



WEATHERWORKS

THE WEATHER TRACKER

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April 14-15 Top Rainfall Amounts

DELAWARE

Bear.....5.05"
Wilmington.....4.87"
Newark.....4.77"

MARYLAND

Baltimore.....3.10"
Norbeck.....2.65"
Oxon Hill.....2.57"

NEW JERSEY

Rivervale.....9.30"
Harrison.....7.92"
Lambertville.....7.25"

PENNSYLVANIA

Roxborough.....6.22"
Media.....6.04"
Glendon.....5.91"

AN IMPRESSIVE LATE SEASON NOR'EASTER

It has been quite a long time since a powerful Nor'easter has moved up the coast in April. But in the middle portion of the month, a storm was brewing over the South-Central section of the country and would slowly work its way towards the Northeast. As low pressure moved East, copious amounts of moisture streamed in from the Gulf and Atlantic. Due to the slow-moving nature of the system, steady precipitation was nearly continuous for a 24hr period.

What was very impressive with this storm was how strong and deep the low pressure center became. Typically, with a Nor'easter, the coastal low rapidly develops, becomes quite strong and moves off the coast. During *this* storm, there was a steady strengthening with the low until it reached its peak intensity over Long Island at 969 millibars (millibar is the standard way of measuring atmospheric pressure in meteorology). To get a sense of a how strong the low was, many **category 2 hurricanes**



Reg. Radar from WeatherTap
4-15-07 at 7:34 AM EDT

are near that strength in terms of pressure. The reason why the winds were nowhere near the strength of a hurricane, is because they are two completely different systems and this storm's pressure gradient was not as strong. Regardless, wind gusts were still significant as speeds reached up to 60 MPH.

Setting this storm apart from other late-season events, was the amount of cold air that was in place. Luckily, the low tracked just along the coast to bring enough warm air in for mainly all rain. But because of the cold air already established, plus what the storm generated, heavy snows

fell not too far away as the storm continued to throw moisture back west-ward. Scranton, PA picked up 7 inches of snow and Binghamton, NY had over a foot! Some of this cold air made it into SE PA, producing a brief slushy accumulation of snow on all surfaces the morning of the 16th.

The main story was the flooding and it was New Jersey (particularly the Northeast part of the state) that was hit hardest. The sheer amount of water was not enough for the rivers and creeks to handle as they swelled out of control onto low-lying areas. In Bound Brook, the Raritan River reached a peak crest of 38.4 feet, 2nd highest of all time.

This storm was definitely one for the record books in terms of time of season, strength, snowfall and flooding.



Flood waters covered many roads including Tyler Street and Bridge Street in Paterson, New Jersey (From the Herald News)

APRIL COLD AND SNOW

Usually in April we find a minor snow threat or two. But this season, a remarkably strong cold air mass set up shop across the Northeast and any weather-maker that could produce precipitation, provided a snow threat. Most of the minor systems just produced flurries or non-accumulating snow. But an Alberta Clipper produced a snow accumulation in the Southern half of the area on the 7th. Some spots also had snow at the tail end of the major Nor'Easter. The amount and duration of the cold air was incredible during the first half of the month. Baltimore and Washington had five days in a row below 50 degrees, which has only happened once over a 120-year period.

Close up: Relative Humidity vs. Dewpoint

As summer approaches, the days of heat and humidity are not far behind. Most people agree, the humidity has more of an impact on how uncomfortable a day actually feels than the temperature.

To gauge humidity there are generally two separate numbers used. First is relative humidity which is a measure of moisture in the air compared to the maximum amount possible. The second, and more useful, is the dewpoint, which is an absolute measure of moisture.

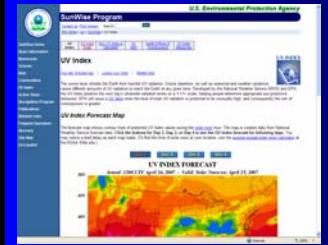
Since warmer air holds more moisture, relative humidity is subject to daily variations with temperature, typically higher in the morning and at night, and lowest in the afternoon. Thus, a relative humidity of 75% in the morning can easily fall to 50% by the afternoon without a change in the amount of moisture in the air.

Dewpoint, in the simplest form, is a way to measure the moisture in the atmosphere. Unlike relative humidity, dewpoints **do not** change without an increase or decrease moisture. While preparing for

outdoor work, the dewpoint temperature is the best way to determine the effects humidity will have on your work day. The chart below depicts how dewpoints are perceived.

DP	Feels Like
75°+	Oppressive
70° - 74°	Very Humid
65° - 69°	Humid
60° - 64°	Fairly Humid
55° - 59°	Comfortable
50° - 54°	Very comfortable
< 49°	Dry

Website of the Month



Many web pages provide UV index information, but the website from the EPA is likely the best. The page provides daily UV forecasts as well as other useful info (click image to follow link)

A few notes from Frank Lombardo

Well as the calendar finally turns to May, we can close out yet another Snow and Ice season. This past winter brought a wide range and variety of storms to the area with an unusual distribution and frequency that made it an exceptionally difficult winter. Early warm spells, severe icing and late season events all contributed to complicate winter.

Warmer weather returning during the next few months turns our attention to Landscape Management, Paving, Striping parking lots and other warm weather activities. I want to remind all of you to keep communicating your concerns and needs to our meteorologists whenever weather becomes a factor in your day to day operation, during the warmer season.

Also remember that now is the time to start planning for next winter. Evaluate your weather needs and how to integrate them into your sales/marketing and operations programs. Call us with any questions on how to improve our service and how to get the best weather information to you and your clients.

Don't forget....May 9-11, I will be in Indianapolis at the Snow Magazine Snow Expo.

WeatherWorks launches mygolfweather.com!

WeatherWorks is proud to announce the launch of a new product for golfers and golf courses this Spring.



Mygolfweather.com is aimed towards the golfer so that he or she can play more in the best weather conditions possible. We have eliminated confusing language from our forecasts like "chance" and "probability" and provide the specifics needed to schedule a

tee time for any day of the week. If you or someone you know is an avid golfer or just enjoys to occasionally play throughout the year, make sure to check out our site for detailed forecasts, upcoming tournaments and subscribe to our free newsletter! In addition, we will also provide options for **company advertising** as well as discounts to pro shops and courses.



For questions about the mygolfweather.com service:

Contact Kevin Hopley at 908-850-8600 or kevinhopley@weatherworksinc.com

MAY PREVIEW

Heading into the heart of the Spring and Landscaping season, May temperatures look to be near normal. The first week or two of the month may provide a couple brief cool spells (nothing like April though). Below average precip is anticipated in May, especially for the first half of the month.

Towards the end of the month, keep in mind that thunderstorms start to become more prevalent, especially as moisture and humidity increase. For any storm related threat, be sure to call **WeatherWorks**.

UPCOMING EVENTS

May 9-11 Indianapolis, IN
-Snow Magazine Snow Industry Conference

May 28 Memorial Day

June 12-17 Milwaukee, WI
-SIMA Snow & Ice Symposium

June 21 First day of Summer