

The Lake Breeze

NATIONAL WEATHER SERVICE BUFFALO, NY
FORECAST OFFICE

Photo Credit: Liz Jurkowski



Photo Credit: Judy Levan

KTYX Pedestal Replacement
on October 7, 2021

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Volume 4, Issue 2

Fall 2021

A Note from the Meteorologist in Charge

By Judy Levan

October! It's a month of change. At the office, we're shifting our mindset from summer convective weather to winter storms. For me as a supervisor, it's a month of performance reviews with the staff. And as I reflect on all the amazing things that have been accomplished this past year, I wanted to make sure you know there's a whole team of folks that allow us to fulfill our mission.

You might first think of the forecasters. 24/7 there are meteorologists maintaining a constant weather watch, making forecasts and, if needed, issuing headlines. The forecasters all work rotating shifts to ensure that coverage -- weekends, holidays, midnight shifts!

But there are other folks on the team that support those forecasters. I had a previous supervisor whose saying was "good forecasts start with good observations". Operationally, our Observation Program Leader maintains our Cooperative Observer program, ensures the forecasters are certified to launch weather balloons, and oversees the quality of our climatological records and database.

There's a team of electronics technicians that maintain the equipment that "observes" our weather. Whether it's radar, upper air, surface observations or hydrologic gages, there's preventive maintenance and upgrades and of course, repair of failed systems.

As you can probably imagine, the office is heavily dependent on computers and technology. Our Electronics System Analyst and our Information Technology Officer, manage our information technology and systems -- updates, backups, and cybersecurity.

And, as you would expect in a government office, there's a bunch of administrative duties too. Our Administrative Support Assistant dots the i's and crosses the t's on the government paperwork. She not only pays the bills to keep the lights on, but ensures our spending, property, and purchases are all done in accordance with Federal Regulations.

So the next time you hear a weather forecast and you think of the forecaster, I ask that you also remember the folks that make those forecasts possible. I'm very proud to have these twenty-one people, all doing their individual parts but working as a team, ensuring that the people of western and north-central New York have accurate forecasts and are forewarned of adverse weather.

Be prepared! Be safe!



Meet the Observer—Jeff Slowik, COOP Observer, Macedon, NY

By Dan Kelly

Jeff Slowik is from Rochester, NY, and moved to Fairport, NY after getting married. After college, his career took off at the Van Lare Wastewater Treatment Plant near Irondequoit, NY, where one of his duties was to calibrate and maintain the plant wind instrumentation. Jeff remembers explaining to others that the wind does come from due north at times. It's not always from the northwest! After 16.5 years, Mr. Slowik returned to school and realized he was a much better student the second time around. He earned a certificate in telecommunications, and began working for Frontier Communications. Verizon took over Frontier which resulted in many layoffs including Jeff. Fortunately, soon after the layoff, he found a seasonal Lift Bridge Operator position with the NY State Canal Corporation in Fairport in 2004. This led to a lock operator position at Lock 30 in Macedon where he began taking precipitation observations as a Cooperative Observer. After about 8 years, Mr. Slowik was promoted Chief Lock Operator which meant he rotated through several locks in the section. In 2013, Jeff became the Chief Lock Operator at Lock 30 in Macedon. The Chief Lock Operator involves greasing the gears and mowing the lawn, in addition to operating the locks. Winters are spent cleaning, polishing, painting and rebuilding motors and other electrical and mechanical components of the lock to preserve the historic equipment. Jeff also maintains a campground near the lock to accommodate campers and bikers of the newly opened Erie Canalway Trail.

About 2 to 3 years ago, while working in the upper “dog house” (upstream control house of the Lock), Jeff remembers a thunderstorm nearby. Therefore he backed away from the metal lock controls for safety. He looked over at the control cabinet and saw a white glowing orb no larger than the size of a quarter. This ball floated for a bit, then popped and vanished. This was quickly followed by a loud “blast” of thunder and a shock wave!



Just west of Lock 30 in Macedon is one of the few locations where the original Erie Canal (seen to the right of the red platform on the opposite bank), the Enlarged Erie Canal (left side of the picture) and the present Erie Canal (right side of the picture) can all be seen at the same location.



Jeff Slowik, Cooperative Observer at Macedon, and also the Chief Lock Operator at the Erie Canal Lock 30, stands next to some of the tools used to maintain the historic lock.

Jeff lives in Fairport with his wife. His two daughters are both Clinical Psychologists! One of his favorite hobbies is to tinker. He said that he has “blown up more stuff than most people have fixed. That’s half the fun!”

Mr. Slowik carries on a long tradition of precipitation observations at Lock 30 in Macedon. Precipitation records for Lock 30 in Macedon (as well as Lock 28B in Newark and Lock 26 near Clyde) date back to May 1, 1918, around the opening of the Erie Barge Canal! Temperature equipment was recently installed in Macedon to fill a data void in the temperature observing network. Lock 30 was built by General Electric of Schenectady, NY and opened for service in 1914. The lock continues to operate to this day with the original 1914 equipment because of the the skillful and meticulous maintenance of Jeff and many other Lock Operators and Chief Lock Operators. The Lock was originally powered by 240V DC power coming from a generator at Lock 29 in Palmyra, NY. It was then switched to commercial power however a motor and generator were used in tandem to convert from AC to DC power.

(continued next page)

Meet the Observer (continued)

At this time, a rectifier converts the power for the canal lock.

The original Erie Canal, known as “Clinton’s Ditch”, was started in 1817, and completed in 1825. It was enlarged in the mid 1800s and passes about 400 feet south of the present lock site.

Winter Weather Awareness Week

By Mike Fries

Each year, the National Weather Service has awareness weeks during which we share safety information for specific upcoming hazardous weather seasons. We do this in advance of severe thunderstorm/tornado season, boating season, and hurricane season during the warmer months. As the calendar moves later in the year, the days shorten, and the first flakes of the year flutter from the sky, our awareness week calendar moves to winter weather. This year, National Weather Service offices in New York are recognizing the week of October 31 to November 6 as Winter Weather Awareness Week.

As with the other awareness weeks, each day during the week will feature different information about weather threats during the cold season, safety information for the cold season, and our winter weather products. These messages are all in concert with the [Winter Safety Campaign](#) of the [Weather Ready Nation Program](#). Our location in the country makes our region especially vulnerable to almost every weather threat in the winter from heavy snow and snow squalls to ice storms and ice jam flooding.

The messages our office delivers during Winter Weather Awareness Week will be primarily delivered through our social media feeds on [Facebook](#) and [Twitter](#). We encourage you to share these with your family, friends, customers, clients, and the like widely. Additionally, to ensure that you get information in advance of each of the safety campaigns the National Weather Service has throughout the year, you are encouraged to sign up your local groups, businesses, schools, churches, and other local organizations for the [Weather Ready Nation Ambassador Program](#). Safety information is shared seasonally with all Weather Ready Nation Ambassadors, and once you are signed up for this program, you are free to use all of that information on your social media feeds and websites. Sharing this information widely helps to build a nation that is prepared for and responds to dangerous weather conditions throughout the year, and the help of all our Ambassadors ensures the success of each of our safety campaigns. If you have more questions about this program, please contact our Warning Coordination Meteorologist, Michael Fries, at michael.j.fries@noaa.gov.

 <h3>Blizzard Warning</h3> <p>Severe winter weather is expected within the next 12 to 36 hours or is occurring -- including whiteout conditions. Do not travel.</p> <p>take action.</p>	 <h3>Winter Storm Warning</h3> <p>Dangerous winter weather is expected within the next 12 to 36 hours or is occurring. Considerable travel problems are expected.</p> <p>take action.</p>	 <h3>Winter Weather Advisory</h3> <p>Potentially dangerous winter weather is expected within the next 12 to 36 hours or is occurring. Travel difficulties are expected.</p> <p>be aware.</p> 
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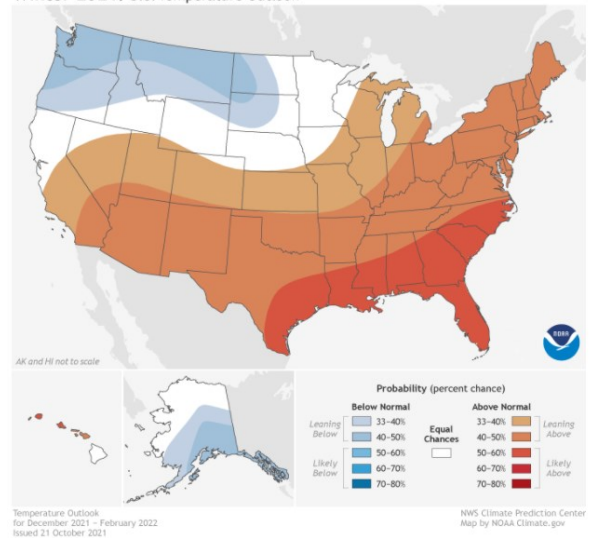
Winter Seasonal Outlook 2021-2022

By David Thomas

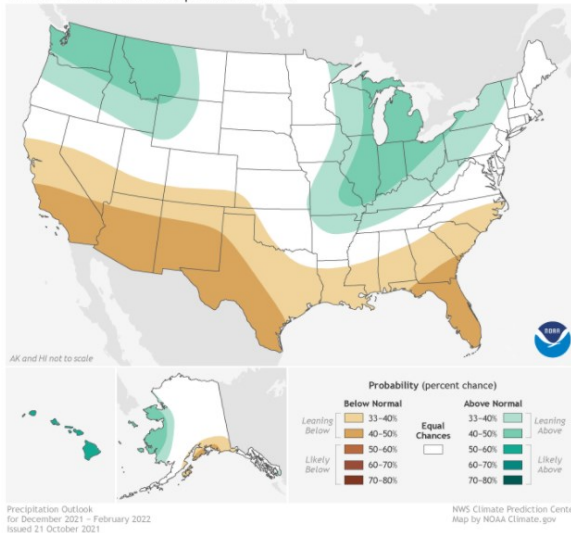
Cooler air is upon us after a mild start to autumn. It's time to look at the winter outlook. The Climate Prediction Center, part of the National Oceanic and Atmospheric Administration (NOAA) released this forecast in late October 2021.

One of the driving forces for this winter season is the phenomena of La Niña, which is the counterpart of El Niño of which both make up the El Niño Southern Oscillation (ENSO) cycle. La Niña is the pooling of cooler ocean waters near western South America and warmer waters sliding towards Indonesia. When this happens, the change in tropical rainfall patterns affect weather patterns throughout the world, including the jet stream across North America. These effects are usually strongest during the winter months. One of the driving forces influencing the large scale circulation pattern last winter was La Nina. Last winter, 2020-2021, featured moderate temperatures through the winter season. There was no severe cold last season as the lowest minimum temperature for many of our climate stations ranked high on being least severe for cold. Though all of our climate locations registered below normal snowfall, we did end up with 9 lake effect snow events, which is close to normal. As we have seen in past winters, just because temperatures average above normal does not mean winter's lake effect snow cannot still be active.

Winter 2021: U.S. Temperature Outlook



Winter 2021: U.S. Precipitation Outlook



The official 2021-2022 winter forecast has above normal temperatures favored for the Eastern Great Lakes region for the meteorological winter months of December, January and February. This forecast is the first winter outlook using the new 1991-2020 climate normals, which are slightly warmer than the previous 1981-2010 period.

Precipitation is also favored to be above normal this winter. Precipitation includes frozen and non-frozen precipitation including snow, rain, sleet and freezing rain. This will be the second consecutive La Nina winter. There has been back to back La Nina winters before, in fact there have been two instances of three consecutive La Niña winters. Since 1950 there have been 8 winter periods with consecutive La Niña events (consisting of either 2 or 3 consecutive La Niña's over the winter months). Local office research has found most of the winters that featured consecutive La Niña events struggled to produce below normal snowfall in both consecutive

seasons. This might not be great news for snow lovers however there are many other phenomena that influence our winter seasonal snowfall, including the North American Oscillation, Arctic Oscillation, the placement of the North American ridge and trough axes, and just climate variability of which all are difficult to forecast more than a few weeks out and make it hard to forecast snowfall with any certainty.

Regardless of how much snow falls, we know it will snow and now would be a good time to prepare for the upcoming winter including: dusting off those gloves, boots and hats, getting snow removal equipment ready to use, and preparing an emergency winter car kit.



Q & A with NWS Buffalo - Jon Hitchcock, Meteorologist

How and when did you become interested in meteorology?

I became interested in the weather and meteorology in middle school, which is a little later than many meteorologists. I have always enjoyed being outside, including golf, hiking, fishing, and playing outdoor sports with neighborhood friends when I was growing up. I started looking at the weather on a daily basis since I was always outside, and became hooked on meteorology by the time I was in eighth grade. Lake effect snow in the winter and thunderstorms in the summer cemented my interest in meteorology, and I decided early in high school that meteorology was my dream career.

Describe the path leading up to your job at NWS Buffalo, NY?

I attended college at SUNY Oswego, earning a Bachelor of Science degree in Meteorology. I was a volunteer student intern at the National Weather Service in Buffalo for 3 summers during my time in college, which was instrumental in gaining experience beyond the college classroom.

I accepted an entry level position at the National Weather Service in North Webster, Indiana in February 2003 shortly after finishing my degree at Oswego. I was both excited and apprehensive, having accepted a job in a state I had never even been to! I was promoted to forecaster on station in 2004. Living and working in Indiana was a great experience both professionally and personally. Severe convective weather in the warmer summer months was far more common than here in Western NY, which gave me invaluable experience. We still had a taste of lake effect snow to deal with as well off the southern end of Lake Michigan.

After 4 years in Indiana, I was fortunate enough to be selected for a forecaster position in my hometown at the National Weather Service in Buffalo in late January 2007. I was promoted to Senior Forecaster in the fall of 2011, and have been in that position ever since.

What is your favorite part about your job?

I most enjoy trying to put together the puzzle of meteorology each day to successfully forecast the weather. I would describe the forecast process in layman's terms as trying to put together a 1000 piece jigsaw puzzle with only 800 of the pieces. Most of the time we can provide an accurate forecast based on the meteorological pieces we can see, but there are features and processes in the atmosphere that are too small to observe or forecast that can occasionally have a big influence on the weather and change the overall picture.

Forecasting in the lee of the Great Lakes is a huge challenge, and keeps every day exciting. Our incredible lake effect snow events are the most obvious, but the lakes also modulate temperatures on a daily basis, and have a profound impact on summertime thunderstorms as well.

What is the one weather event that stands out to you?

The event that stands out the most is the November 2014 lake effect snow event. Some areas in the Buffalo Southtowns received 6 feet of snow from November 17 to 21, with snowfall rates of over 5" per hour at times. This early season lake effect event brought transportation to a standstill for several days across central Erie County. Our forecast for this event was excellent, we had 5 feet of snow in the forecast before the first flake fell. To my knowledge, that is the most snow we have ever put in the forecast prior to the start of a lake effect snow event.



Jon Hitchcock with an Adirondack Guideboat built by his father.

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Q&A with NWS Buffalo (continued)

I can't pass up mentioning a summer severe weather event as well. My first summer in Indiana, a widespread severe weather event struck on July 4th, 2003. The office issued 65 Severe Thunderstorm Warnings and several Tornado and Flash Flood Warnings in one day! I ended up working 16 hours that day, and it was by far the most widespread severe weather event I have experienced.

Tell us something most people don't know about you.

I am an avid golfer, and have been playing since I was about 5 years old. I compete in several tournaments each year locally, and also play in the annual National Weather Service Golf Association tournament each summer. The NWS Golf tournament has been around for a long time, in 2022 we will celebrate the 50th year of the event. This year I won the NWS Golf Tournament for the 11th time, setting a new record for the most number of wins. The champion each year takes home the very large travelling trophy. Rumor has it the trophy was in south Florida when Hurricane Andrew struck in 1992.

What advice would you give people interested in meteorology?

If you are interested in a career in meteorology, take as much science and math as you can in school. A meteorology degree is rigorous, with a similar course load in math to an engineering degree. I actually took enough math credits in college to qualify for a mathematics minor. Be aware that most careers in meteorology will require working strange hours, weekends, and holidays. The weather never sleeps, so neither do we!

NEW! From the Vault—1880

By Heather Kenyon

Weather observations have been documented for centuries in the eastern Great Lakes region. The weather station in Buffalo, NY is one of the original 24 offices that began the weather agency in 1870. Residents and visitors to the region witness interesting weather and a large reason is the proximity to Lake Erie and Lake Ontario. As part of a new series in The Lake Breeze Newsletter, we are going back in time to highlight weather events in a specific year. In this issue, we will go back to **1880** in Buffalo, NY. Many observations were archived in capitalization which is why the below observations are in all CAPS. Let the journey begin...

April 10, 1880– HIGH WATER

WATER IN THE LAKE RAISED 6 FEET AND WAS REPORTED HIGHER THAN FOR THE PAST 20 YEARS. IT DID CONSIDERABLE DAMAGE ALONG THE WHARVES AND CANALS. NYC RAILROAD WAS WASHED OUT ALONG THE LAKE FRONT AND A LOCAL TRAIN RAN INTO THE WASHOUT AND WRECKED. SOME FREIGHT CARS UNDERMINED AND TOPPLED IN THE LAKE FROM TRACK ALSO. FIFTY FOOT CHIMNEY BLOWN DOWN. A PROPELLER AND SCHOONER LEFT DURING THE DAY AND WERE DRIVEN BACK TO THE HARBOR. CONSIDERABLE DAMAGE WAS ALSO DONE TO BOATS, BOATHOUSES, AND OTHER STRUCTURES NEAR THE LAKE.

December 29, 1880– HEAVY SNOW STORM

HEAVY SNOW (AMOUNT UNKNOWN) CONTINUED ALL DAY WITHOUT INTERRUPTION AND BEING ACCOMPANIED WITH STRONG WINDS PRODUCED DRIFTS THAT HAVE ALMOST ENTIRELY STOPPED RAILROAD AND STREET CAR TRAVEL. EVERY RAILROAD RUNNING INTO THE CITY HAS BEEN OBLIGED TO EXTEND MORE THAN 12 OR 15 MILES OUTSIDE OF THE CITY. TRADE IN THE CITY HAS BEEN SERIOUSLY INTERFERED WITH AND ALL TRAVEL WAS SUSPENDED THROUGH THE 30TH.

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From the Vault (continued)

November 7, 1880– GALE

THE GALE CONTINUED WITH DESTRUCTIVE FURY UNTIL ITS ENDING AT 9:10PM. THE DAMAGE TO SHIPPING IS VERY GREAT. FOUR VESSELS WHICH HAD COME TO ANCHOR IN THE HARBOR LAST NIGHT DRAGGED THEIR ANCHORS AND WENT ASHORE. A LARGE NUMBER OF OTHER VESSELS WERE SERIOUSLY DAMAGED IN CANVAS AND SPARS. THE STEAM BARGE, B.W. JENNESS, WHICH WENT OUT AT 6 O'CLOCK YESTERDAY MORNING, WAS OBLIGED TO RETURN AFTER HAVING GONE ABOUT 80 MILES, HER TOW WAS BROKEN UP THE GALE THAT STRUCK HER AT 4PM 40 MILES ABOUT LONG POINT. SHE WAS OBLIGED TO LEAVE THREE BARGES TO TAKE CARE OF THEMSELVES. THE STEAM BARGE MILLS WITH A TOW ALSO GOT ROUGHLY HANDLED IN THE SAME VICINITY. MOST OF THE DAMAGE TO VESSELS OCCURRED TO THOSE WHICH LEFT PORT YESTERDAY. THE RIVER ROSE SEVERAL FEET ABOVE ITS ORDINARY LEVEL THIS MORNING, FLOODING THE HOUSES IN THE LOW GROUND NEAR IT AND DRIVING THE INHABITANTS OUT. A GOOD DEAL OF DAMAGE WAS DONE IN THE CITY. SIGNS WERE BLOWN DOWN AND MANY WINDOWS BROKEN. THE GALE REACHED ITS HEIGHT AT 5:10 THIS MORNING, 41 MPH FROM THE SOUTHWEST AND RECKONING FOR FIVE MINUTES, THE VELOCITY SOUTH WOULD BE 47 MPH. ITS AVERAGE VELOCITY FOR THE 12 HOURS AFTER ITS COMMENCEMENT WAS 34 MPH AND FOR THE WHOLE TIME IT LASTED OVER 29 MPH. THE TELEGRAPH LINES WERE SERIOUSLY DAMAGED. THE DOMINION TELEPHONE CO.'S WIRES WERE ALL DOWN SO THAT NO REPORTS FROM CANADA WERE RECEIVED IN THE MORNING AND ONLY TWO IN THE AFTER-NOON.

November 21, 1880– GALE

THE GALE, AFTER REACHING A MAXIMUM 30 MPH FROM THE WEST LAST NIGHT, CONTINUED UNTIL AFTER 4AM WHEN IT DECREASED TO FRESH AND LASTED SO UNTIL 9AM WHEN IT INCREASED AGAIN AND CONTINUED VERY SEVERE DURING THE AFTERNOON AND EARLY PART OF THE NIGHT ENDING AT 1:30PM BUT CONTINUED VERY BRISK ALL NIGHT. TEMPERATURE LOW AND FALLING RAPIDLY IN THE NIGHT. THE SCHOONER FALMOUTH VALUED AT \$10,000 WITH A CARGO OF 16,500 BUSHELS OF WHEAT STRUCK ON THE BREAKWATER ABOUT 4 O'CLOCK THIS MORNING AND WENT TO PIECES PROVING A TOTAL LOSS WITH THE CARGO. THE COOK, A WOMAN, WAS LOST. SEVERAL OTHER MORE OR LESS SERIOUS CASUALTIES OCCURRED TO SHIPPING IN THIS NEIGHBORHOOD.

NWS Buffalo Welcomes Two New StormReady Communities

By Mike Fries

In western New York, we are no strangers to severe weather in every season of the year, whether it be summertime thunderstorms, fall wind storms, winter blizzards, or spring floods. One specific way we work toward our agency's mission of protecting life and property to enhance the national economy through all seasons of severe weather is through the StormReady program. This program was originally designed to help provide the skills and education needed to survive severe weather before and after the weather occurs. Historically, we have done this by working through partnerships built with emergency managers and public safety officials due to the fact that, in normal times, emergency managers deal with weather-related disasters more than any type of disaster.

The National Weather Service provides early warning information for severe weather and flooding to emergency managers and public safety



Members of NWS Buffalo with the Genesee County Emergency Services Coordinator and Legislator

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StormReady (continued)

officials, and the StormReady program ensures those people have the skills and resources necessary to relay that critical life saving warning information to municipalities, schools, fire, police, and sometimes even a captive audience inside a large outdoor venue. In order for a community to be deemed StormReady, they are required to meet several requirements. These include: establishing a warning point and emergency operations center, having multiple ways to receive severe weather warnings in order to alert the public, creating a system that monitors local weather conditions, promoting the importance of public readiness through community education, and developing a formal hazardous weather plan.



Mike Fries, Warning Coordination Meteorologist with Buffalo Bills Operations and Security Staff

As a community applies to become StormReady, they work with the National Weather Service to ensure their procedures meet the requirements. The National Weather Service with our partners in the New York State Department of Homeland Security and Emergency Services or individual county emergency management offices then visit the site for verification of the information on their application. Each application is then reviewed by management at every NWS office in the state before any community is certified as StormReady.

We are happy to announce that in the last month, both Genesee County and the Buffalo Bills at Highmark Stadium have been formally recognized as StormReady! You can view all of the StormReady communities in New York at <https://www.weather.gov/stormready/ny-sr>. Additionally, more information on the StormReady program can be found at

NOAA SciJinks– It's all about weather!

By Judy Levan

Have you heard about Scijinks?

NOAA SciJinks is a website for middle- and high-school students and teachers. Launched in 2002, the site has informative articles about weather, games to play, videos and tons of downloadable materials.

The website is updated about once a month. This month's feature answers the question [How Do Clouds Affect Solar Energy?](#) Recent articles explained what is a red tide, what are the different climate types, and everything you wanted to know about a solar eclipse.

There's fun interactive games: grow your own [snow crystals](#), make lightning with a game called [ZAP!](#), or test your knowledge of weather terms playing [Weather Tricktionary](#).

Have fun while learning all about the atmosphere, satellites and technology, weather forecasting and space weather. If you're a teacher, be sure to check out all the [resources for educators!](#)

Anyone can [sign up](#) for a monthly newsletter, so you always know when new material is posted.



 **SciJinks**
It's all about weather!

I Have A Meteorology Degree But They Didn't Teach Me That!

By Dave Zaff



Photo Credit: NOAA Hazardous Weather Testbed

Like many professions, there is a minimum set of scholastic requirements needed for a National Weather Service (NWS) meteorologist or hydrologist position. A Bachelor's degree in Meteorology, Atmospheric Science, or Hydrology is typical however other degrees such as mathematics, physics, or one of the other earth sciences are great too. You'll need to take meteorology classes to meet the requirements of a NWS job posting. In fact, there's a specific set of courses needed before a hiring official looks at a resume for a NWS forecast position. Fast forward, you got the job as a NWS forecaster! Congrats! What happens now?

College courses provide us with the basic foundation but they usually don't cover specific types of weather forecasting like aviation, marine, or fire weather. And then there's more intricate stuff. For example, what's the difference between a quasi-linear convective system, a bow echo, and a derecho? Why do some lake effect snow events have lightning while other snow events do not? How does a Doppler radar measure wind speed and precipitation? What about the new research and technology that didn't exist when we were in college ten, twenty, or in some cases thirty years or more ago?

No worries, we have you covered. The NWS has an extensive on-the-job training program to cover these topics and more. There are intensive college-like courses that NWS staff go through at various points throughout our careers. The NWS Warning Decision Training Division (WDTD) in Norman, OK provides some of the content for many of NWS's in depth coursework. We also have a dedicated training center located in Kansas City, MO. Today, most of these courses can be completed online but there are some courses that require in-house training. Our newest staff needs to become proficient in radar interrogation so they go through a 6-month course covering almost 120 hours of material with a one week in-house workshop. There are other courses, often spanning about 6 months, dedicated to key parts of NWS forecasting, including severe weather, winter weather, and flash flooding. A new course was released this year on the latest techniques of mesoscale meteorology. There are other courses focused on technological advancements. We even have a course on human factors. Many of these courses are equivalent content to college level courses and require a final examination. Our expertise and ability to protect lives and property fully depend on understanding the course content.

In addition to meteorology and hydrology, there are multi month-long courses on leadership, diversity, and management. And the list goes on... So, while some of us received degrees in meteorology before widespread use of computers, Doppler radar, and high-resolution satellites, the weather profession is a constant learning experience.



Photo Credit: NWS Warning Decision Training Division

Located in Norman, OK, the NWS Warning Decision Training Division is the backbone of many of NWS's most

The 15th Anniversary of the October 12-13, 2006 Lake Effect Snowstorm

By Liz Jurkowski

This past summer the Winter Team of WFO Buffalo worked together to create a few different projects to commemorate the 15th anniversary of the October 12th and 13th, 2006 early season lake effect snowstorm. Projects included: an ArcGIS StoryMap, YouTube video, and a series of social media posts.

As a part of the effort, the meteorologists on the team met with those NWS meteorologist, past and present, who worked the event. The group gathered old tricks of the trade and their memories of the event, anything from what the models were reporting to what was happening as the event unfolded.

These stories, plus a little research of our own went into creating a [StoryMap](#) that narrates the evolution of the lake effect snowstorm. A [YouTube video](#) presenting a more in depth look of the event. And finally, multiple social media posts highlighting different statistical facts from the event.



Tree damage in western New York



Buffalo-Niagara International Airport



A 105 mile stretch of the NYS Thruway was closed between Rochester and Dunkirk, New York

Climate Word Find

T A U T U M N Y F L Y G O
 C Q H Q F O C H E V F N E
 E C N E R Q L A H H J I L
 F W O N S Y V A E H R N I
 F X D X L E S L F E Z R G
 E Y E E S P U H E F L A H
 E T A M I L C K O T U W T
 K G A T B O A B O V G B N
 A W P C U L P E R O E D I
 L Y O C T O B E R E E L N
 N A M N Z J G I V K W E G
 B A S E M E N T F L O O D
 W D E S T R U C T I O N P

The following words are associated with the October Surprise Snowstorm.

See if you can find the words listed below

- | | |
|-------------|-----------|
| Autumn | Lake Erie |
| Basement | Leaves |
| Flood | Lightning |
| Buffalo | October |
| Climate | Power |
| Destruction | Shovel |
| Heavy Snow | Warning |
| Lake Effect | |

Word Scramble

Unscramble the words on the left, placing one letter per box to form a word that is associated with autumn. Using the letters that fall within the circled boxes, answer the question on the right.

NOSW

	○		
--	---	--	--

SLUBYTER

		○		○	○		
--	--	---	--	---	---	--	--

LOCD

			○
--	--	--	---

Octhacoo

○						
---	--	--	--	--	--	--

Fcars

			○	
--	--	--	---	--

Using the letters within the circles at the left, what is a phenomena usually associated with summer storms that intense lake effect snow bands may contain

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BUFFALO NY**

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Weather Service
provides weather,
water, and climate
data, forecasts and
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protection of life
and property and
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SKYWARN® News

By Jon Hitchcock, Meteorologist

The calendar has turned to fall, and that means our snow season is right around the corner. Our fall SKYWARN training sessions focus on winter storms, lake effect snow, measuring snow, reporting to the National Weather Service, and winter weather safety. We review the common weather patterns that bring active winter weather to our region, and look back at some memorable storms of the past.



Volunteer reports of snowfall during and after the storm, snowfall rate, and changes in precipitation type play a critical role in our ability to successfully forecast winter weather. Snowfall can vary widely over a short distance, especially in our intense lake effect snow storms east of Lake Erie and Lake Ontario. The more volunteer spotters we have the better!

DATE	TIME
Tuesday 11/2/2021	7 PM
Tuesday 11/16/2021	7 PM
Wednesday 12/1/2021	7 PM

All of our fall 2021 SKYWARN training sessions will be virtual. There are 3 remaining training sessions from early November through early December. Each of the training sessions cover the same material. Everyone is welcome to attend this free training. For more information and links to register for the virtual training sessions visit our website at : weather.gov/buf/skywarn

Six Basic Steps for Properly MEASURING SNOW

Accurate and timely snowfall measurements are extremely important to your National Weather Service office, your community, local media, and many others. Here are the six steps you need to know for measuring snow:

- 1 Supplies**: Ruler or yard stick, 24" X 24" white board, flag
- 2 Planning**: Find an open area away from tall objects, but sheltered from wind
- 3 Set-up**: Set up before snow begins. Put your board out and mark it with the flag
- 4 Measuring Snow**: Record your total to the nearest tenth of an inch. Wipe the board off after measuring. Measure once daily at the same time, after measuring place the board on top of snow
- 5 When Snow Stops**: Measure as soon as the snow stops to avoid lower totals due to melting, setting and drifting
- 6 Reporting**: Report to weather.gov and social media. SEND us your report!

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