prompting a severe thunderstorm watch for our eastern counties and into Hastings' and Omaha's forecast area. By the evening I had been at work for a long time and went home after a busy day. The remaining staff dealt with storms well into the night.

In total, the North Platte office issued 14 severe thunderstorm warnings, three tornado warnings, and two flash flood warnings. It turns out there were no confirmed tornadoes in our forecast area that day; the front stalled out well to our south and severe thunderstorms produced tornadoes in Kansas. However, we did get reports of baseball sized hail and 60 mph winds. Nonetheless, our office worked as a team and was ready to face whatever was thrown at us that day.



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

<http://www.weather.gov/northplatte>