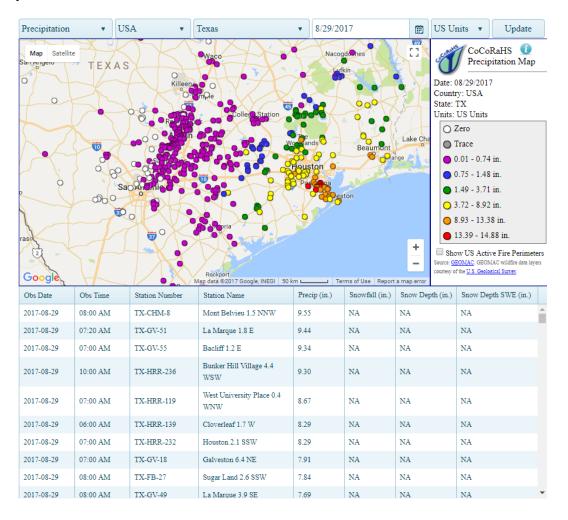


# REMEMBER TO TAKE OUT YOUR INNER TUBE TO MEASURE SNOW OR IT MIGHT CRACK!

#### Hello CoCoRaHS Observers!

Happy Fall! I wanted to give an update on the hurricane season and how it could impact New England. But first, check out this cool map of CoCoRaHS reports from Harvey on 8/29/17:

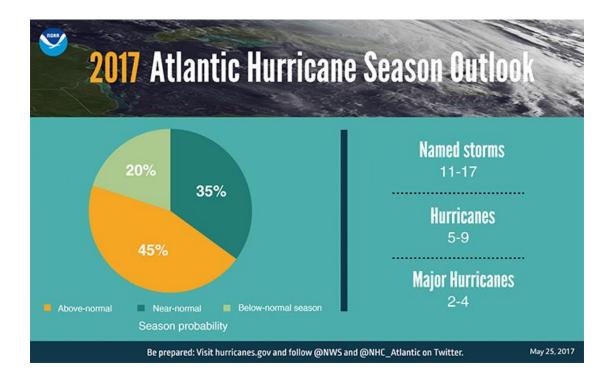


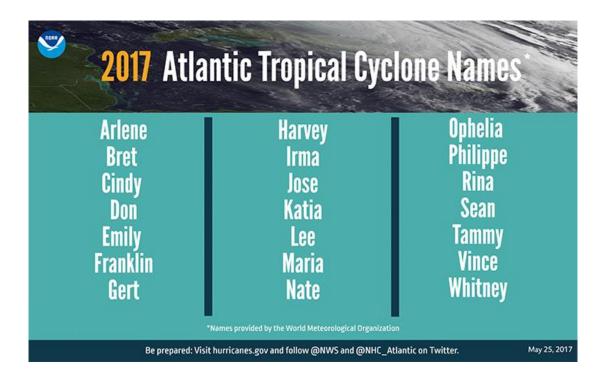
## What about the rest of the hurricane season?

For the remainder of the Atlantic hurricane season, which runs through November 30, forecasters predict a 45 percent chance of an above-normal season, a 35 percent chance of a near-normal season, and only a 20 percent chance of a below-normal season.

"The outlook reflects our expectation of a weak or non-existent El Nino, near- or above-average sea-surface temperatures across the tropical Atlantic Ocean and Caribbean Sea, and average or weaker-than-average vertical wind shear in that same region," said Gerry Bell, Ph.D., lead seasonal hurricane forecaster with NOAA's Climate Prediction Center.

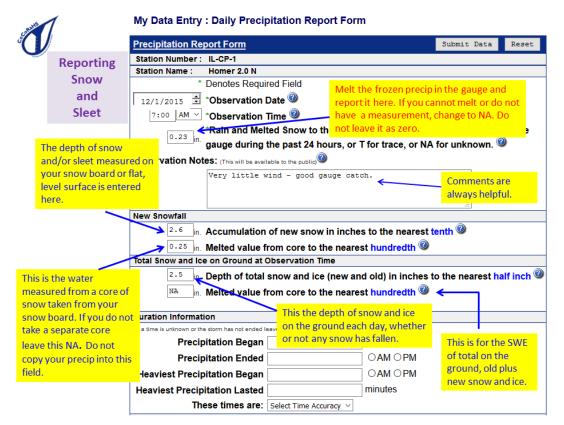
Strong El Ninos and wind shear typically suppress development of Atlantic hurricanes, so the prediction for weak conditions points to more hurricane activity this year. Also, warmer sea surface temperatures tend to fuel hurricanes as they move across the ocean. However, the climate models are showing considerable uncertainty, which is reflected in the comparable probabilities for an above-normal and near-normal season.





## A Note on Snow Observing to Jog Your Memory

Here are the basic fields you may want to fill out:



## **Significant Weather Reports**

Have you seen flooding, hail, or other severe weather that just can't wait for your CoCoRaHS report? Remember you can submit a Significant Weather Report if you see conditions that the forecasters at your local office need to know NOW. We receive these reports as an alarm as soon as you send them, and are able to use them to decide whether we should issue severe weather warnings or even end them if they are already in effect.

The following reports were received at the Gray weather office over the Spring and Summer. THANK YOU SO MUCH FOR YOUR REPORTS!!!

<u>Date</u> ▲	<u>Station</u> Number	Station Name	<u>Durati</u> on (Min)		<u>New</u> Snow (in)	Flooding	<u>County</u>
9/5/2017	ME-AN-32	Winthrop 9.4 W	120	2.51	0.0	Unusual	Androscoggin
8/18/2017	ME-YK-65	North Berwick 5.3 W	720	1.95	NA		York
7/8/2017	ME-OX-2	Hartford 1.4 N	30	0.77	NA		Oxford
7/1/2017	ME-CM-110	Harrison 0.3 NW	198	2.02	NA	Unusual	Cumberland
6/24/2017	ME-CM-114	Yarmouth 1.8 E	5	0.09	NA	Minor	Cumberland
6/20/2017	ME-WL-8	Winterport 2.9 N	5	0.28	NA		Waldo
5/15/2017	ME-WS-8	Lubec 4.1 W	1440	1.90	NA		Washington
5/6/2017	ME-WS-8	Lubec 4.1 W	1440	2.06	NA	No	Washington
4/1/2017	<b>ME-CM-18</b>	Portland 5.5 WNW	375	0.38	2.5		Cumberland
4/1/2017	<b>ME-CM-18</b>	Portland 5.5 WNW	315	0.06	0.3		Cumberland

<u>Date</u> ▲	<u>Station</u> Number	Station Name	<u>Duration</u> ( <u>Min</u> )	<u>New</u> Precip <u>(in)</u>	<u>New</u> Snow (in)	<u>Flooding</u>	<u>County</u>
9/3/2017	NH-MR-33	Boscawen 2.2 SE	480	1.01	0.0	No	Merrimack
8/4/2017	NH-BK-1	Tilton Northfield 3.3 NE	25	0.87	NA	No	Belknap
8/2/2017	NH-MR-33	Boscawen 2.2 SE	30	0.56	NA	Minor	Merrimack
8/2/2017	NH-MR-55	Canterbury 2.5 SSW	210	1.37	NA	No	Merrimack
7/20/2017	NH-ST-40	Barrington 3.2 E	15	0.62	NA	Minor	Strafford
7/13/2017	NH-CH-24	Keene 2.5 NNW	120	0.96	NA	Minor	Cheshire
7/8/2017	NH-CH-21	Keene 2.0 SE	37	1.20	NA	Minor	Cheshire
6/30/2017	NH-RC-65	Derry 4.2 NW	70	1.06	NA	Minor	Rockingham
6/27/2017	NH-MR-55	Canterbury 2.5 SSW	120	0.66	NA	No	Merrimack
6/27/2017	NH-CH-24	Keene 2.5 NNW	10	0.30	NA	Minor	Cheshire
6/25/2017	NH-CS-10	Randolph 1.4 NE	8	0.37	NA		Coos
6/25/2017	NH-CS-10	Randolph 1.4 NE	14	0.44	NA	Minor	Coos
6/19/2017	NH-CH-24	Keene 2.5 NNW	20	0.63	NA	No	Cheshire
6/19/2017	NH-CH-21	Keene 2.0 SE	15	0.23	NA	Minor	Cheshire
5/31/2017	NH-BK-1	Tilton Northfield 3.3 NE	0	NA	NA		Belknap
4/12/2017	NH-CR-39	Wolfeboro 12.8 N	180	0.29	NA	No	Carroll
4/1/2017	NH-HL-48	Greenville 1.1 ENE	660	3.00	10.2		Hillsborough

### Multi Day Reports- Are You Going out of Town for the Holidays?

If you go out of town for several days, and come back to precipitation in your gage, what should you do?

First off, **multi-day reports** are perfectly fine. We know you can't be there all the time! Putting a quick note in the Observation Comments section is a great way to let us know what we are looking at is a multi-day total, not just a mistake. For instance, you could write: "since Friday", "n-day total", or "storm total". This is a quick and helpful way to check for the multi-day reports.

One overall guiding principle to pass along as you submit reports. *Mistakes happen with reporting, not with measuring.* Spend just a few seconds looking over your report before pressing submit. Having the decimal point in the incorrect location, incorrect date or observation time, incorrect start or end date on the Multi-Day Report, or using the Daily Report instead of the Multi-Day Report are the most common errors that are found. That's before it snows again and we begin to report multiple values of snow and melted amounts.

## Multi-Day Reporting on the App

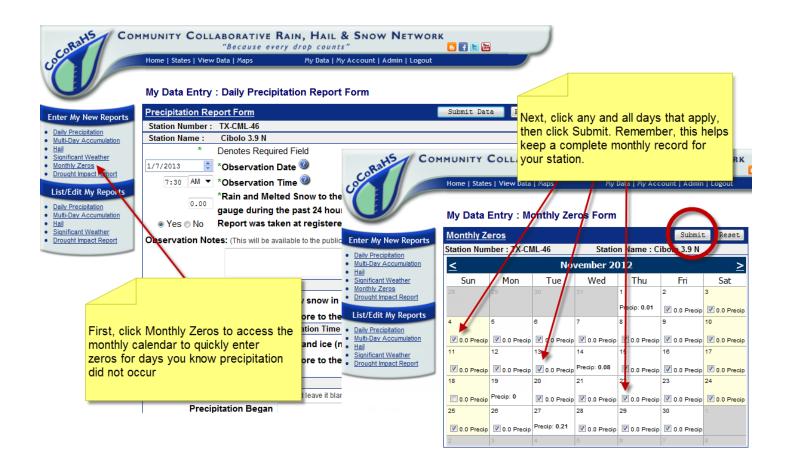
For those of you that use the mobile app to report and haven't already done so, please update your app on Apple or Android. The feature for Multi-Day Reporting is now available.

The "First Day of Accumulation" should be one day after your last report. In this case, if the last report is July 4, the "First Day of Accumulation" should be July 5. With the app, there is a history function. Please use it to see where missing reports may be.



## Zeroes Are Important!

Why are zeroes so important? Because we cannot use your data during the winter unless we are absolutely sure that is did not snow. You can let us know that by entering zeroes on days when you didn't get any snow or rain. This helps us a bunch! Thankfully, there is an easy way to do it as well:



\*\*\*\*If you do not report zeroes, please use a multi-day report when you do return to your reporting. For instance, if you only report the days it rains, include the previous zero precipitation days in the report and make it a multi-day report...even if all of that fell in the last 24 hours. This makes our Quality Controlling much easier!!! THANK YOU\*\*\*

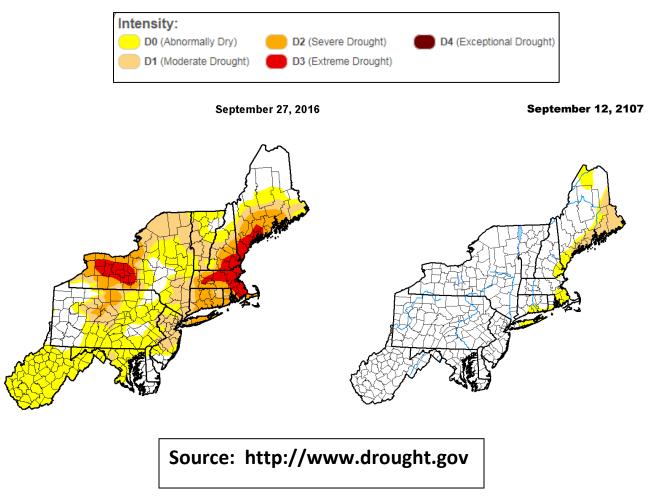
### The Latest on the Drought

As the fire weather lead for the Gray, ME office, I am in constant contact with the Maine Forest Service as well as the New Hampshire Department of Forests and Lands. Rangers were battling a 325 acre brush fire in the White Mountains as late as November 19. Here is some more information from our climate specialist about what is exactly going on:

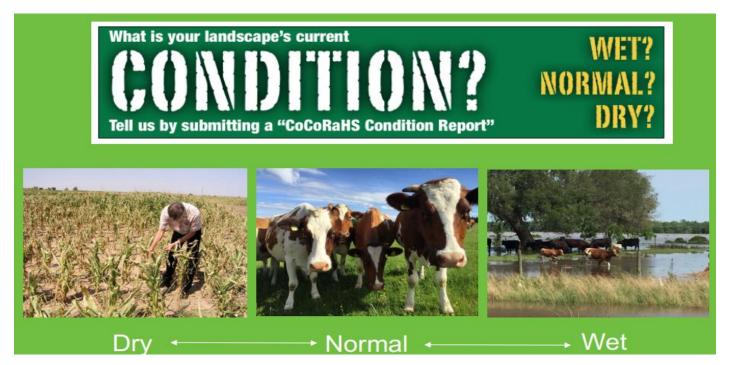
There have been multiple reports that hay production has been affected in several areas of Maine and New Hampshire, including Waldo, York, and Cumberland Counties. After the first cutting, many farmers were not able to grow an additional cutting. Reportedly the hay was withered, dry, and short.

In addition, wildlife biologists say that it may take as long as four years for Main's wild brook trout to fully recover from the drought. Ponds and streams in central and southern Maine were affected by extreme drought conditions earlier this year and were especially low. Streams and brooks that would normally support the wild brook trout population dried up, inhibiting breeding and making them easy prey in the shallow pools.

The drought has improved thanks to recent rains however. Here are maps from the U.S. Drought Monitor, showing the difference from the beginning of the water year, September 2016, essentially a year ago, and now:



## New Condition Monitoring Page



To understand the impacts of drought on plants, animals, and people, it is very helpful to monitor conditions regularly, whether the weather is wet or dry. This allows us to see how a drought year differs from a normal year, and we learn how different plants, animals and people respond to the onset, intensification, and recovery of drought. Regular condition monitoring can also help identify expected seasonal changes versus changes caused by unseasonably wet or dry conditions. This type of monitoring can also help to identify long-term or cumulative effects of drought. Who knows best about how your land is reacting to the current long-term weather conditions? You!! Your knowledge about the local environment and how weather influences it can reveal much more than can be learned from recording daily rainfall alone. Go to www.cocorahs.org and click on 'Condition Monitoring' to learn how to help!

## The Fires of 1947

Over 200 fires burned between October 13 and 27, 1947 in the state of Maine. The fires burned a quarter of a million acres of forest, and obliterated 9 towns. A total of 2,500 people were left homeless, and over 1200 homes were razed to the ground. This year marks the 70<sup>th</sup> anniversary of the conflagration, and Acadia National Park, in cooperation with the National Weather Service and other organizations, is holding events October 17-18, 2017 concerning the fires, fire climatology, and fire management. Go here to check out the events: <u>http://www.firesciencenorthatlantic.org/</u>

The state had some early indications that the stage was being set for a conflagration: there were 108 consecutive days without rain from mid-July through early October, and snow melted early that spring. The National Forest Service recognized the danger and categorized Maine to be in a "high state of flammability", urging residents to clean chimneys. The Forest Service also kept open fire watch towers which normally closed on September 30.

The first fires that developed were in Portland, Bowdoin, and Wells. By October 16, at least 20 separate fires were burning. Residents began to notice hazy skies, a smell of smoke in the air, and night skies that glowed red.

Organized fire departments, or brigades, were few and far between, with communications lacking and no centralized warning or command structure for the state. Firefighting resources were stretched to the maximum. Thankfully for the residents of Maine, men and boys from Maine and nearby states including New Hampshire, Massachusetts, and Vermont rushed to help extinguish the flames. Despite this, most homes in the towns of Shapleigh, Waterboro, Alfred, Lyman, Newfield, Kennebunk, Kennebunkport, Arundel, Dayton, Wells, Biddeford, and Saco were destroyed in the fires over the next weeks.

The USS Little Rock came from Boston with 1,000 servicemen and firefighting equipment. The men fought the fires tirelessly. Many towns that would have otherwise been destroyed were saved due to these heroic efforts, including Hollis.

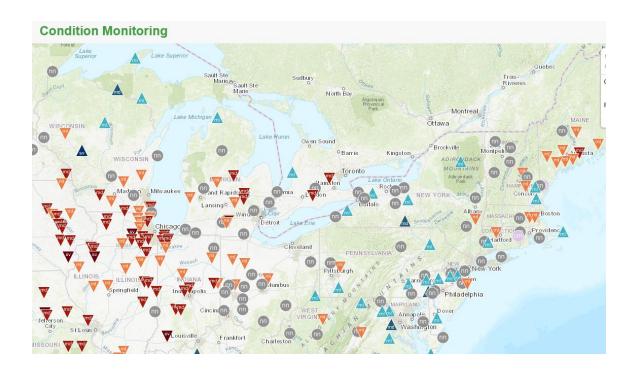
Mount Desert Island, which contains Bar Harbor and Acadia National Park, had a total of 17,188 acres destroyed, with 5 people dying because of the fire. Fires engulfed 67 townhomes in an area known as Millionaire's Row in Frenchman Bay. Another 170 homes and 5 historic hotels were destroyed. As residents fled to nearby piers to escape the fires, fisherman from Winter Harbor, Gouldsboro, and Lamoine evacuated 400 people by boat. The nearby Jackson Laboratory exploded in a fireball over the ocean.

The fires were declared under control in late October, but continued to burn under the ground through mid-November. The fires were a wake-up call for Maine. A statewide firefighting and prevention meeting was held in 1948, and it is at that meeting that most Maine towns established volunteer firefighting departments. Maine developed a two-way public radio network, and a public education program was begun.

# The staff at the National Weather Service in Gray would like to express their thanks to old and new observers alike.

The next WxTalk webinar, entitled **Storm Surge, Run From the Water, Hide from the Wind,** by Jamie Rhome, Storm Surge Specialist, at the National Hurricane Center in Coral Gables FL, has been postponed due to the recent active tropical systems. Keep watch over the Message of the Day to see when this webinar will be rescheduled at <u>www.cocorahs.org</u>.

It is recommended that you go to the website and submit a Condition Monitoring Report. Also check out the new mapping feature, where you can see your recent report. Here is a preview:



Summer will officially end and Autumn will officially begins with the Equinox, which occurs Friday, September 22 at 4:02 pm. October 1 starts a new Water Year and a new snow reporting season.

Thank you for all that you do for CoCoRaHS, whether in the past, present and in the days to come!!

Special thanks to Matt Spies.

#### Stacie

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