FALL
2018

PREWARNING

winds

NATIONAL WEATHER SERVICE
BOSTON-NORTON

TABLE OF CONTENTS

Follow us!

@NWSBoston

2018: A YEAR OF CHANGE FOR THE NWS BOSTON OFFICE

BY STEPHANIE DUNTEN

Over the past 6 months, the National Weather Service office that covers southern New England has seen a lot of change. We moved into a brand new building, had a change in leadership at the Meteorologist-in-Charge level, and experienced a few staff personnel changes. Through it all, the office has not skipped a beat and has continued to provide non-stop service to southern New England.

A NEW BUILDING

During the third week of March, both the Taunton Weather Forecast Office (WFO) and the Northeast River Forecast Center (NERFC) moved out of the Taunton facility into a newly constructed building located in Norton, MA. The new facility of approximately 12,000 square feet is located on 5.4 acres in the Norton Commerce Center Industrial Park. Inside the building is cutting edge technology so that the staff can provide impact-based decision support services for southern New England. The building was also designed to have large windows in the operations area, staff lockers, a training room, and even a shower. The biggest improvements are in the operations area. Aside from new windows to actually see outside, employees now have the ability to have standing workstations and state of the art situational awareness displays. On August 1, a ribbon cutting ceremony was held to officially welcome the WFO and the NERFC into their new home. This ceremony was co-hosted by General Services Administration (GSA), National Oceanic and Atmospheric Administration (NOAA), and Condyne Capital Partners, LLC. Approximately 100 people attended the ceremony with speeches from Congressman

Joe Kennedy III, Chief Operating Officer for the NWS John Murphy, GSA Acting Regional Administrator Glenn Rotondo, Director for NWS Eastern Region Jason Tuell, Norton Town Manager Michael Yunits, and President of Condyne Capital Partners Jeffrey O'Neill. "Being unprepared for and unaware of extreme weather can have life-threatening consequences in our communities. With this advanced facility, NOAA and NWS can not only study our region's weather patterns, but alert our neighbors whenever powerful, dangerous storms may be approaching," said Congressman Joe Kennedy III. In addition to the keynote speakers, the ceremony featured the Norton Police Department Honor Guard and Glenn Field, Warning Coordination Meteorologist, who sang the National Anthem and recited the Pledge of Allegiance.

WE SAY GOODBYE

Bob Thompson

On April 30th we bid a fond farewell to our Meteorologist-In-Charge (MIC) Bob Thompson, who retired after 45 years of federal service! He has been the MIC at NWS Boston since 1989. Bob led the office through many notable storms, some of which include Hurricane Bob (1991), "The Perfect Storm" (1991), New England Ice Storm (1998), Tropical Storm Floyd (1999), Major River Flooding (2010), Springfield/Monson MA Tornado (2011), Tropical Storm Irene (2011), "Snow'tober" (2011), Superstorm Sandy (2012), Revere, MA Tornado (2014), Winter Blitz - 108.6 inches! (2015), Severe Drought (2016-2017), Conway MA Tornado in February (2017), and Major Coastal Flooding/70-90+ mph Winds (Jan 4th & March 2nd 2018).

One of the huge successes of Bob's tenure as MIC has been his engagement with all partners and customers. He has always preferred the personal touch - calling and speaking with emergency managers ahead of storms. He has conducted thousands of television, radio, and newspaper interviews and given many hundreds of outreach presentations to civic organizations, and schools. Bob conducted countless hurricane awareness seminars throughout the region, since he often states that the hurricane threat, and public complacency, is the one thing that really keeps him up at night. Prior to his 29 years as MIC in southern New England, Bob Thompson served as Meteorologist-in-Charge of the Reno, NV forecast office, was the Verification Program Manager at NWS Headquarters in Silver Spring, MD, and worked in other locations including Washington, DC, Anchorage, AK and Albany, NY.

In many instances, Bob has led his staff to be the leaders in NWS programs. Bob significantly improved the coastal flooding program and its website visualization.

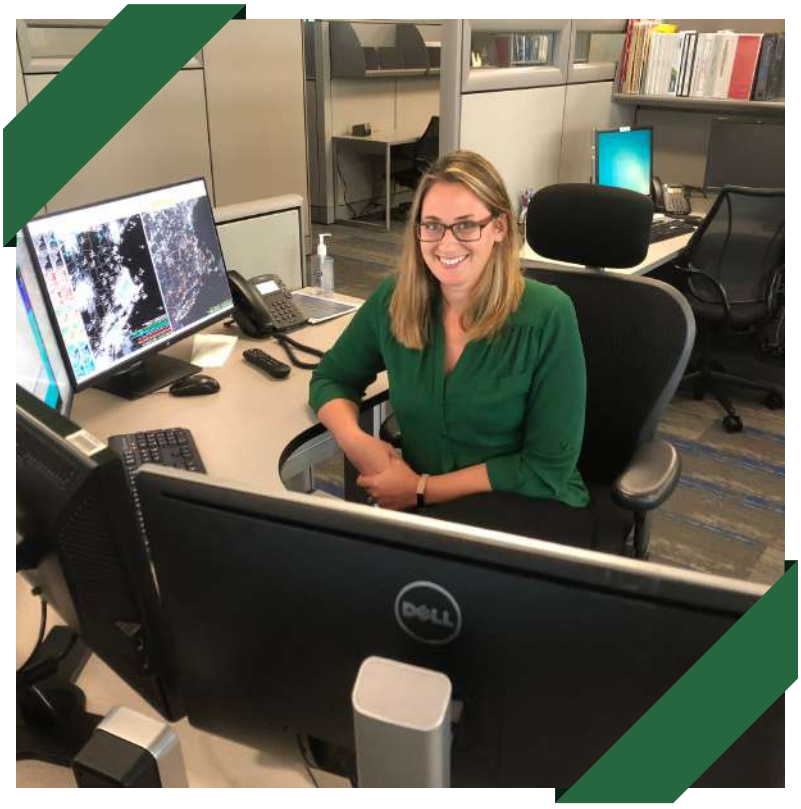
He met one-on-one with coastal emergency managers to develop a matrix of impact thresholds and this matrix is refined after every coastal storm. This has now become the NWS Eastern Region standard and is being accepted by NWS Southern Region. Bob established partnerships with Wheaton College and MA/RI lifeguards to better predict rip currents. Real-time reports of rip currents and rescues were combined with a forecaster's study of offshore wave heights to develop a matrix to predict rip currents. NWS-Taunton was the first WFO in Eastern Region to implement the Enhanced Short Term Forecasting Program (in 2007), which is now standard for all Eastern and Central Region WFOs. With regard to Digital Aviation Services, NWS-Taunton improved upon initial work by two other WFOs and this version has now become the standard in Eastern and Central Regions and many Southern and Western Region WFOs, too. In 2010, NWS-Taunton initiated the Probabilistic Snowfall Forecast program, which is now utilized by all Eastern and

Central Region WFOs and is being expanded nationwide. It is one of our most-used products, by emergency managers, the media, and the public.

His emphasis has not been on writing papers, but rather on establishing solid, lifelong relationships with customers and serving everyone with accuracy and fairness, which is his legacy. During retirement, Bob plans to stay in the area and spend time hiking, skiing, and having time with family.

Thanks, Bob!

- Bob with his family and fiancée Mary at his retirement party -

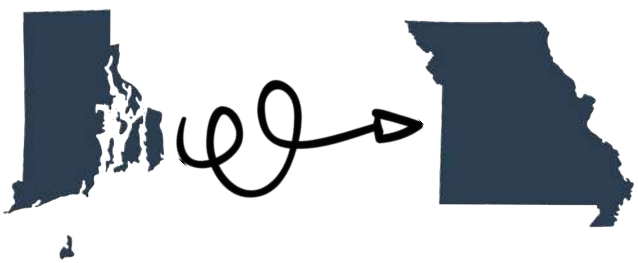


WE SAY GOODBYE

Stephanie Dunten

On August 30th we say goodbye to forecaster Stephanie Dunten. Stephanie has been at the Boston forecast office since 2011. She has worked through countless events such as Tropical Storm Irene, Superstorm Sandy, Winter Blitz of 2015, the Rhode Island Macroburst as well as countless Nor'easters and severe weather events. Stephanie was the fire weather focal point and was in charge of the SKYWARN program. She was also a part of the outreach and decision support services team and presented at several conferences. Stephanie has also been deployed to several large scale events across southern New England to provide weather support to the Massachusetts Emergency Management Agency (MEMA). These events include the July 4th Boston Pops Fireworks Spectacular, Boston Marathon and Sail in 2017. Stephanie has a passion for working with the emergency management community and enjoyed providing weather information to our partners during time of need, whether onsite, or remotely at the office.

Beginning in September, Stephanie will start her new role as the Emergency Response Specialist at the Regional Operation Center at Central Region Headquarters located in Kansas City, MO. We wish her nothing but luck.

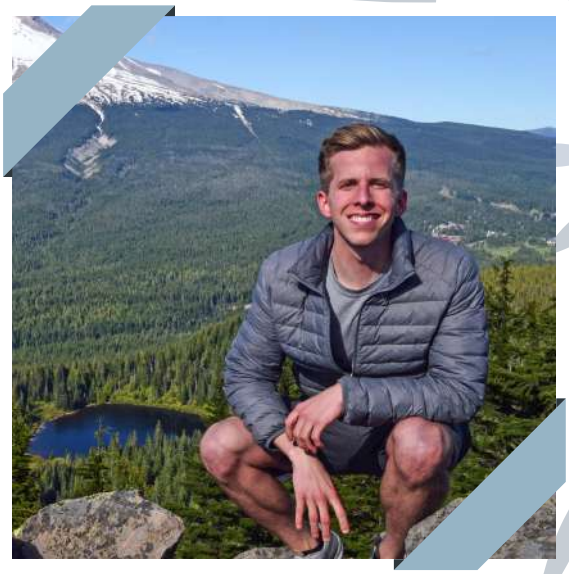


WELCOME TO THE BOX

Andy Nash

On October lst our new Meteorologist-in-Charge (MIC), Andy Nash, arrived at the Boston/Norton Forecast Office. Andy had been the MIC at the Burlington Forecast Office since 2007. While there he helped lead many projects including StormTotalSnow, GIS mapping, and the Winter Storm Severity Index. Andy's NWS career began in 1992 at Montgomery, Alabama as an Intern. From 1994 to 1999, he held Forecaster positions first at WFO Tampa Bay and then WFO Boston/Taunton. In late 1999, Andy became the regional aviation and severe weather program manager at Eastern Region Headquarters. In 2002 he went to Hawaii as the Science and Operations Officer at WFO Honolulu/Central Pacific Hurricane Center and 3 years later became the office's Director of Operations (Deputy Director).

Andy is no stranger to southern New England weather as he is originally from Connecticut. His wife grew up in Plymouth, MA and they frequently visit her parents who still reside in Plymouth. In his free time, Andy will focus on family-oriented activities with his two daughters, one a junior in high school and the other in 6th grade. Like most of us, Andy wants everyone to know that weather is not a job, it is also a passion. We are excited to welcome him back to the Boston Forecast Office.



WELCOME TO THE BOX

Bryce Williams

At the end of August, our newest forecaster, Bryce Williams, arrived at the Boston/Norton office. Bryce has worked at NWS offices in Morristown, TN, Huntsville, AL, and most recently Spokane, WA as a Meteorologist Intern. His work experience in Spokane included Decision Support Services with thenational and stateparks, as well as the Department of Transportation. He has also worked with NOAA weather radio, social media, Skywarn, and Geographic Information System. Bryce earned his B.S. degree in 2013 from Mississippi State University. The following two years were spent at the University of Alabama in Huntsville where he earned his M.S. degree in Atmospheric Science. Bryce is a native southerner, having lived in Florida, Texas, Tennessee, Mississippi, and Alabama before turning 22. His home, though, is Knoxville, Tennessee. This is where he grew up and where his family, including a twin brother, lives today.

Bryce's passion for meteorology started at a young age, fueled by the many thunderstorms he experienced as a kid, and solidified by the movie Twister. It sounds funny, but this disaster movie opened my eyes to weather as a potential career. Besides meteorology, Bryce loves photography, camping, hiking, and skiing. He looks forward to exploring all that New England has to offer and capturing it all with his camera.

THE DESTRUCTIVE NOR'EASTERS OF MARCH '18

BY HAYDEN FRANK

The winter of 2017-2018 was certainly a roller coaster ride in southern New England. After a bitterly cold and snowy stretch of weather from late December into early January, the second half of January into February featured well above normal temperatures. In fact, it was the warmest February on record for portions of the region aided by highs reaching into the 70s in some locales on both February 20th and 21st. While it might have appeared that winter was coming to an early end, three powerful and destructive nor'easters would bring us quickly back to reality that March can be very stormy and snowy.

The first in the series of three major nor'easters occurred on March 2nd. While precipitation was generally in the form of heavy rain across the vast majority of the region, a very small area along the east slopes of the Berkshires received 6 to 12 inches of snow. However, the two main impacts from this storm were very significant coastal flooding along the eastern Massachusetts coast and widespread wind damage across eastern Massachusetts and Rhode Island. Hurricane force wind gusts in this region resulted in over a half a million power outages! Many roads were blocked by downed trees and power poles. In fact, portions of the Cape and Islands recorded wind gusts over 90 mph from this storm.

While the region was still in the process of recovering from the major wind damage/power outage event, another major nor'easter was bearing down on the region. This nor'easter occurred on March 7th and 8th, but featured vastly different weather. While coastal flooding and damaging wind gusts were not an issue, rain changed to heavy wet snow in many locations. The bulk of the heavy snow occurred near and especially northwest of the Boston to Providence corridor where 9" to 18" were common.

This amount of heavy wet snow with temperatures near freezing resulted in widespread tree damage and power outages across central and northeast Massachusetts. Power outages in Massachusetts alone reached about a half million during the peak of the storm. The only fortunate thing was that the area of Rhode Island and Southeast MA that bore the main impacts from the previous storm were spared most of the power outages from this nor'easter, since the majority of the precipitation fell as rain.

The third major nor'easter occurred on March 13th, 2018. This was a colder storm than the prior two events, and the bulk of the precipitation occurred as snow, even across the Cape and Islands. The heaviest snow occurred just northwest of the Boston to Providence corridor, where 1 to 2 feet of snow accumulated. While there were some power outages in this region, the snow was drier and prevented them from being widespread. While snowfall amounts were somewhat less from Plymouth County and onto the Cape/Islands, impacts were much greater. This was the result of hurricane force wind gusts coupled with a more wet snow. Power outages reached a quarter of a million people in this region and many roads were blocked from downed trees and power outages.

March Nor'easters

March 2, 2018 — March 8, 2018 — March 13, 2018

March 2, 2018
Scituate, MA - Karl Swenson

March 8, 2018
Southboro/Framingham MA
NM1B-Matt Brennan

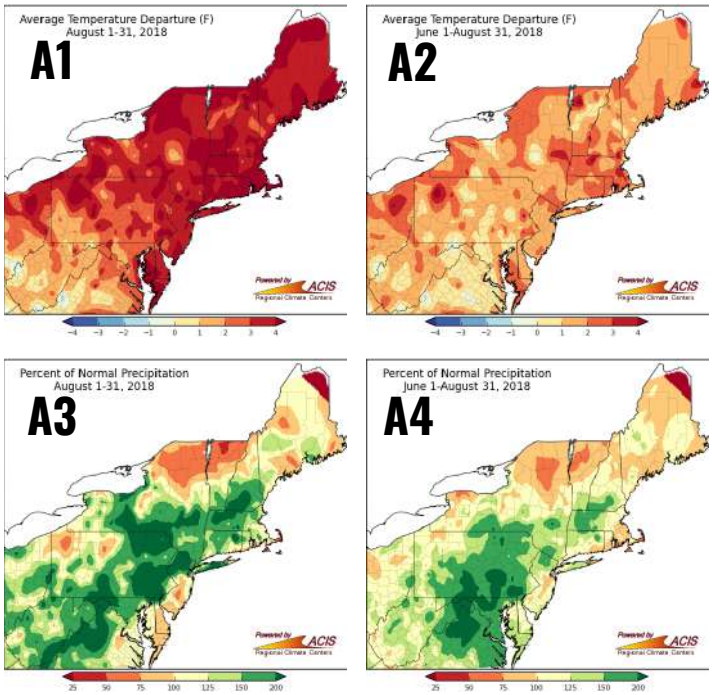
HOT AND HUMID AUGUST AND SUMMER

BY NORTHEAST REGIONAL CLIMATE CENTER

Coastal parts of the Northeast experienced the warmest temperature departures from normal during August (A1). With the seemingly constant supply of warmth and humidity enveloping much of the region this past month, it's no surprise that the entire Northeast experienced warmer-than-normal temperatures on average. This August ranked among the 20 warmest on record for all but three of the 35 major climate sites in the region. Caribou, ME, Burlington, VT, Boston, MA, Providence, RI, and Atlantic City, NJ, each experienced their warmest August on record.

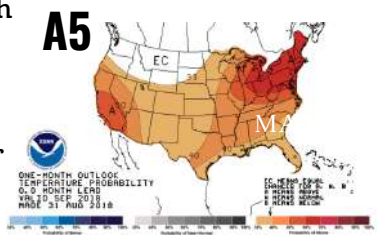
Meteorological summer, which encompasses the months from June through August, was also noticeably warmer than usual for the Northeast. All major climate sites in the region recorded warmer-than-normal temperatures during this past season. Seventeen climate sites in the Northeast experienced among their ten warmest summers ever recorded, and Caribou, ME, ranked this as their warmest summer on record. The heat wave during the first week of July, in addition to the warm temperatures throughout much of August, helped contribute to this summer being warmer than usual.Temperature departures have been above normal in most of the region throughout the summer (A2).

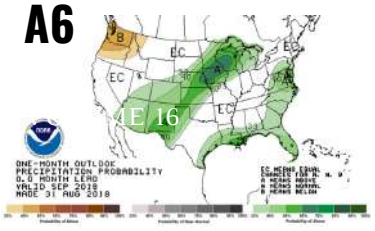
Precipitation was highly variable in the region during August. Areas towards the Mid-Atlantic, as well as parts of New England, saw a much higher percent of normal precipitation. Concord, NH received over three times their normal amount of rain during the month of August after recording 10.67 inches, or 336% of normal precipitation. Binghamton, NY, Scranton, PA, and Allentown, PA noted this August as their second wettest on record. For other locations scattered throughout the Northeast, it was a different story. August was drier than normal for seven of the major climate sites in the region. According to the U.S. Drought Monitor released on August 30, abnormally dry conditions were impacting 13% of the region, which shows an improvement from the beginning of August when 18% of the Northeast was abnormally dry.Parts of northern New England were drier than normal while the central part of the region experienced wetter than normal conditions this past month (A3).



Meteorological summer mirrored the month of August in terms of precipitation. The Mid-Atlantic region saw the highest percent of normal precipitation as many parts of Pennsylvania, Maryland, and New Jersey experienced days of heavy rain throughout the summer. Flooding was reported in cities towards the southern part of the region over the past three months, primarily in Maryland and Pennsylvania. Dulles Airport, VA and Williamsport, PA each experienced their wettest summers on record. The southern part of the region received the highest percent of normal precipitation during these past three months (A4).

According to the temperature outlook published by the Climate Prediction Center (CPC), increased chances of above-normal temperatures are shown for the month of September for the entire Northeast (A5). The CPC outlook for precipitation shows the highest probability of above-normal precipitation for areas south of New York (A6).





MARK ALLEN LOVEWELL

EDGARTOWN, MA CO-OP OBSERVER

- Mark Allen Lovewell receiving his 35 Year Service Award in 2017 -

There is plenty to think about when a storm rages in the open Atlantic and threatens our isle. Martha's Vineyard is an island a couple of miles off the coast of Massachusetts. Storms can be pretty bad. While it probably doesn't mean a lot in the easy daily ebb and flow of recording data every day at the National Weather Service cooperative weather station in Edgartown, the numbers matter. We get hit pretty hard. The question we hear afterwards all the time is: "How much?"

We like to think we are the first to get the rain bands, ahead of those living on the mainland, the first to feel the gusting wind and when the storm abates, we are the first to see the rainbow after all is done. Since 1982 I've dutifully measured the weather at the cooperative station in Edgartown, MA. I've emptied the rain gauge hundreds of times and to this day I still experience a sense of discovery each time I look inside. We've seen as much as four inches of rain in one day. We've seen the thermometer reach into the 90s during a summer heat wave and drop down below zero on the nights when our harbors seemed to magically freeze over. Compared to some of the inland weather stations we hear about, our snowfall amounts don't compare. But living on the edge, between the land and the open ocean, we feel like we are at a meteorological and a poetic outpost. Weather is always a living breathing creature that immeasurably impacts our day. We often feel the weather on this island is different from what we hear from our friends on the mainland. Factually, we could be wrong, but that doesn't keep us from thinking otherwise. There are gigantic forces at play and it feels like we are in the middle of them all.

Our gorilla in the closet isn't a large span of land to our west or the air mass above; it is the open ocean to our south and east. That massive amount of water can delay the cold approach of Old Man Winter. But the opposite is also true. When Old Man Winter has left the region and brought the first signs of spring, we are still likely to feel cold and damp, and still waiting. And that contributes to our sense of purpose in recording the weather data. We feel we are a special place, an intersection between a lot of streams.

The Edgartown cooperative weather station was started in 1946 by Henry Beetle Hough, publisher of the Vineyard Gazette, a weekly island newspaper I've worked at for 39 years. He was a sensitive and strong advocate of environmental thinking. He wrote novels and a multitude of essays and editorials. In addition to editing a newspaper, he is highly credited here for his work on conservation, protecting land , protecting groundwater, and protecting the environment. A lot of land on Martha's Vineyard is in conservation today not only by his actions but also by his ability to share his vision. He was an elder statesman, when I took over as his cooperative station replacement. It was by invitation. He asked me if I would do it. And without any heavy thinking on my part, it was an easy "yes." On the day we moved the weather station out of his backyard, he told me matter of factly: "This will make you a better writer." He was not only right, I think his little "ritual" each morning has made me a better islander.

19TH ANNUAL SOUTHERN NEW ENGLAND WEATHER CONFERENCE

BY GLENN FIELD

Since 2000, the Southern New England Weather Conference has provided a place for both seasoned weather professionals and enthusiasts alike to meet and share their knowledge and expertise in a friendly learning environment. We pride ourselves in covering a wide variety of topics that are presented in ways that can be appreciated by everyone. The conference is sponsored by the not-for-profit Blue Hill Observatory Science Center. The National Weather Service in Norton, MA helps construct the agenda.

The conference will again be held at Meditech Corporation, located in Foxboro, MA, (adjacent to the Marriott Courtyard) -- on Saturday, October 20th. You can see a full agenda, abstracts/bios, and register online at sneweatherconf.org. The price of registration includes a continental breakfast and hot buffet lunch by Rita's Catering of Boston.

Speakers Include

- Jason Samenow, Editor and Chief Meteorologist for the Washington Post's Capital Weather Gang… discussing communication of weather/climate info using digital media
- Maureen McCann, TV Meteorologist in Orlando, FL and Commissioner on Professional Affairs for the American Meteorological Society, discussing plans for the AMS' 100th Anniversary celebration
- Joseph Sienkiewicz, Chief of the Ocean Applications Branch at the NOAA/NWS/NCEP Ocean Prediction Center in College Park, MD… discussing the January 4, 2018 'Bomb Cyclone' coastal flood event and the ocean wave growth and dynamic fetch
- Dr. Richard Primack, a plant ecology professor at Boston University…discussing the effects of climate change on plants and animals in Concord, MA
- Dr. Carling Hay, Assistant Professor at Boston College…discussing sea level rise in Massachusetts
- Dr. David Robinson, New Jersey State Climatologist at Rutgers University… discussing the varied responsibilities of a state climatologist
- Mike Iacono, Senior Staff Scientist at Atmospheric and Environmental Research in Lexington, MA…discussing the history and climate record of the Blue Hill Observatory
- Matthew Doody, Forecaster at NWS-Norton…discussing the winter storm bust that occurred on March 20, 2018. He will also give a glimpse into our new forecast office in Norton, MA.
- Mary Rose Duberek, Emergency Management Specialist at the University of Connecticut and Derek May, Emergency Management Director for Pomfret, CT… discussing the use of weather information to promote a common operating picture

SUMMER TORNADOES IN SOUTHERN NEW ENGLAND

BY JOSEPH DELLICARPINI

- East Douglas, MA -

Five tornadoes were confirmed in our County Warning Area this past summer, all of which occurred in a two-week period from mid-July into early August. Earlier this year, there were another four tornadoes that affected Litchfield and New Haven Counties in Connecticut on May 15th. On average, our area experiences a few tornadoes each year. Tornadoes that occur in New England tend to be shorter-lived than their Midwest counterparts, with the exception of the June 1, 2011 tornado which was a rare, long-lived tornado. Nonetheless, tornadoes such as these are a reminder that even though they are on the ground for just a few minutes, they can still cause significant damage.

This summer, a stagnant weather pattern set up in the middle of July and persisted into August. High pressure off the East Coast provided a steady supply of hot and humid air, while approaching cold fronts and strong winds aloft led to a favorable environment for thunderstorms and tornadoes.

ASHFORD, CT

On July 17th, a small tornado occurred in Ashford, CT, near the Eastford line. Wind speeds were estimated at 80 to 85 mph, near the upper end of the EF0 category of the Enhanced Fujita scale. The tornado was only on the ground for 1 minute. It had a width of 225 yards and a length of 0.4 miles. Damage was mainly confined to a narrow area bounded by North Road to the west and Ashford Lake to the east, and by Birchwood Drive to the north and Westview Drive to the south. In that area, numerous large trees were uprooted and many large branches fell. An eyewitness at the lakeshore observed the water in the lake bring sucked up 50 to 60 feet into the air.

DOUGLAS, MA

Just over one week later, on July 26th, two tornadoes struck Douglas and Upton, MA in the middle of the night (around 2:30 AM). The first tornado touched down just south of Maple Street in East Douglas, where it produced most of its damage. The tornado tracked across Route 146 in the northwestern most portion of Uxbridge, then crossed Sutton Street and headed into the southern part of Northbridge, where it lifted up near the Northbridge Middle School. The tornado was on the ground for 4.4 miles. The path width was maximized at 200 yards in East Douglas and became narrower in Uxbridge and Northbridge. The tornado downed, uprooted, and snapped many large maple and oak trees, some of which landed on homes. Wind speeds were estimated at 100 mph (EF-1) in East Douglas. In Uxbridge and Northbridge, winds were estimated at 80 mph (EF-0).

UPTON, MA

The same parent storm dropped a second tornado in the town of Upton, MA. It touched down on Hartford Avenue South, just south of the railroad tracks in West Upton. The tornado crossed Route 140 and produced most of its damage in the neighborhood of Ephram's Way, between Jonathans Way and Warren Street. The tornado tracked a little farther to the northeast into the southwest portion of the Upton State Forest before it lifted. Winds were estimated at 70 to 80 mph

- Main Street in Webster, MA

UPTON, MA
CONTINUED

near the railroad tracks where it began (EF-0). However, it intensified to approximately 100 mph when it approached Ephram's Way (EF-1). Large oak and maple trees were uprooted and some were snapped. Some trees fell onto houses, causing some roof damage. One roof on Route 140 was damaged when the strong winds got underneath it and flipped a portion of it over.

WOODSTOCK, CT

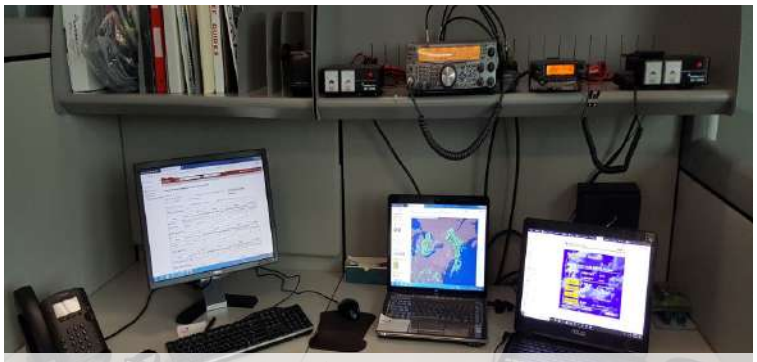
On the morning of August 4th, a weak, narrow tornado touched down in the northern portion of Woodstock, CT. It continued east-northeastward on a discontinuous path for approximately five miles into a portion of Quinebaug in Thompson, CT. The tornado was only 8 yards wide. This tornado was ranked EF-0, with maximum winds estimated at 80 mph. It touched down on Redhead Hill Road where it sliced a single, healthy oak tree in half and flattened small portions of two separate corn fields. The corn was laid down in different directions. A woman saw swirling of trees and other debris as it occurred, despite it being enshrouded in rain.

WEBSTER, MA

The same thunderstorm then produced a high-end EF-1 tornado in Dudley and Webster, with the most significant damage in Webster. Maximum wind speeds there were estimated at 110 mph. The tornado was 300 yards wide and traveled 0.5 miles in length. In just one minute, it wreaked havoc in the easternmost part of Dudley from roughly Route 12 (Schofield Avenue) to west of Laprise Court northeastward onto Main Street in Webster, and lifted near the French River by Oxford Avenue. Many trees were snapped and debarked. In Webster, a gas station overhang was twisted. An old brick rooftop was damaged, with bricks having fallen onto Main Street. The rubber roof covering of another building was peeled completely off. Windows were blown out at a business on Main Street and the street was littered with broken glass. The side walls of an apartment complex were bent slightly outward toward the tornado. Window screens were sucked outward. A car windshield and side mirror was damaged. There were other reports of trees fallen onto cars. Utility poles were snapped and numerous wires were downed.

Research done at our office over the past several years helped us improve our warnings for these tornadoes. We recently completed a study of the environments that favor tornado development as well as radar signatures that indicate a tornado is developing. This summer, we issued Tornado Warnings for each of these tornadoes (except a Severe Thunderstorm Warning for the Douglas/Uxbridge tornadoes) with as much as 23 minutes of lead time. Tornado Warnings are part of Wireless Emergency Alerts (WEA) and are automatically sent to cell phones within the warning area. Many people we spoke with during these storm surveys all said they received Tornado Warnings in the minutes before the storms hit, giving them time to get to safety. You can find out more about WEA at www.ready.gov/alerts.

- Upton, MA -



The new WX1BOX Amateur Radio Station at the new NWS Boston/Norton facility in Norton Massachusetts. The laptops are brought in during active operations. Photo by KD1CY-Rob Macedo

THE NWS OFFICE MOVE

Over the course of 2018, our amateur radio station at National Weather Service Taunton, along with the rest of the office, moved to the new facility in Norton, MA. As part of the move, NWS provided WX1BOX amateur radio with brand new equipment. The new equipment included two VHF/UHF antennas, a HF antenna, a Yaesu FT-8900 29/50/144/440 MHz radio, a Kenwood TS-2000 HF/144/440 MHz radio, and a Desktop PC. In addition, the prior Kenwood 144/440 MHz radio is available for use on the station.

The equipment was installed in early April and one radio and antenna system was fully functional in time to do a SKYWARN activation and support for the 2018 Boston Marathon as heavy rainfall and strong winds affected the race and other areas outside the race course. After a few technical issues, the second VHF/UHF antenna system issues were resolved in mid-July. The HF antenna was installed in late August and preliminary tests reveal that it is performing well and will need to be checked on a few other HF bands for any other adjustments. The station is now fully functional and was used many times over the past spring and summer severe weather season. The station position allows for 2 amateur radio operators to sit comfortably. Internet connectivity remains through a hot spot.

SEVERE WEATHER ACTIVATION - SUMMER 2018

On Sunday Morning August 12th, a significant flash flood event impacted the Lynn and Peabody, Massachusetts area. What started as a typical urban/poor drainage flood event, turned into a significant flash flood event with 7-9" of rain recorded in portions of Lynn and Peabody and a more widespread 4-7" of rain across the North Shore of Massachusetts from training strong thunderstorms. This caused significant flash flooding. North Shore SKYWARN was active on the 145.47-Danvers Repeater with numerous flash flood reports, pictures and videos sent out on the flash flooding.

As we moved into September, a strong cold front caused pockets of wind damage, flooding and house fires from lightning on Thursday, September 6th. WX1BOX amateur radio operations were active during this event. Also, during this time frame, we had a special visit from WD4R-Julio Ripoll, Assistant WX4NHC Coordinator where WX4NHC is the amateur radio call-sign of the amateur radio station at the National Hurricane Center, which Julio founded and has supported for 38 years. Julio was impressed with the SKYWARN activation and the amount of high quality reports received of house fires from lightning and pockets of wind damage in the region.

WD4R-Julio Ripoll With KD1CY-Rob Macedo During Thursday 9/6/18 SKYWARN Activation. Photo by: KD1CY-Rob Macedo

The remnants of Florence would affect the region on Tuesday September 18th with a widespread 2-5" of rainfall with isolated higher amounts of 5-7" of rain. W1KRX-Greg in Baldwinville, MA had 7.00" of rain from the remnants of Florence. This caused widespread urban and poor drainage flooding in the region with some small rivers and streams rising out of their banks and flooding roadways. The remnants of Florence also produced isolated severe weather and even a Tornado Warning was issued for parts of the North Shore where trees and wires were downed in a concentrated area in Saugus, MA. No tornado occurred but a microburst with 70-75 MPH winds occurred in Saugus. Other isolated pockets of wind damage occurred from severe thunderstorms in eastern MA as a couple of other thunderstorms reached severe limits in southeastern MA.

On Tuesday September 25th, flash flooding occurred particularly in southern CT but also in portions of southern Windham County CT, extending into isolated parts of RI and southeast MA. SKYWARN self-activated to monitor the flooding and flash flooding. A widespread 1.5-4" of rain occurred but some isolated locations had between 4-6.5" of rain including 6.4" of rain in Scotland, CT and 6.18" of rain in Windham, CT and just under 6" of rain in Cranston, RI. This led to significant pockets of flash flooding of urban areas and even a few rivers out of their banks and road washouts in the region. This was followed by some additional flooding and isolated severe weather Wednesday evening 9/26/18 where 1 to 3.5" of rain occurred in portions of interior north-central MA with pockets of significant urban flooding and an isolated concentrated area of trees and wires down in Sutton, MA, where WX1BOX operations was active Wednesday evening into early Thursday morning.

To see more pictures and videos of damage from the Spring/Summer 2018 season, find us at:

WX1BOX onFacebook: Facebook.com/wx1box
WX1BOX on Twitter: Twitter.com/wx1box
WX1BOX Web Site: wx1box.org

Thanks again to all SKYWARN Spotters for their support during the 2018 Spring/Summer Season. We look forward to working with everyone in the 2018-2019 winter weather season and experience winter from our new NWS Norton amateur radio station!

Waltham, MA - Matt Carter

Road Washout on Station Road in Scotland, CT
Photo by: KC1CVU-Rusty Lanzit