

WEATHERWORKS

THE WEATHER TRACKER

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For those with snow removal contracts, you know how frustrating it can be to deal with frozen precipitation. The last two winter seasons have tested our patience many times with numerous, often pain staking hours of sleet and freezing rain. Although most snow and ice agreements distinguish between snowfall accumulation and ice, the distinction falls short of clearly defining **what ice is**. The ideal way is to distinguish between freezing rain (rain that freezes on contact and creates clear ice) and sleet (ice pellets that accumulate at about 30-40% the rate of snow), since each type of ice requires a different method of clearing. A long duration light freezing rain event

may only produce 0.1 inches of ice but last 12 hrs. Sleet on the other hand may accumulate one inch in 2 hrs but be equivalent to the weight of 4 inches of snow. Wouldn't it be great if after every storm you could just take a scale and weigh the mounds of snow, sleet and/or ice you just removed and bill your client by the pound. After all other goods and services are billed according to weight.

Weather Works is one of the nation's leaders in its innovative approach to third party snow verifications. The Certified Snowfall Totals™ program provides detailed summaries helping to illustrate when sleet becomes a factor in the total ground accumulation even identifying the accumulation of sleet when it is the only pre-

cipitation type and the amount of accretion of glare ice.

Too many contractors are faced with significantly reduced profits when working sleet and freezing rain storms. As you prepare contracts for next season, keep in mind that ice is a vague term and distinguishing between sleet and freezing rain in your contracts could possibly increase your billing.



For more information on this article, check out the Nov. 2007 issue of "[Snow Business](#)"



Selected February Snow Totals and Avg Temps

Newark, NJ	10.3	+1.9
Allentown, PA	8.5	-0.9
Philadelphia, PA	3.7	-2.9
Atlantic City, NJ	3.0	-2.5
Baltimore, MD	1.3	-5.1
Washington, DC	1.0	-4.2
Allentown, PA	31.3	+1.4
Newark, NJ	35.7	+1.9
Philadelphia, PA	36.9	+2.1
Baltimore, MD	37.1	+1.6
Atlantic City, NJ	38.0	+3.8
Washington, DC	41.0	+2.9

Two Notable February Storms



Jersey City, NJ 2/22/08

After going through a good chunk of the winter without much snowfall, February brought appreciable snow to just about all areas from the coast to the mountains. This is not overly surprising as February is often the snowiest winter month. There were two events to particularly note; the first on February 12th-13th and another on the 22nd. The storm on the 12th brought a wintry mess to the area with light snow accumulations followed by a period of

freezing rain which caused widespread icing, some places receiving up to 0.5 inches of ice. In parts of Southeast PA and Maryland, this was primarily an ice storm, with insignificant snowfall accumulations followed by numerous reports of 0.10 - 0.25 inches of ice.

Conversely, the February 22nd event was the largest snow event the region has seen in the last 2 years. Areas from Southeast PA thru the New York City area saw accumulations of 3 to 7 inches. Even coastal Southern NJ was able to accumulate around 1.5 inches. Areas further south were largely left out again, with snow totals of less than an inch throughout most of

Maryland, along with another round of icing.

As evidenced in the box to the left, northern areas had near normal snowfall in February, while further south were well below normal.

Did You Know

According to NCEP, the January 2008 snow cover in the Northern Hemisphere covered 48.5 million sq. km (18.7 million sq. mi) This is the most snow coverage since January 1978. So don't let all that Global Warming hype get you down.

For more snow cover information...[click here](#)

Website of the Month



http://www.crh.noaa.gov/crnews/display_story.php?wfo=lot&storyid=13252&source=0

Hopefully, this month's website does not make anybody jealous of those getting snow. But the above site shows how La Nina patterns favor snow in the Midwest

LEAP DAY

We hope everyone enjoyed the bonus day of Winter this year, especially with most seeing some snow on February 29th. An extra day in the calendar takes place every 4 yrs, giving us something to look forward to in 2012, 2016 and 2020.

<<	February 2008							>>
Su	Mo	Tu	We	Th	Fr	Sa		
						1	2	
3	4	5	6	7	8	9		
10	11	12	13	14	15	16		
17	18	19	20	21	22	23		
24	25	26	27	28	29			

UPCOMING EVENTS

- Mar. 9 Daylight Savings Time Begins
- Mar. 19 3:00 PM SIMA Web seminar "A Practical Approach to Liquids for Snow & Ice"
- Mar. 20 First Day of Spring

MARCH AVERAGES (30 year averages: 1971-2000)

	Sussex, NJ (FWN)		Philadelphia, PA (PHL)		Baltimore, MD (BWI)	
	Mar 1	Mar 31	Mar 1	Mar 31	Mar 1	Mar 31
High Temp	42	53	46	57	49	59
Low Temp	20	30	31	39	29	38
Precip (Mo. Total)	2.94"		3.81"		3.93"	
Snowfall (Mo. Total)	5.9"		3.2"		2.4"	
Sunrise	6:32 AM	6:43 AM	6:33 AM	6:46 AM	6:38 AM	6:52 AM
Sunset	5:50 PM	7:23 PM	5:53 PM	7:24 PM	5:59 PM	7:30 PM

March 2008 Temperature Outlook

Temps look to start the month out mild, but there are signs of a few rounds of colder air moving through the area, after the first week of the month. On average, expect seasonable temperatures.

March 2008 Precipitation Outlook

The first half of the month will likely continue the active pattern seen recently, with a slow down later on. Expect precip to be near or slightly above normal, with snow threats mainly early on.

Freezing Rain Misconceptions

Even though this snow & ice season is winding down, threats remain possible for at least the next 4-6 weeks. There is still some confusion on the difference between Sleet and Freezing Rain. To make sure you are best prepared to handle whatever Old Man Winter throws your way, let's redefine exactly what non-snow frozen precipitation is.

FREEZING RAIN looks like ordinary rain falling from the sky. However, surface temperatures are below freezing. This will

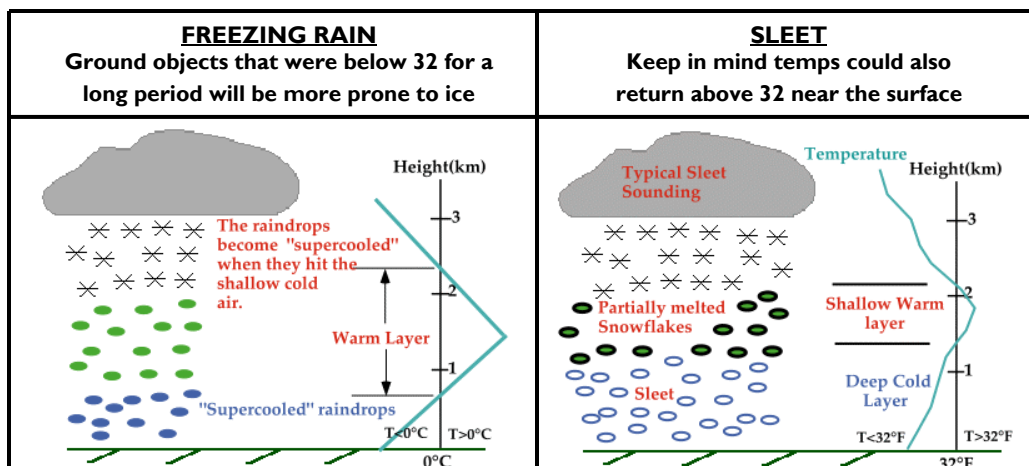
cause water to freeze on contact (or very soon thereafter) with the ground. Freezing rain can occur on ground surfaces even when air temperatures are slightly above freezing, since ground temperatures usually warm slower than air temperatures.

SLEET is just a fancy way to say ice pellets. Sleet occurs when falling precipitation re-freezes BEFORE reaching the surface, thus forming an ice pellet. Sleet can fall in a wide

range of temperatures, from well below freezing, to as high as the low 40's. Sleet is particularly problematic because it can cover ground surfaces even when air and ground temperatures are a few degrees above freezing.

The graphics below are a good visual representation of what is happening vertically in the atmosphere and how the frozen precipitation is created.

A VERTICAL PROFILE OF FROZEN PRECIPITATION



Graphics from the University of Illinois