

The Lake Breeze

NATIONAL WEATHER SERVICE BUFFALO, NY
FORECAST OFFICE

Niagara River, Photo Credit: Dan Kelly

Volume 5, Issue 1

Spring 2022

Severe Weather Awareness Week—April 24-30, 2022

By Michael Fries

Each year, the National Weather Service has awareness weeks during which we share safety information about specific upcoming hazardous weather seasons. We do this in advance of the winter season, boating season, and hurricane season during other months of the year. However, as the winter snow melts, and the trees start to bud, our focus quickly turns to the threats brought about by severe thunderstorms, tornadoes, and flash floods. If you follow the National Weather Service's Awareness Weeks, you have a pretty good idea that indicates Severe Weather Awareness Week is on the horizon! In 2022, Severe Weather Awareness Week is April 24-30.

As with the other awareness weeks, each day during the week will feature different information about weather threats during the severe thunderstorm and tornado season, safety information for the season, and our severe weather warning products. These messages are all in concert with the [Spring Safety Campaign](#) of the [Weather Ready Nation Program](#). While our location in the country doesn't normally coincide with the greatest threats from severe weather caused by thunderstorms, we generally receive hundreds of reports each year of wind damage from thunderstorms, several flash flooding events, many reports of large hail, and even a tornado or two in a normal year. Any one of these is a major threat to life and property, so it's important to be prepared ahead of severe weather season.

The messages our office delivers during Severe Weather Awareness Week will be primarily delivered through our social media feeds on [Facebook](#) and [Twitter](#), daily public information statements, and a dedicated Severe Weather Awareness Week webpage that will be available under the "Top News of the Day" at the top of our www.weather.gov/buf website. 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.



Sap being collected in Wyoming County, NY

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Photo Credit: Aaron Reynolds

Meet the Observer—Jim Maryinuk, COOP Observer, Palermo, NY

By Dan Kelly

Jim Maryinuk has been a dedicated Cooperative Weather Observer for the National Weather Service at his home near Palermo for the past 11 years. During that time, he has measured a total of 1,766.8 inches of snow with an average of 135.9 inches of snow per year. Jim established a Coop weather station in 2012 at Lock O-3 on the Oswego Canal, where he was the Chief Lock Operator. Jim retired in 2017 after 30 years with the New York State Canal Corporation. While at Lock O-3, he took snow depth and snow water equivalent observations for the bi-weekly snow survey organized by the Northeast Regional Climate Center.

Mr. Maryinuk, a lifetime resident of Palermo, lives on the farm that has been in his family for 5 generations and over 100 years! On the Maryinuk Farm, he primarily grows asparagus, but also grows a lot of varieties of organic lettuces and a wide range of berries, some of these berries can not be found in your typical grocery store such as Saskatoon and Hascap berries. He also has a wide variety of animals that live on the farm. Over the years, there have been several school groups that have stopped by the farm. One group of about 30 school children came to visit from one of the city schools in Syracuse a few years ago. Jim and his wife Linda made doughnuts for their guests. He remembers one boy was sitting and eating a doughnut, when he felt someone trying to take the doughnut away from him. Thinking it was one of his friends playing a joke on him, the boy turned around to find himself face to face with one of the goats. Startled, the boy ran onto the bus and the goat actually followed him to his seat and wanted to ride on the bus back to Syracuse!

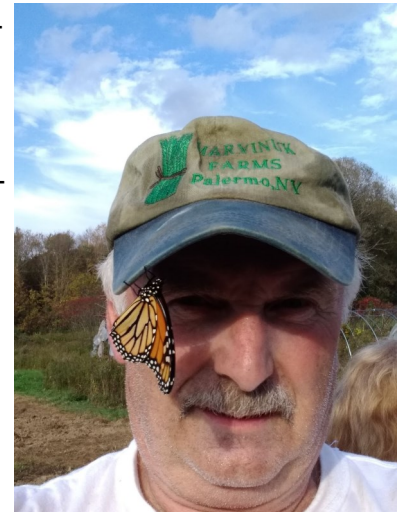
Jim and Linda are very active in their church, the Fellowship Baptist Church in Parish NY. He is a licensed minister at his church, and holds services twice a week at the Seneca Hill Nursing Home in Oswego. During the final years of Jim's mom's life, Jim's mom was a resident at Seneca Hill. He would play his accordion for her in her room when he would visit. Many of the residents would come by and stand at the door to hear Jim play. After seeing the joy on all of their faces, he made it a tradition to play for the residents on a regular basis.

Being a farmer, Mr. Maryinuk is really in tune with the weather. He has experienced first hand some of the changes in the weather patterns over the past few years. The Maryinuk Farm has experienced a snow drought. The lake effect snow bands have shifted farther north that in the past have brought several inches of snow to his farm. Jim can see these snow bands to the north from his house. With very sandy soil on the farm, it is difficult for the soil to retain moisture, so he has found himself having to rely on irrigation more and more. Additionally, Jim has noticed that the summers have been noticeably warmer over the last 20 years or so. Shortly after he and Linda got married, they traveled to Florida, and equated the summer sun to that of the October Florida weather. He also noted that he sees the maple trees in his area dying from the warmer weather.

Jim used to grow raspberries on the farm, however a non-native fruit fly has spread north into the area. Instead of spraying pesticides on the plants, he has looked into other varieties of berries.

In addition to the daily precipitation and snow observations, Jim also monitors and reports frost depth every day to the NWS. Frost depth data is very important to the National Weather Service for river flood forecasting during the spring snowmelt season. Jim has noted that the frost depth was deeper this year. When the thick frost lifts as it thaws, the garlic bulbs surface, and are eaten by hungry deer.

Jim and Linda have been married for the past 32 years and have three children and one granddaughter.

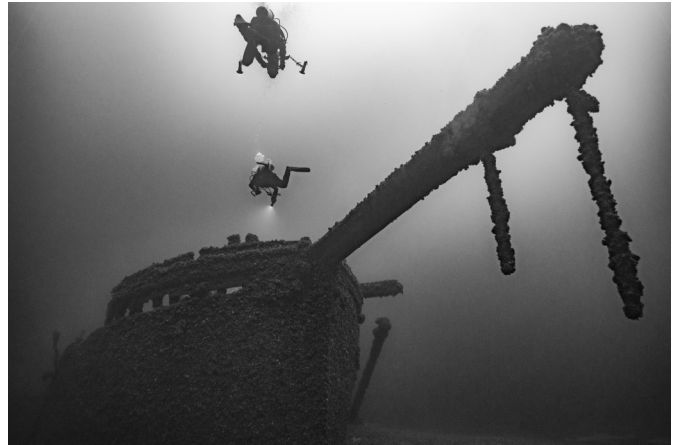


Jim Maryinuk, COOP Observer in Palermo, NY with a friend who stopped for a rest.

Proposed Marine Sanctuary on Lake Ontario

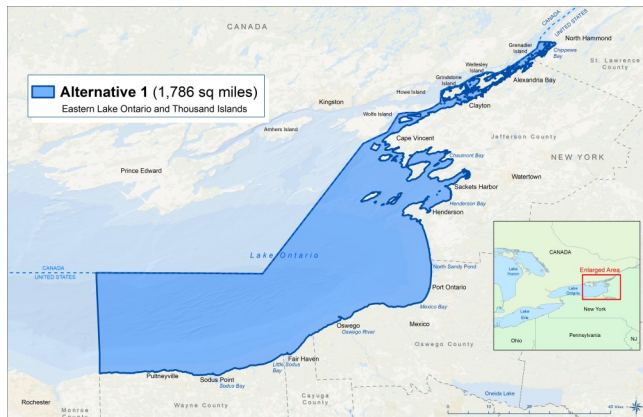
By Judy Levan

In 2017, a nomination was submitted to NOAA to designate the southeastern portion of Lake Ontario as a National Marine Sanctuary. The process continues and a determination on the designation is expected within the next year. The area is rich in American history from Native Americans to European explorers. Port Oswego is the oldest freshwater port in the United States. Within the nomination area, there are 40+ shipwrecks and one aircraft whose locations are known. With the designation, NOAA would manage, research, interpret and improve public access to a nationally significant collection of maritime heritage resources, including historic shipwrecks. There are nine lighthouses located along the lakeshore within the proposed area. There are currently two alternatives to the area of the proposed sanctuary. They both include the same portion of Lake Ontario however one of the alternatives includes parts of the St. Lawrence River.

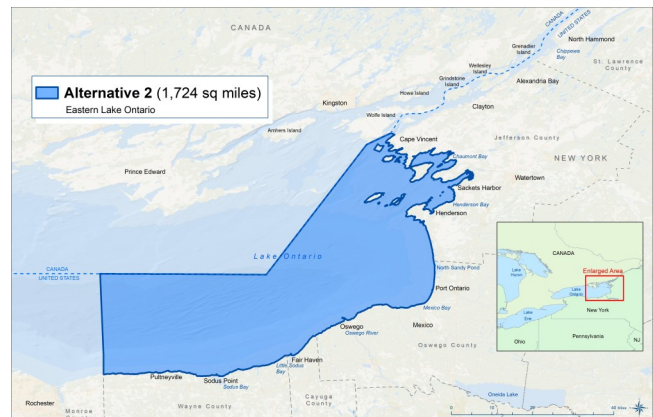


Divers near the bow of the St. Peter shipwreck in Lake Ontario. Photo Credit: NOAA

The Lake Ontario National Marine Sanctuary Advisory Council has been garnering interest in the proposed sanctuary through a series of lectures. I was honored to be invited to speak about the Weather and Climate of Eastern Lake Ontario in March. The next installment of the lectures will take place on Saturday April 30, 2022 from 2PM-4PM. Dr. Tim Abel, Dr. Ben Ford, and Dr. Gary Gibson will discuss Lake Ontario and the War of 1812. You can join in person at the Sackets Harbor Ballroom, 103 W. Main Street, Sackets Harbor, N.Y. or watch on-line. Register at tinyurl.com/LakeOntarioWarof1812. To find out more about the proposed Marine Sanctuary, visit sanctuaries.noaa.gov/lake-ontario/



Alternative 1 Site for the Marine Sanctuary on Lake Ontario. Credit: NOAA



Alternative 2 Site for the Marine Sanctuary on Lake Ontario. Credit: NOAA

Using Satellites to Help the Forecast

By Dave Zaff

The NWS relies heavily on our radar systems throughout the year. Radar data is especially important during the summer convective season when storms can become severe. Like a car though, radars break down on occasion, sometimes when we need them the most. Luckily, we have a top notch group in our office that specializes in keeping our radar running. But when a part is needed and it takes a day or two to get delivered,

(continued on page 6)

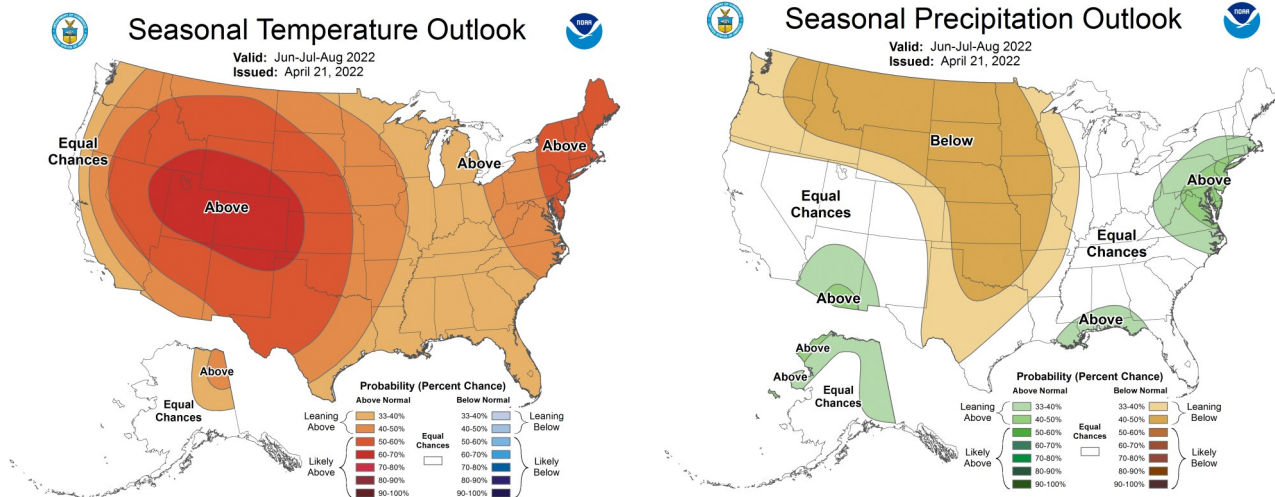
Summer 2022 Outlook

By David Thomas

As the days warm and winter is fully in the rear view mirror we will take a look down the road at this upcoming summer. The long range forecasts are made by scientists at the Climate Prediction Center (CPC) in College Park, Maryland. In mid-April they made a June-July-August temperature and precipitation outlook for the entire country. The scientists derive a temperature and precipitation forecast for the entire country based on studying circulations in the atmosphere, current conditions of both land and ocean, past seasonal trends and computer model simulations. Their forecast will show if an region leans warmer or cooler and wetter or drier compared to a 30 year normal.

One circulation that is looked at every year is the El Niño and La Niña Oscillation (ENSO). A year ago we experienced a moderate La Niña during the 2020-2021 winter months that trended towards ENSO neutral (neither El Niño or La Niña) during the summer months (2021). This is very similar to this current year where we briefly dipped to moderate La Niña during the 2021-2022 winter months and are now forecasted to trend back towards ENSO neutral summer 2022. So should we expect a repeat of last summer? Not so fast as there are many other factors that drive our summer weather patterns. Other factors for this year include the current state of soil moisture and snow cover as well as where convection has been concentrated in the tropics early this Spring.

The summer of 2021 was a hot summer with Buffalo tied for 2nd warmest summer on record, Watertown 8th warmest and Rochester tied for 13th warmest. While records for Watertown date back to the summer of 1949, the climate records for both Buffalo and Rochester date back to 1871. For all three of our climate sites the number of record warm minimums outweighed the number of days with record highs for the summer months. In fact, Buffalo had no record high temperatures during the summer months, while Rochester had one and Watertown had three. Perhaps the most noteworthy record warm minimum temperature for our climate sites last summer occurred on June 27th, when both Rochester (75°F) and Watertown (76°F) set all time June warmest minimum temperatures. These values were also the warmest of all summer nights last year for these two climate sites.



So as we head towards the summer of 2022, what shall we expect? To start a forecast CPC creates three bins: below normal, equal chance and above normal. For each of these three bins the value of 33.3% chance of occurrence is given. As the forecasters study the patterns and long range models they then give higher weight to a particular bin, while subtracting from another bin. Summer for these forecasts is defined by the three months of June, July and August. The forecast for the summer of 2022 has greatest odds favoring above normal warmth for the summer of 2022. Towards our eastern zones, these odds are the greatest with 50 to 60 percent probability of an above normal

(continued on page 6)

Q & A with NWS Buffalo - Bernie Walsh, Administrative Support Assistant

What is the role of an Administrative Support Assistant (ASA) at the National Weather Service?

As an Administrative Support Assistant (ASA) my job is to perform work that supports the operations of all departments at our location. I am responsible for working on our budget, paying bills and being a liaison with our regional headquarters. I am also involved with procurements to meet our office's needs which includes working on contracts to pay for services. As the Property Contact I am involved with logging our accountable assets and working on annual inventory. Timecards and travel are another area that I provide support.



Bernie Walsh,
Administrative Support
Assistant

What is the most interesting thing you have learned so far?

Finding out that there is more than just radar providing input for forecasting the weather. So many cool things to learn but my favorite so far is the weather balloons and their role in providing input for forecasts. Balloons are launched twice a day, simultaneously, from sites all across the United States. This is to observe temperature, wind, relative humidity and pressure through the atmosphere. Before working for the National Weather Service I had no idea that weather balloons even existed.

What did you do before you worked for the National Weather Service?

I have done some interesting and fun things in my career. I worked as a government contractor in the International Air Freight industry helping our troops move big and heavy freight around the world. I served as a member of an Ethics team as the Training Manager and traveled the world teaching and mentoring. My last position before joining the National Weather Service was as a Business Manager for a local Veterinarian Hospital where the biggest benefit was visiting with the furry visitors.

What weather event stands out the most to you?

I was in elementary school during the Blizzard of '77. Through the eyes of a kid it was exciting and scary. There was so much snow and it was too cold and blustery to go out and play in it. The snow on the path down our sidewalk was piled so high it was up over my Dad's head. The highlight of my excitement was standing with my cousin on top of a snow mountain trying to get the attention of President Carter's son Chip's helicopter. He flew over our area to help survey the storm damage. Erie County was officially declared a state of emergency. Although I was young I remember lots of family stories of the good things that people were doing for each other to help get through it. Rides were given, homes were opened to anyone who needed a place to wait for cars to be shoveled out and food was shared with anyone who needed it. As a Buffalonian I can claim "I survived the Blizzard of '77"

What do you do when you are not at work?

I love to spend my time with my husband Mark and our family and friends enjoying life and all its adventures. I like to give back to my community through volunteering. I have had a love affair with music since I was a little girl so it was natural to choose to share my time with organizations that bring arts and music to children. I have served on, and still support, the boards of Young Audiences of WNY and Sportsmen's Americana Music Foundation. I also like to share my love of books by donating my time to reading for the blind at Niagara Frontier Radio Reading Service.

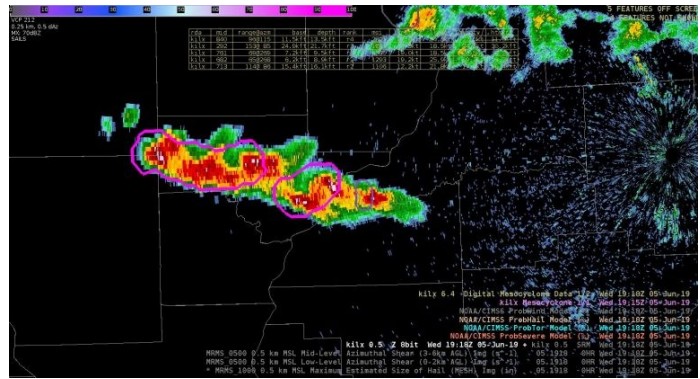
Summer 2022 Outlook (continued)

temperature summer. Remember there are 3 bins, so the remaining 40 to 50 percent is not necessarily all in the below normal bin, but split between below normal and equal chances of occurrence.

There are not enough signals to tip the scale to below or above normal for precipitation and thus the greatest chance of occurrence of the three bins is the equal chance bin. As always summer precipitation can vary greatly from town to town as a storm can pummel one town locally with heavy rain with a neighboring town receiving just a few drops from a storm. In summary the forecast is for another warmer than normal summer, with no clear signals for either a wetter or drier summer.

Using Satellites to Help the Forecast (continued)

then what do we do? Today's satellites (Geostationary Operational Environmental Satellite, or GOES) do a surprisingly good job as a backup, and by design. GOES can provide minute-by-minute updates, and even 30 second updates on rare occasions. Although viewed from space 22,300 miles away, this data is actually more timely than our radars. To be fair though, satellites only have to look at cloud tops, while the radars spin repeatedly in order to get a 3 dimensional depiction of storms. But still, satellites have come a long way. Today's satellites use new algorithms, collectively called ProbSevere, which combine satellite data with model output to detect rapid cloud top cooling, formation of ice, and changes in lightning intensity that aid forecasters in warning decision making, all without radar as an input source. Thus, GOES serves as a great backup, but also an independent dataset for interrogating severe weather. This is even more important for areas of the country that have poor radar coverage.



ProbSevere (contoured around thunderstorms above) combine satellite data with model output to aid forecasters in warning decisions.

There are two GOES that provide coverage for nearly half the globe: GOES East and GOES West. A third satellite was just launched in March 2022; it will replace GOES West later this year. A fourth satellite is expected to be launched later in the 2020s. The four satellites will likely provide coverage for the next 15 or so years. The satellites have a variety of instrumentation that allows them to see and differentiate various cloud types, detect fires, and even see lightning. Additional instrumentation is used to monitor both the sun and the earth's magnetosphere, although locally, we don't use that information much. So, if you ever hear about a NWS radar being briefly offline, you can be assured we can still effectively monitor active storms using satellites.

From the Vault– The Year 1876

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 **1876** in Buffalo, NY. Many observations were archived in capitalization which is why the below observations are in all CAPS. Let the journey begin...

February 10, 1876- **FRESHET IN BUFFALO RIVER...**

(continued on next page)

From the Vault (continued)**February 10, 1876- FRESHET IN BUFFALO RIVER**

FRESHET ABOUT 9AM IN BUFFALO RIVER. ICE BROKE AND WAS BORNE DOWN BY THE SWIFT CURRENT. SEVERAL VESSELS WERE WRENCHED FROM THEIR MOORINGS IN THE HARBOR AND CARRIED DOWN TOWARDS THE HARBOR BUT WERE SECURED AGAIN AFTER SUSTAINING CONSIDERABLE DAMAGE. CURRENT DIVERTED INTO CANALS AND SLIPS BEFORE REACHING THE MOUTH OF THE RIVER AND THE ICE STILL REMAINS THERE. SCHOONER WANCONIA SUSTAINED INJURIES TO THE EXTENT OF ABOUT \$1,000; THE BARGE OGARITA RECEIVED SLIGHT INJURIES AND SEVERAL VESSELS WITH WHICH THEY COLLIDED.

February 14, 1876- WHIRLWIND

A WHIRLWIND PASSED OVER THE EASTERN PART OF THE CITY ABOUT 8:30AM. IT CARRIED OFF THE ROOF OF THE SLAUGHTER HOUSE, TRANSPORTED A PORTION OF THE ROOF WEIGHING ABOUT A TON FOR ABOUT 1000 FEET. ITS PROBABLE DIRECTION WAS FROM THE WEST ALTHOUGH SOME ASSERT THAT IT WAS FIRST OBSERVED IN THE NORTHEAST; IT LASTED ABOUT 4 MINUTES. NO OTHER DAMAGE WAS DONE EXCEPT TO SURROUNDING PROPERTY AND THE BLOWING DOWN OF TELEGRAPH.

July, 5, 1876- THUNDERSTORM

THE BAROMETER BEGAN FALLING RAPIDLY AT 9AM. AFTER 2PM THE WIND ROSE RAPIDLY. AT 5:15PM IT BLEW FOR SEVERAL MINUTES AT 47 MPH, BUT AVERAGED ABOUT 30MPH, UNTIL 7PM WHEN IT ROSE AGAIN AND FOR JUST 10 MINUTES BLEW STEADILY AT THE RATE OF 36MPH. AT 3:30PM A TREMENDOUS THUNDERSTORM ACCOMPANIED BY TORRENTS OF RAIN AND GALES OF WIND PASSED OVER THE SOUTHEAST SUBURBS OF THE CITY, THE EDGE OF IT JUST REACHING THIS OFFICE. THE WIND LASHED THE WATER OF THE LAKE INTO A SEA OF FOAM MAKING IT RISE IN THE HARBOR ABOUT 5 FEET ABOVE THE MAIN LAKE LEVEL. CHAIN LIGHTNING OF A LIVID HUE, A BLUE COLOR RENT THE STORM CONTINUALLY.

July 19, 1876- BALL LIGHTNING

SHOWER AT 1AM. SHEET LIGHTNING IN THE WEST AND NORTHWEST VERY RAPID FLASHES FROM 12:15AM UNTIL 3AM. IT EXTENDED AROUND THE ENTIRE HORIZON. THE LIGHTNING IN THE NORTHWEST WAS ACCOMPANIED BY THUNDER GRADUALLY NEARING THIS VICINITY. AT 3:50AM A TERRIFIC CRASH SIMULTANEOUS WITH A VERY VIVID AND INTENSE CHAIN OF BALL LIGHTNING SUPPLANTED THE PREVIOUS ELECTRICAL DISCHARGES WHICH HAD TAKEN VENT IN LOW MUTTERINGS. AFTER AN INTERVAL OF PERFECT QUIET (FIVE MINUTES) ANOTHER EXPLOSION OCCURRED, ALMOST EQUALING THE FIRST IN INTENSITY. SOON AFTER A VIVID FLASH OF ZIGZAG LIGHTNING RAN THROUGH THE HEAVENS WITH A SHARP CRACKLING SOUND, CULMINATING IN A DEEP ROAR THAT ECHOED AND REECHOES. FOR THE SPACE OF 20 OR 30 SECONDS THE NIGHT WAS MADE BRIGHTER THAN DAY BY THE SUCCEEDING FLASHES. AFTER THIS THIS STORM GRADUALLY PASSED AWAY TO THE EAST. LIGHT RAIN FELL FROM 3:45 TO 4:30AM EXCEPT IN CERTAIN PARTS OF THE CITY WHERE IT CAME DOWN IN TORRENTS. LIGHTNING STRUCK SEVERAL BUILDINGS IN THE CITY.

October 6, 1876- WIND AND RAIN STORM

AT 3:30PM A FURIOUS SQUALL ACCOMPANIED BY A HEAVY RAIN PASSED OVER THE CITY FROM THE WEST. THE WINDS WHICH ALL ALONG HAD BEEN BLOWING VERY HARD ROSE RAPIDLY AND SOON ROSE TO 47 MPH. THIS HOWEVER ONLY LASTED A FEW MINUTES WHEN THE WINDS FELL TO 30 MPH. THE SQUALL REPEATED AT 10:20PM WHEN THE WIND ROSE AGAIN TO 47 MPH. DURING THE SQUALL AT 3:20PM THE MATE OF THE SCHOONER ZACH CHANDLER WHICH WAS NEAR PORT WAS THROWN OVERBOARD AND DROWNED.

National Safe Boating Week is May 21-27, 2022

By Jason Alumbaugh


The week of May 21 through 27, 2022 is recognized as National Safe Boating Week across the US and Canada. As has been said by the National Safe Boating Council, “the best boating experience is safe boating.” US Coast Guard statistics show that drowning was the reported cause of death in four out of every five recreational boating fatalities. One of the biggest ways to prevent drowning is to wear a life jacket when boating. When selecting a life jacket, make sure it is US Coast Guard approved, appropriate for the water activity, and fits properly.

One big tip for safe boating on the Great Lakes and inland waterways this summer includes knowing the weather forecast before you head out. This will give you a better chance at not being caught off guard by the weather. Great sources for weather information on the waters are weather.gov/buf and weather.gov/greatlakes. To get an idea for the potential of hazardous weather for the upcoming week a great resource is weather.gov/erh/ghwo?wfo=buf.

Other tips for a safe boating summer include: take a boating safety course, check your boating and navigation equipment by scheduling a free vessel safety check with the local US Coast Guard Auxiliary or the US Power Squadron, let people know where you are going, know your surroundings, travel at safe speeds, have sufficient communications such as a cell phone and VHF radio and never boat under the influence (BUI) of alcohol. A BUI is involved in one-third of all recreational boating fatalities. Don't become a statistic.

For more information on safe boating be sure to check out our Facebook and Twitter pages (search NWSBuffalo) as we will put posts out daily during National Safe Boating Week. Have a safe and fun time on the waters this summer!






**BOAT RESPONSIBLY:
WEAR A LIFE JACKET**


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twitter.com/boatingcampaign

SAFEBOATINGCAMPAIGN.COM




Life Jacket Styles


Make sure it is the right fit for you, the activity and the water conditions. Life jacket should be in good and serviceable condition, and properly stowed when not in use.



Standup Paddleboarder
(Belt-pack inflatable life jacket)



Anglers
(Lightweight life jacket)




Power Boater
(Suspender inflatable life jacket)

Life Jacket Fit Facts

- U.S. Coast Guard-approved (check the label)
- Appropriate size and type for the intended wearer
- A snug fit is a proper fit
- Adult life jackets do not work for children
- Do not buy a life jacket for a child to "grow into"
- Even life jackets for pets!

Wearing a life jacket is not enough – make sure the straps, buckles or zippers are secure.



Life Jackets Save Lives

75% of all fatal boating accident victims drowned.*
Of these, 86% were not wearing a life jacket.*

Boating Accidents and Fatalities Statistics*

Accidents happen too fast to reach and put on a stowed life jacket. Always wear your life jacket.

About 8 out of 10 people who died were not wearing a life jacket.

8 out of 10 people who drowned were not wearing a life jacket.

4 out of 10 people who died from trauma were not wearing a life jacket.

Reported Boating Accidents

Most Common Vessels in Accidents*

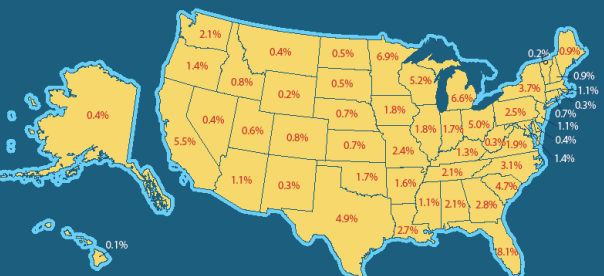
1. Open motorboats (46%)
2. Personal watercraft (22%)
3. Cabin motorboats (13%)
4. Other (19%)

Top 6 Factors in Boating Accidents and Deaths*

1. Operator inattention
2. Operator inexperience
3. Improper lookout
4. Excessive speed
5. Machinery failure

Recreational Boat Registration by State*

100 million Americans participated in boating in 2020.**
There were 11,838,188 registered boats in 2020 (state percentages indicated below).



American Samoa	0.0009%	Northern Mariana Islands	0.003%
District of Columbia	0.02%	Puerto Rico	0.3%
Guam	0.007%	Virgin Islands	0.03%

Sources: *U.S. Coast Guard's 2020 Recreational Boating Statistics
**National Marine Manufacturers Association

Climate Word Find

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

The following words are associated with Summer Weather. See if you can find all listed words

- | | |
|--------------|--------------|
| Beach | Severe |
| Cumulonimbus | Sizzle |
| Damage | Thunderstorm |
| Hail | Tornado |
| Heat | Updraft |
| Humid | Warning |
| Lightning | Wind |

Word Scramble

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

DUNERTH

		○		○		
--	--	---	--	---	--	--

CINPIC

			○		
--	--	--	---	--	--

ZEEBRE

	○				
--	---	--	--	--	--

CATIVAON

	○						
--	---	--	--	--	--	--	--

ROSTM

		○		
--	--	---	--	--

Using the letters within the circles at left, complete the phrase:
 When encountering flooded roadways,
 "Turn _____
 Don't Drown"

**NATIONAL
WEATHER SERVICE
BUFFALO NY**

587 Aero Drive
Cheektowaga, NY 14225
(716) 565-0204
www.weather.gov/buf
Email: buf.webmaster@noaa.gov



**“The National
Weather Service
provides weather,
water, and climate
data, forecasts and
warnings for the
protection of life
and property and
enhancement of the
national economy.”**



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SKYWARN® News

By Jon Hitchcock, Meteorologist



The calendar has turned to spring and our focus in the office now pivots from snow and cold to the severe weather season. 2021 was an active severe weather season, with over 200 reports of wind damage or large hail from thunderstorms. We rely on trained SKYWARN spotters, social media reports, and reports from law enforcement for the majority of these severe weather reports.

**Local SKYWARN
Schedule**

DATE	TIME
Tuesday 5/10/2022	7 PM
Tuesday 5/17/2022	7 PM
Wednesday 5/27/2022	11 AM

Our Spring 2022 SKYWARN training season is underway, with two training sessions completed so far and 3 more scheduled through late May. The SKYWARN program dates back to the 1960s, when the National Weather Service recognized the need for a volunteer network of trained weather spotters to aid in warning the public of imminent severe weather threats. Our SKYWARN training session focuses on severe thunderstorm development, tornadoes, flash floods, severe weather safety, and how to report to the National Weather Service. The free training lasts for about 1 hour and 45 minutes, and open to everyone! All training sessions this spring are being held virtually. For the schedule of remaining training sessions, visit our SKYWARN website at: <https://www.weather.gov/buf/>

[Skywarn](#)

Severe weather can happen at any time of year, but the majority of our severe weather events are from late spring through early fall when warm temperatures and humidity provide the necessary fuel for severe thunderstorms. With that in mind, we hold a series of SKYWARN training sessions each spring from late March through late May to prepare for the heart of the severe weather season. If you would like to learn more about severe thunderstorms and how to report to the National Weather Service, consider signing up for one of our SKYWARN training sessions!

HELPING OTHERS: THUNDERSTORMS



Before storms, help others trim trees and pick up loose items



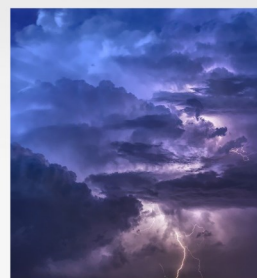
Get others inside at the first sign of thunder or lightning



Keep everyone inside 30 minutes after the last sign of thunder or lightning



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