

NORTHLAND WRN AMBASSADORS

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Issue 7



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It's time to get prepared for autumnal weather hazards.

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OCTOBER GALES

A strong fall storm brought strong winds, heavy rain and flooding October 21st 2017 A review on p. 3

WIND SAFETY



Wind is a common hazard in the Northland during the fall, most strongly affecting Lake Superior and nearby land areas. Even the most common items become dangerous objects when picked up and carried by the wind! When high winds are forecast, secure outdoor items such as patio furniture, sports equipment and trash cans. High winds can also make driving dangerous. For more information about high wind, visit: weather.gov/safety/wind-during

FIRST SNOWFALL STATISTICS!

	First Measurable (0.1") Earliest – Average - Latest			First 1" Earliest – Average - Latest		
Duluth	9/18/1991 (2.4")	10/24	11/26/2004 (0.6")	9/18/1991 (2.4")	11/4	12/5/2008 (1.1")
International Falls	9/14/1964 (0.3")	10/20	12/8/1999 (0.3")	9/26/1951 (1.0")	11/1	12/26/1999 (1.0")

FIRST SNOWFALL: COMING SOON!

Our first snowfall of the fall and upcoming winter season has already fallen for the region as of mid October. Whether that seems early- or late- to you, here's a look at the climatology of the first snowfall: The earliest measurable snowfalls (0.1" or greater) were recorded in mid-September at both Duluth and International Falls. The average first measurable snowfall usually occurs in mid-to-late October, followed by the average first 1 inch of snow in early November. (It was early for that much snow!) The latest first 1 inch of snow recorded are in December for both Duluth and International Falls.

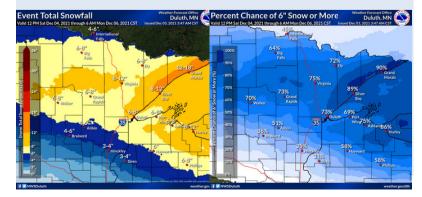
The main factors that control the first day of snowfall are the same main factors that control other major climate characteristics: latitude and altitude. In general, the farther north, and the higher in elevation, the earlier the threat of first snow. Around the Great Lakes, proximity to the lake can have an effect too. The first frigid winds of autumn can pick up a lot of moisture from the still relatively warm lake. This can result in a rather rude and early introduction to winter precipitation. Typically this affects the southern shores, but can also be found along Lake Superior's North Shore. The lake can sometimes keep locations closer to the lake warmer, with snowfall occurring farther inland and rain falling closer to the lake.

PROBABILISTIC SNOWFALL FORECASTS

Did you know that NWS Duluth produces probabilistic snowfall forecasts as well as our usual "expected" snowfall forecasts and graphics? These are experimental probabilistic snowfall products to provide a range of snowfall possibilities, in complement to existing NWS snowfall graphics, to better communicate forecast uncertainties during winter weather events. These forecasts include a most likely storm total snowfall forecast, as well as a reasonable lower-end and upper end snowfall amount for the time period shown on the graphic, based on many computer model simulations of possible snowfall totals.

In addition to the low end, high end, and expected snowfall amount graphics, graphics showing the chance of seeing more snow than specified snowfall amounts, including >0.1, 1, 2, 4, 6, 8, 12 and 18" are created.

For more information and to see these snowfall forecasts, visit: weather.gov/dlh/winter



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Visit
https://www.weather.gov/wrn/gall-safety

for useful autumnal safety information you can share on social media, website or to print out and share with your visitors!

REMEMBER WHEN: THE GALES OF NOVEMBER CAME IN OCTOBER?

Do you remember October 21st 2019? We certainly do! An intense area of low pressure approached northern Minnesota through the day on Monday, October 21st 2019, producing increasingly strong east to northeast winds over much of northern Minnesota and Wisconsin. The winds increased through the day, and were especially strong coming off Lake Superior into the Twin Ports area.

Peak wind speeds exceeded 70 MPH at some of the bridges and waves caused damage along many of the lake shore areas. The strong winds knocked down trees and power lines down leading to widespread power outages.



The Duluth Water Level Observation Station located in the Duluth harbor operated by NOAA's National Ocean Service, broke an all-time record at 604.75' topping the previous record of 604.42' recorded in 1985. Other unique impacts included:

- Access to the Park Point neighborhood in Duluth was limited to all but emergency vehicles for a period of time that evening.
- Winds gusted to 61 mph at the Duluth International Airport (KDLH) with a peak gust of 74 mph recorded on the Blatnik Bridge in the Twin Ports.
- Fairly widespread rains of 1 to over 3 inches of rain fell leading to some ponding, localized flooding, and rises on area rivers.

This was the fourth storm in two years to have a significant impact upon the Twin Ports, but strong winds and significant rainfall were reported across a large portion of northern Minnesota and Wisconsin. The first of these storms, in October 2017, was the one that infamously damaged Duluth's Lakewalk. Damage from these storms was made worse due to unusually high lake levels. A more <u>complete storm summary</u> is available on our website!

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Welcome to our new Ambassadors!

- Grandma's Marathon
- Minnesota DNR Law Enforcement Aviation
- City of Breezy Point Police Department

WEATHER READY NATION AMBASSADORS

The National Weather Service office in Duluth, Minnesota is calling on community organizations and agencies to become Weather-Ready Nation (WRN) Ambassadors. WRN Ambassadors help in spreading WRN messages and building community resilience to extreme weather. Building a Weather-Ready Nation requires more than just the National Weather Service. It requires the entire community, its government, organizations and businesses to provide information for better decision making, and innovative partnerships across all segments of society. We must involve everyone in an effort to move people - and society - toward heeding warnings, taking action, and influencing their circles of family, friends, and social network to act appropriately.

As a WRN Ambassador, you will serve as a leader in your community. You will inspire others to be better informed and prepared, helping to minimize or even avoid the impacts of these natural disasters.

To officially be recognized as a WRN Ambassador, an organization must commit to:

- Promoting Weather-Ready Nation messages and themes to their stakeholders;
- Engaging with National Weather Service Duluth personnel on potential collaboration opportunities;
- Sharing their success stories of preparedness and resiliency;
- Serving as an example by educating employees on workplace preparedness.

Together, we will inform and empower communities, businesses, and people to make pre-event decisions that can be life-saving and prevent or limit devastating economic losses. We are a nation of many communities, and it is only through connected communities that we will achieve this goal.

To apply to become a WRN Ambassador, visit https://www.weather.gov/wrn/amb-tou

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