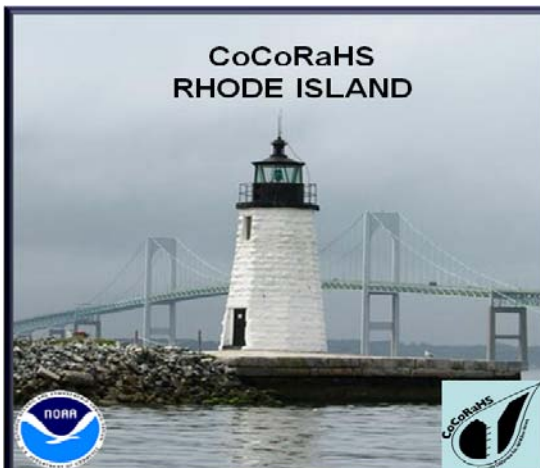


# SOUTHERN NEW ENGLAND CoCoRAHS NEWSLETTER



**SPRING/SUMMER 2012**

# WELCOME!!!

Even though warmer weather has returned, the past winter ended up being warmer and drier than average. In fact, seasonal snowfall totals were as much as 2 to 3 feet below average in some locations!

Here are some snowfall totals (in inches) from the long term climate sites:

Site	2011-12 Snowfall	Average	Departure
Worcester, MA	39.7	64.1	-24.4
Hartford, CT (Bradley)	26.7	40.5	-13.8
Blue Hill Observatory, MA	24.2	60.0	-35.8
Providence, RI	17.8	33.8	-16.0
Bridgeport, CT	13.6	28.1	-14.5
Boston, MA	9.3	43.9	-34.6

You can find your seasonal total (and from other CoCoRaHS observers) by using the **Station Snow Summary Report** feature in the **View Data** menu.

Dry weather lasted through early spring, but we finally saw a wetter weather pattern emerge later in April and May.

CoCoRaHS continues to expand and remains an active observation network in southern New England. As of mid May, there were a total of 275 observers:

- 147 observers in Massachusetts
- 75 observers in Connecticut
- 53 observers in Rhode Island

Many observers have been reporting daily, even when no precipitation fell. Keep it up! ***Even Trace amounts and “zeroes” are important to CoCoRaHS!***

## **REVIEW OF THE HISTORIC OCTOBER 29-30, 2011 WINTER STORM**

An unprecedented and historic early season winter storm deposited over 2 feet of snow across the Monadnocks of southern New Hampshire and the Berkshires in western Massachusetts. Twelve to twenty inches of snow fell across the Connecticut River Valley of New Hampshire, Massachusetts, and Connecticut as well as the Worcester Hills. Four or more inches of snow accumulated across the rest of interior southern New England to the northwest of Route 128 in Massachusetts and northwest Rhode Island.

The highest snowfall amounts from this storm were reported at both Plainfield, MA and Jaffrey, NH with amounts of 31 inches. These totals would be extraordinary for the heart of winter, but a storm of this magnitude occurring before Halloween is unprecedented. To add insult to injury, since this was such an early season storm much of the foliage remained on the trees. This combined with the very heavy wet snow resulted in widespread tree damage and power outages across interior southern New England.

One day after the storm, 1.5 to 2 million people were without power, exceeding the numbers that resulted from Tropical Storm Irene! Many people remained without power for over a week! In addition, damaging winds of up to 70 mph were experienced across the southeast New England coast. The storm also resulted in minor coastal flooding across along east facing shorelines. However, if the high storm tide had occurred 6 hours earlier or later during the time of astronomical high tide the coastal flooding would have been much worse.

This historic winter storm was the result of a rapidly deepening low pressure system developing off the North Carolina coast. The storm system tracked to a position just southeast of Nantucket on Saturday evening, October 29. Heavy snow rapidly overspread most of interior southern New England Saturday afternoon, as unseasonably cold air was in place. Hourly snowfall rates of 1 to 3 inches per hour were common across this region into Saturday night. Meanwhile, across Eastern MA and Rhode Island it was warm enough to initially support rain Saturday afternoon. Colder air worked in from the northwest Saturday evening, allowing the rain to change to snow even along the immediate coast. The snow

finally came to an end across the western New England after midnight and ended across eastern New England early Sunday morning.

National Weather Service forecasters saw the potential for a freak early season winter storm nearly a week before it occurred. It remained uncertain through the middle of the week if the storm would track close enough to the coast to impact southern New England. That all began to change by Thursday October 27, as confidence rapidly grew that a high impact event would occur that weekend. This information was distributed via the Hazardous Weather Outlooks and Area Forecast Discussions as well as conference calls to emergency managers.

Winter storm watches were issued for all of interior southern New England Friday morning and upgraded to winter storm warnings that afternoon. The winter storm warning mentioned that the heavy wet snow would result in damage, with the potential for an area of widespread power outages and tree damage. The snowfall amounts were underdone, but forecasters correctly located where the axis of heaviest snow would occur and result in widespread damage.

The unprecedented, major winter storm that struck before Halloween will not soon be forgotten. This storm would have been considered historic if it had occurred during the middle of the winter. The fact that it occurred in late October is extraordinary, and that the wet snow combined with lots of foliage on the trees resulted in one of the highest impacts events in recent memory.

## SUMMERTIME REMINDERS



\* Warmer weather means it's time to place the inner cylinder and funnel back on your rain gauge. ***Remember to remove them, however, if freezing weather is in the forecast!***

\* Measure rainfall to the nearest hundredth (0.01) of an inch and report your daily precipitation total. Trace amounts and zeroes are important too!

\* If you observe hail, measure the diameter of the largest hailstones (use a ruler or coin) and send a **Significant Weather Report**. Your report will automatically be forwarded to the nearest National Weather Service office! ***The same holds true for anything you feel is significant, such as heavy rainfall, flooding, or storm damage (downed trees, branches, power lines, etc.)***

## NEXT NEWSLETTER

Have a great summer! Look for the next Southern New England CoCoRaHS Newsletter in the fall.