



The High Plains Drifter

Recreation Forecast By Bill Taylor-Meteorologist

**NATIONAL WEATHER SERVICE
NORTH PLATTE, NE**

Heading out to the lake this summer? There are many lakes and reservoirs across western and north central Nebraska that make for good fishing, boating and other recreational activities. The National Weather Service in North Platte issues a specific forecast for the larger lakes and reservoirs: which include Calamus, Merritt, Sutherland, Jeffery, Enders, Hugh Butler Lake (Red Willow Dam), Harry Strunk Lake (Medicine Creek Dam), Lake Maloney and Lake McConaughy.



Photo Courtesy of Dody Madson

The forecast information includes expected weather, wind, temperature and wave action. The forecast can be found at (weather.gov/lbf/recreationforecast) or navigate to the bottom of our home page (weather.gov/lbf) under forecasts and click on recreation forecast.

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

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Recreational Forecast – Western and North Central Nebraska

HEAT SAFETY

BY SHAWN JACOBS—WARNING COORDINATION METEOROLOGIST

As we venture into the “dog days” of summer, here are a few heat safety tips to keep in mind.

- Never leave a child, disabled person or a pet locked in car. It is not safe, not for one minute, even during the coldest months of winter. Temperatures in motor vehicles can heat quickly when left in the sun and death in humans can occur in less than 10 minutes. A reported 51 pediatric vehicular heatstroke deaths occurred in 2019. Children locked in cars have died during 70 degree weather in December. Never leave a child locked in a car!
- During extremely hot and humid weather, your body's ability to cool itself is challenged. When the body heats too rapidly to cool itself properly, or when too much fluid or salt is lost through dehydration or sweating, body temperature rises and you or someone you care about may experience a heat-related illness.
- Slow down: reduce, eliminate or reschedule strenuous activities until the coolest time of the day. Children, seniors and anyone with health problems should stay in the coolest available place, not necessarily indoors.
- Dress for summer. Wear lightweight, loose fitting, light-colored clothing to reflect heat and sunlight.
- Eat light, cool, easy-to-digest foods such as fruit or salads. If you pack food, put it in a cooler or carry an ice pack. Don't leave it sitting in the sun. Meats and dairy products can spoil quickly in hot weather.
- Drink plenty of water (not very cold), non-alcoholic and decaffeinated fluids, even if you don't feel thirsty. If you on a fluid restrictive diet or have a problem with fluid retention, consult a physician before increasing consumption of fluids.
- Use air conditioners or spend time in air-conditioned locations or use portable electric fans to exhaust hot air from rooms or draw in cooler air.

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HEAT SAFETY CONTINUED

- Minimize direct exposure to the sun. Sunburn reduces your body's ability to dissipate heat.
- Check on older, sick, or frail people who may need help responding to the heat.
- For more heat health tips, go to the [Centers for Disease Control and Prevention](#)

The National Weather Service in North Platte issues the following heat-related products as conditions warrant.

Excessive Heat Warning—Take Action! An Excessive Heat Warning is issued within 12 hours of the onset of extremely dangerous heat conditions. The general rule of thumb for this Warning is when the maximum heat index temperature is expected to be 105° or higher and the minimum heat index is above 75° for a minimum of 48 hours. If you don't take precautions immediately when conditions are extreme, you may become seriously ill or even die.

Excessive Heat Watches—Be Prepared! Heat watches are issued when conditions are favorable for an excessive heat event in the next 24 to 72 hours. A Watch is used when the risk of a heat wave has increased but its occurrence and timing is still uncertain.

Heat Advisory—Take Action! A Heat Advisory is issued within 12 hours of the onset of extremely dangerous heat conditions. The general rule of thumb for this Advisory is when the maximum heat index temperature is expected to be 100° or higher. Take precautions to avoid heat illness. If you don't take precautions, you may become seriously ill or even die.

SCIENCE CORNER - USING SATELLITES FOR WEATHER FORECASTING

BY JOHN STOPPKOTTE—SCIENCE AND OPERATIONS METEOROLOGIST

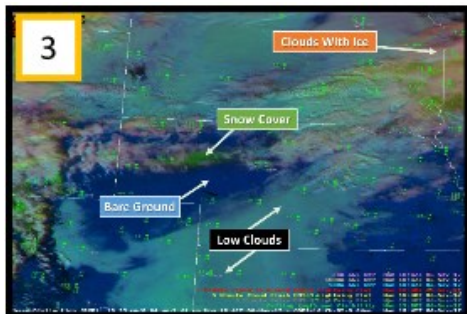
NOAA's Geostationary Operational Environmental Satellites (or GOES for short; [image 1](#)) are designed to orbit the earth, maintaining its position over a "fixed" spot on earth (geostationary) at an altitude of 22,236 miles above the earth. This really means that the satellite's orbit matches that of the Earth's rotation. This allows continuous coverage of primarily the Earth's western hemisphere, although the satellite can view the entire earth as well from that altitude.



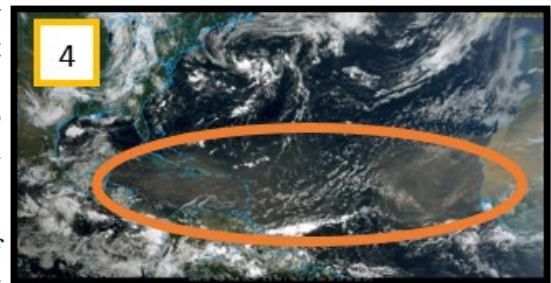
The GOES-R series is the most advanced fleet of weather satellites in the nation, helping to provide real-time imagery and measurements of the Earth's atmosphere and oceans, while also having instruments on-board to detect lightning activity and more. GOES-R was launched on November 19, 2016 and after a testing phase was moved to a position along the equator at 75.2° W longitude (now known as GOES-East). Its sister satellite, GOES-S, was launched on March 1st, 2018 and sits at 137.2° W longitude over the Pacific Ocean (see [image 2](#)) and is known as GOES-West.



Although radars give NWS forecasters a detailed look inside the precipitation systems affecting western and north central NE, GOES satellites provide a much more vast look at the environment through associated applications designed to emphasize all of the remote sensing abilities of the satellite, forecasters can understand more about developing weather systems, including very early detection of developing thunderstorms as satellite data during some events are transmitted every minute! In addition, manipulation of the data via adaptation of color enhancements designed to highlight certain features can allow forecasters to spot new fire starts, as well as understand even the microphysical aspects of the clouds themselves.



In [image 3](#) is a single image from GOES-East from November 6, 2017. Through use of color enhancement designed to highlight certain wavelengths that the satellite scans at, forecasters can interpret many things. In this example, a large part of western NE is seen to have bare ground which shows up as a blue color, while areas just to the north of that have a layer of snow cover, which shows up as green due to the highly reflective nature of snow. From central NE into northwest KS, low clouds are seen which, in this case, are likely made up of water and not ice. Meanwhile further north into eastern SD and western MN, the brighter orange and greenish colors tell us these are clouds higher in the atmosphere because they *do* contain ice. Then in [image 4](#), another satellite enhancement is designed to show areas of fine sand in the atmosphere from the Saharan Desert moving across the Atlantic Ocean (reddish-brown color).



So the next time you look up at a cloud, know the GOES satellites are keeping track too, from 22,000 miles above!

NOAA WEATHER RADIO

By JACLYN GOMEZ

Did you know every year the state of Nebraska declares a day in late Spring or early Summer as NOAA Weather Radio All Hazards Awareness Day? This year the date was June 1st. On this day we remind all Nebraskan's that NOAA Weather radios are a key component to the warning process and provides audible warning information specific to your locations.

NOAA weather radios are similar to smoke detectors. They are silently monitoring at all times, but are ready to rapidly provide warning information direct from the source when hazardous weather conditions or other hazards pose a threat to life and property. During severe weather, National Weather Service personnel can interrupt routine weather broadcasts and insert warning messages concerning immediate threats to life and property. Most receivers are equipped with Specific Area Message Encoding (SAME) technology which allows listeners to choose a specific county and what events their radio will sound an alarm for when official NWS watches and warnings are used.

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 (terrorist attacks). 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.

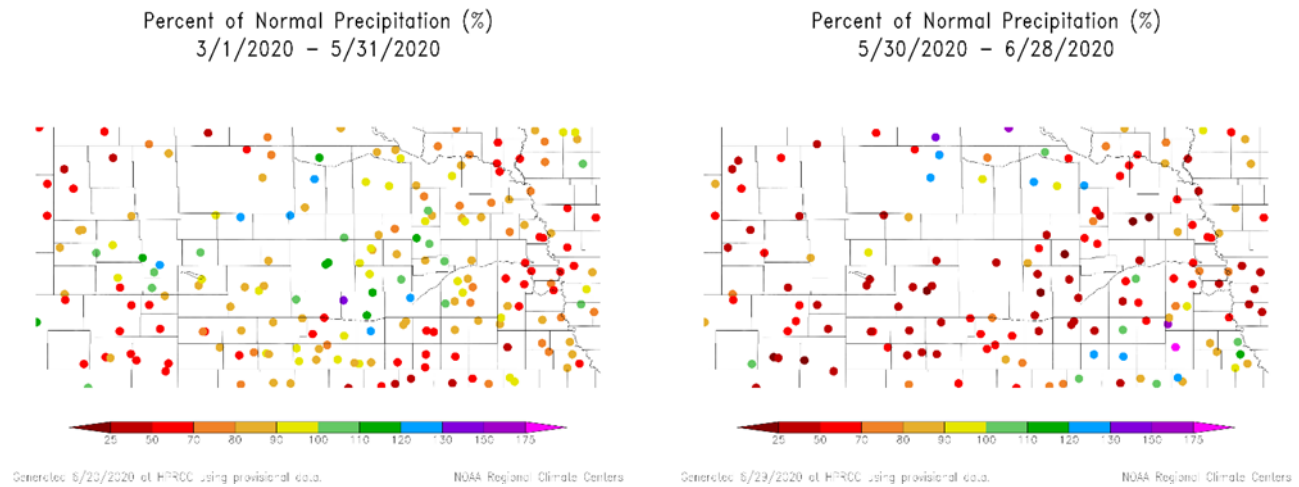
For more information please visit the National Weather Service's NOAA Weather Radio All Hazards web site: <http://www.nws.noaa.gov/nwr>



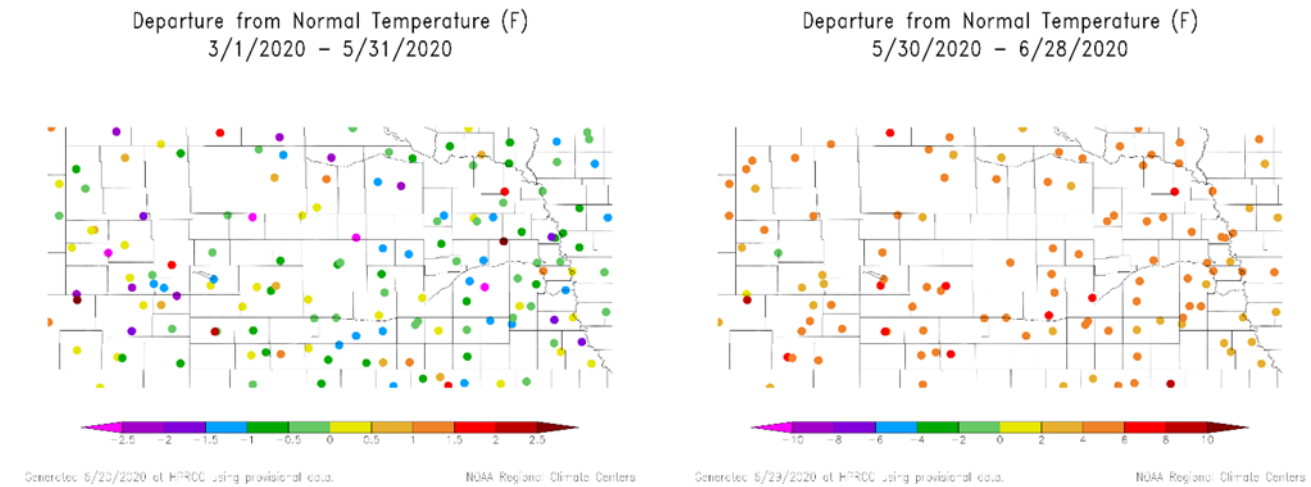
WET & MILD SPRING GIVES WAY TO HOT & DRY START TO SUMMER

By Darren Snively—Senior Forecaster

Spring 2020 (March to May) featured near normal precipitation across the Sandhills, with the wettest locations generally stretching from Oshkosh to Bassett. These totals were anchored by a very wet March and May. Far northwest and far southwest Nebraska were somewhat drier, receiving around 70-80% of normal precipitation. However, as soon as June started, much of the moisture shut off. Through June 28th, southwest Nebraska and the southern Sandhills struggled to receive half of its normal monthly rainfall. Decent moisture was hit-and-miss across the north, with parts of Cherry and Holt Counties recording bouts of torrential rainfall, while areas in between dried out.



A similar pattern was followed with temperature, where much of the region remained fairly cool over the course of Spring. March was unseasonably warm, while April and May were generally 2 to 4 degrees below normal. June marked the beginning of Summer, and it sure felt like it. Through the 28th, North Platte reached 90 degrees 17 days, while the “normal” June features 6 days of 90+. Most of the Sandhills and southwest Nebraska were at least 4 degrees above normal throughout the month.



EMPLOYEE SPOTLIGHT

NEW METEOROLOGISTS



Caleb Brown-Growing up in Missouri led to no shortage of weather events to get me hooked at an early age. In 2006, a tornado narrowly missed my hometown and I've been obsessed with weather ever since. I attended the University of Missouri and graduated with my degree in Meteorology in May of 2019. During my time at Mizzou, I was the leader of the storm chase team, did research on long range severe weather forecasting, and led a group of forecasters on the campus weather service. Through college, I worked for the Missouri Mesonet helping to grow and maintain weather stations throughout the state of Missouri. I also spent six months volunteering with the National Weather Service in St. Louis. In my time there, I attended outreach events, worked along forecasters, and did research on large hail and damaging winds. It was during my time volunteering that I decided that working for the NWS was what I wanted to do! I find going to outreach events and meeting the public and our partners extremely rewarding. In my free time, I enjoy photography, storm chasing, watching and playing sports, and hanging out with family and friends.



Sam Meltzer-I've been interested in weather since I was in grade school. Growing up in Phoenix, Arizona, my favorite time of year for weather events was monsoon season. It was exciting for me to watch rain drench the usually dry desert, follow the storms on television radar, and see walls of dust move into the city.

I started at Arizona State University as a geography major. After taking an introductory meteorology class and speaking with professors, however, I changed my major to meteorology. I had opportunities as an ASU meteorology student to work on weather research projects, mostly related to urban heat and its impact on people. I also volunteered with the National Weather Service in Phoenix during the monsoon. It was there that I got my first opportunity to meet NWS meteorologists and observe from the inside their work at a weather office. I launched weather balloons while I was there and reached out to weather spotters. I also worked with the meteorologists on a project looking at the radar signatures of dust storms, which I later presented at the national AMS conference that was held that year in Phoenix. My first job after receiving my degree in the spring of 2019 was as a radar meteorologist for a summer cloud seeding project run by the State of North Dakota. At the end of that summer I returned to ASU for a master's degree in GIS. I'll be graduating in August!



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

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