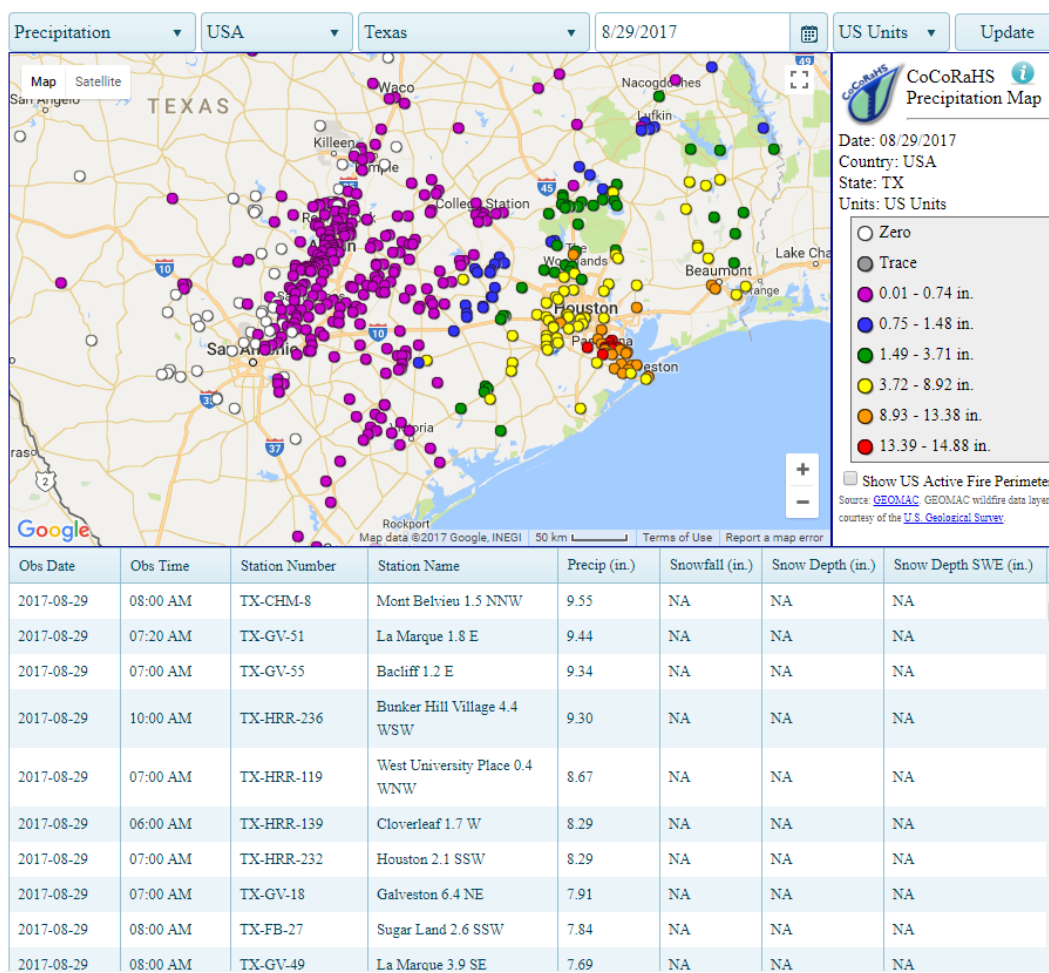




**REMEMBER TO TAKE OUT YOUR INNER TUBE TO MEASURE SNOW OR IT MIGHT CRACK!**

*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:

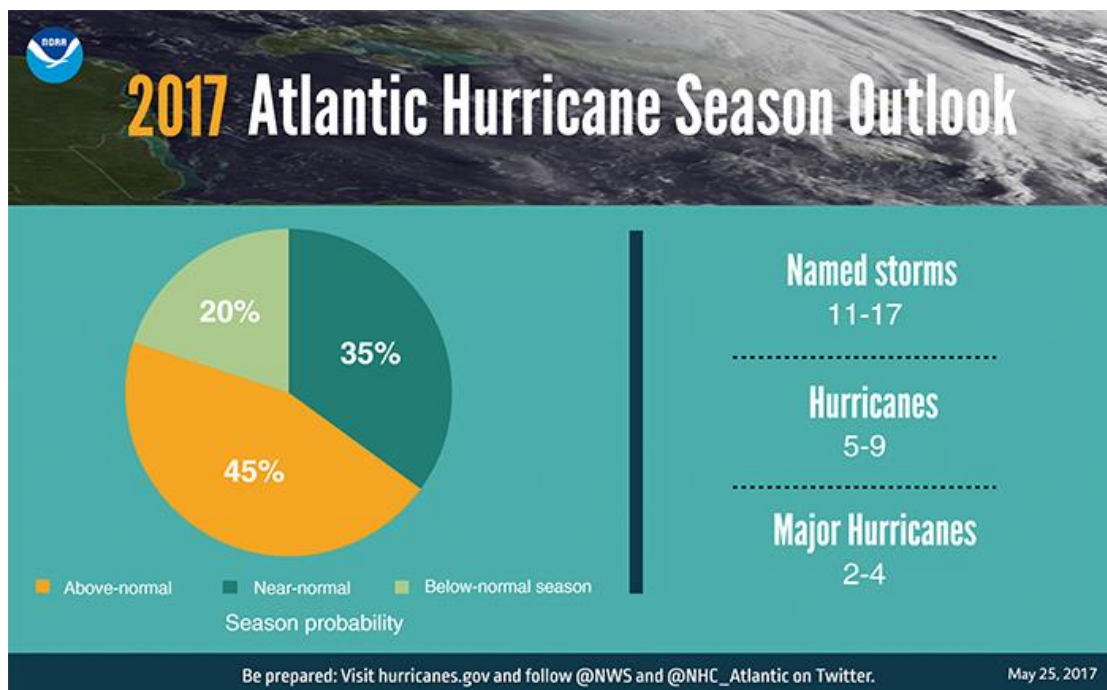


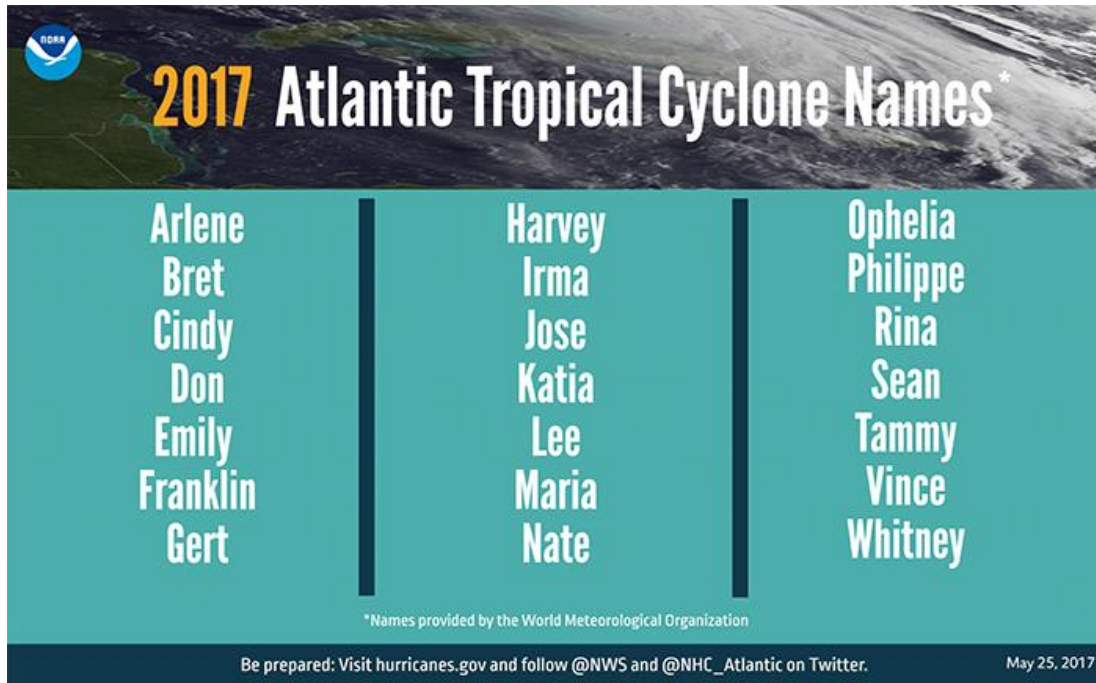
## What about the rest of the hurricane season?

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:

**My Data Entry : Daily Precipitation Report Form**

**Precipitation Report Form** Submit Data Reset

Station Number : IL-CP-1

Station Name : Homer 2.0 N

\* Denotes Required Field

12/1/2015 \*Observation Date

7:00 AM \*Observation Time

0.23 in. ← Rain and Melted Snow to the gauge during the past 24 hours, or T for trace, or NA for unknown.

Observation Notes: (This will be available to the public)

Very little wind - good gauge catch. ← Comments are always helpful.

**New Snowfall**

2.6 in. Accumulation of new snow in inches to the nearest tenth

0.25 in. Melted value from core to the nearest hundredth

**Total Snow and Ice on Ground at Observation Time**

2.5 in. Depth of total snow and ice (new and old) in inches to the nearest half inch

NA in. Melted value from core to the nearest hundredth

**Precipitation Information**

Precipitation Began

Precipitation Ended

Heaviest Precipitation Began

Heaviest Precipitation Lasted

These times are: Select Time Accuracy

**Reporting Snow and Sleet**

The depth of snow and/or sleet measured on your snow board or flat, level surface is entered here.

Melt the frozen precip in the gauge and report it here. If you cannot melt or do not have a measurement, change to NA. Do not leave it as zero.

This is the water measured from a core of snow taken from your snow board. If you do not take a separate core leave this NA. Do not copy your precip into this field.

This the depth of snow and ice on the ground each day, whether or not any snow has fallen.

This is for the SWE of total on the ground, old plus new snow and ice.

## 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 Number</u>	<u>Station Name</u>	<u>Duration (Min)</u>	<u>New Precip (in)</u>	<u>New Snow (in)</u>	<u>Flooding</u>	<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	ME-CM-18	Portland 5.5 WNW	375	0.38	2.5		Cumberland
4/1/2017	ME-CM-18	Portland 5.5 WNW	315	0.06	0.3		Cumberland

<u>Date</u> ▲	<u>Station Number</u>	<u>Station Name</u>	<u>Duration (Min)</u>	<u>New Precip (in)</u>	<u>New Snow (in)</u>	<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.

The image shows a screenshot of a mobile application titled "Multi-Day Precipitation". The app has a blue header with a hamburger menu icon on the left. Below the header, there is a CoCoRaHS logo on the left and the text "Multi-Day Precipitation" on the right. The main form contains several input fields: "First Day of Accumulation" with a date picker set to "2017-07-05", "Date Emptied" with a date picker set to "2017-07-05", "Observation Time" with a time picker set to "07:00", "Precipitation (in)" with a text input field, "Depth of Snow on Ground (in)" with a text input field, and "Core Precipitation (in)" with a text input field. At the bottom, there is a note: "T for Trace or NA for unknown".

## Zeroes Are Important!

Why are zeroes so important? Because we cannot use your data during the winter unless we are absolutely sure that it 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:

**CoCoRaHS COMMUNITY COLLABORATIVE RAIN, HAIL & SNOW NETWORK**  
*"Because every drop counts"*

Home | States | View Data | Maps | My Data | My Account | Admin | Logout

**My Data Entry : Daily Precipitation Report Form**

**Precipitation Report Form** [Submit Data]

Station Number : TX-CML-46  
 Station Name : Cibola 3.9 N

1/7/2013 \*Observation Date  
 7:30 AM \*Observation Time  
 0.00 \*Rain and Melted Snow to the gauge during the past 24 hours  
☒ Yes ☐ No Report was taken at registered location

Observation Notes: (This will be available to the public)

**My Data Entry : Monthly Zeros Form**

**Monthly Zeros** [Submit] [Reset]

Station Number : TX-CML-46 Station Name : Cibola 3.9 N

November 2012

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	31	1	2	3
				Precip: 0.01	<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip
4	5	6	7	8	9	10
<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip
11	12	13	14	15	16	17
<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip	Precip: 0.08	<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip
18	19	20	21	22	23	24
<input checked="" type="checkbox"/> 0.0 Precip	Precip: 0	<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip
25	26	27	28	29	30	1
<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip	Precip: 0.21	<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip	<input checked="" type="checkbox"/> 0.0 Precip	
2	3	4	5	6	7	8

\*\*\* 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\*\*\*

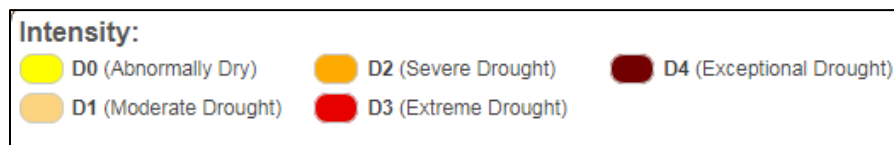
## The Latest on the Drought

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.

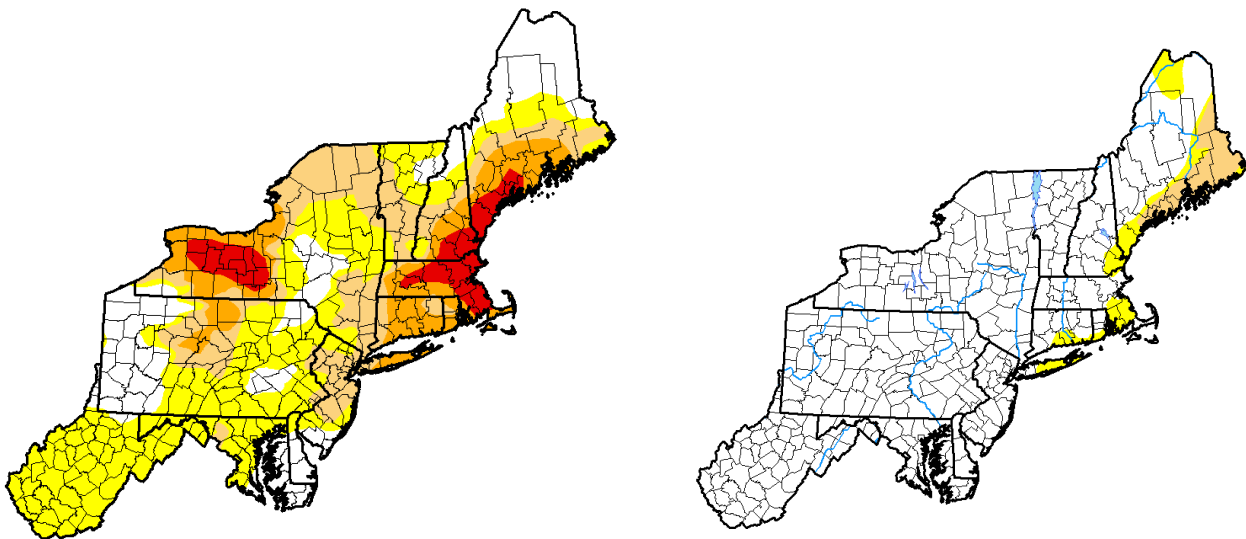
In addition, wildlife biologists say that it may take as long as four years for Main's wild brook trout to fully recover from the drought. Ponds and streams in central and southern Maine were affected by extreme drought conditions earlier this year and were especially low. Streams and brooks that would 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:



September 27, 2016

September 12, 2107



Source: <http://www.drought.gov>






## New Condition Monitoring Page

What is your landscape's current

# CONDITION?

Tell us by submitting a "CoCoRaHS Condition Report"

WET?  
NORMAL?  
DRY?



Dry ← → Normal ← → Wet

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](http://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: <http://www.firesciencenorthatlantic.org/>

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.

