

## PLAINFIELD'S WEATHER

November was the driest on record (dating back to at least 1969), and December was the second warmest on record (after December 2006). The weather turned cold and snowy just in time for Christmas and New Year's – alleviating concerns that we were in for a repeat of the snowless winter we endured all last season.

**November:** Temperatures ran below normal for the first eight days of the month, with light rain on the 1<sup>st</sup> and 3<sup>rd</sup>, followed by snow flurries on the 5<sup>th</sup> and the 8<sup>th</sup>. Temperatures then climbed above normal over the next five days, including three days above 60 degrees on the 11<sup>th</sup> – 13<sup>th</sup>. Daily high temperature records were set on the 12<sup>th</sup> (66 degrees) and 13<sup>th</sup> (64 degrees). A rain squall at 3:30 am on the 13<sup>th</sup> felt more like the onset of spring than winter. However, temperatures dropped back to seasonal norms for the remainder of the month, with the exception of one stretch of 50-degree-plus weather on the 21<sup>st</sup>-23<sup>rd</sup> (which included Thanksgiving Day). The second half of the month was quite dry, with only 0.04 inches of total precipitation – all in the form of snow flurries.

**December:** The weather pattern turned quite active in December, with temperatures generally running well above seasonal norms for the first three weeks of the month. Temperatures topped 50 degrees on the 3<sup>rd</sup> – 5<sup>th</sup>, and again on the 21<sup>st</sup>. Light snow and light to moderate rain took turns on almost a daily basis over the first 10 days of the month. The longest dry spell was from the 11<sup>th</sup> through the 15<sup>th</sup>. The stormy weather pattern returned on the 16<sup>th</sup>. Three-and-a-half inches of snow fell over the following week, but that was washed away by more than 1-1/2 inches of rain over the same period. A half-inch of snow early on the 25<sup>th</sup> gave us a White Christmas, barely. That was followed by back-to-back Nor'Easters which dropped 7.75 inches of snow late on Dec. 26 and through most of Dec. 27, and another 7.50 inches of snow on Dec. 29. The 15-inch snowpack was the greatest we've had since early March 2011.

### DATA ELEMENTS

	<b>November 2012</b>	<b>November 2011</b>
High temperature (F)	66/13 <sup>th</sup> (record)	68/9 <sup>th</sup> (ties record)
Low temperature	17/30 <sup>th</sup>	17/22 <sup>nd</sup>
Average high temperature	45.2	51.7
Average low temperature	26.4	30.2
Total precipitation (inches)	0.77 (record)	2.23
Rainfall/days	0.72/3	1.13/6
Maximum 24-hr. rain	0.43/13 <sup>th</sup>	0.64/29-30 <sup>th</sup>
Snowfall/days (inches)	0.50/7	10.00/3
Maximum 24-hr snow/date	0.25/30 <sup>th</sup>	10.00/22-23 <sup>rd</sup>

	<b>December 2012</b>	<b>December 2011</b>
High temperature (F)	55/5 <sup>th</sup>	55/6 <sup>th</sup>
Low temperature	3/29, 30 & 31 <sup>st</sup>	7/19 <sup>th</sup>
Average high temperature	37.9	38.1
Average low temperature	22.0	21.2
Total precipitation (inches)	4.43	3.08
Rainfall/days	2.54/6	2.73/3
Maximum 24-hr. rain	0.60/18 <sup>th</sup>	0.70/27-28 <sup>th</sup>
Snowfall/days (inches)	20.00/12	6.00/7
Maximum 24-hr snow/date	7.75/26-27 <sup>th</sup>	2.50/5-6 <sup>th</sup> & 22 <sup>nd</sup>
Snow depth on Dec. 31 (inches)	13.00	8.00

## 2012 SUMMARY OF PLAINFIELD'S WEATHER

2012 will be remembered for its extreme weather events and as the year when alarming predictions of global climate change came fully to life. Is this the “new normal?”

- **Temperature:** Nationally, and here in New Hampshire, it was the warmest year on record (dating back 118 years). In Plainfield, it was the second warmest year on record, with a mean annual temperature of 48.5 degrees F. Only 2010 was warmer (at 49.0 degrees). The previous local record was set in 1999 (48.0 degrees). Plainfield set or tied 13 daily high temperature records in 2012, including a five-day stretch in March when old records were smashed by as much as 9 degrees. March was the warmest on record, and December was the second warmest on record (after 2006).
- **Precipitation:** New Hampshire and all of New England endured one the 10 driest summers on record. Sixteen Midwestern states also had one of their 10 driest summers, causing \$11 billion in insured agricultural losses. Plainfield recorded its least annual rainfall since 1997 and had its driest year since 1980. Snowfall – at a mere 36.50 inches – was the least on record (dating back to at least 1969); half of that snow came in late-December snowstorms. Nationwide, the drought is ongoing. Nearly two-thirds of the land area of the lower 48 states is still suffering drought conditions, despite generous December snowfall that blanketed a geographic area of comparable size.
- **Extreme weather:** Worldwide, natural catastrophes caused \$60 billion in insured losses in 2012; the top five weather-related losses were all in the United States. Superstorm Sandy alone was responsible for \$25-\$30 billion in insured losses. This marks the second consecutive year of devastating tropical storms to hit the Northeast. Hurricane Irene, which caused \$1 billion in damage to Vermont in 2011, was twice the size of an average hurricane. Superstorm Sandy was twice the size of Irene, causing a record-breaking storm surge in New Jersey and lower Manhattan. Now the question is how much should be invested in rebuilding in these vulnerable areas versus starting a slow retreat from the coast.
- **Other ominous signs:** Arctic sea ice shrank to a record low in September 2012, going beyond the previous minimum set in 2007 by a whopping 18 percent. Summer coverage is now only half of what it was in the 1980s. ...Yet climate change was barely mentioned in the 2012 elections.... Meanwhile, the average daily temperature in Plainfield has increased by 3.4 degrees since 1969 – nearly three times the average global increase, due to our northern latitude. Up to 8 degrees of additional global warming is projected for the 21<sup>st</sup> century. Imagine what the effects might be of twice as much local warming! New Year’s resolution: *Time to go on a strict carbon diet!*

<b>DATA ELEMENTS</b>	<b>2012</b>	<b>2011</b>
High temperature (F)	96/June 20, July17 (both tie records)	97/July 22
Low temperature	-13/Jan. 16	-25/Jan. 24
Annual mean temperature .....	48.50	46.45
Precipitation (inches)	32.70	51.96
Rainfall/days	28.63/103	42.52/102
Maximum 24-hr rain/date	2.20/Oct. 29-30 <sup>th</sup>	4.82 /Aug. 27-28 <sup>th</sup>
Total snowfall/days	36.50/49 (record low)	105.00/53
Maximum 24-hr snow/date	7.75/Dec. 26-27	12.50/Jan. 12

Doug Cogan  
Plainfield weather observer

## PLAINFIELD WEATHER 2012

(Observations by Doug Cogan)

MONTH	HIGH Temp(F)	LOW Temp(F)	MEAN Temp(F)	RAIN (Inches)	SNOW (Inches)	PRECIPITATION (Inches)
JANUARY	45	-13	24	2.35	8.25	3.38
FEBRUARY	50	8	28	0.02	4.00	0.72
MARCH	84	0	41*	0.36	3.75	0.76
APRIL	90	19	46	2.77	Trace	2.77
MAY	88	32	60	3.14		3.14
JUNE	96	44	64	2.91		2.91
JULY	96	46	71	3.46		3.46
AUGUST	93	46	71	1.65		1.65
SEPTEMBER	84	33	60	4.23		4.23
OCTOBER	78	21	52	4.48		4.48
NOVEMBER	66	17	36	0.72	0.50	0.77**
DECEMBER	55	3	30	2.54	20.00	4.43
TOTALS	--	--	--	28.63	36.50***	32.70
'12 AVG	59.6	37.4	48.5****	--	--	--
10yr AVG	57.6	35.9	46.7	36.06	77.07	42.77

\* Warmest March on record \*\* Driest November on record \*\*\* Least annual snow on record

\*\*\*\* Second warmest year on record (after 2010, 49.0 degrees)

**Daily high temperature records:** March 12, 66 degrees F; March 13, 68°; March 18, 80°; March 19, 79°; March 20, 80°; March 21, 82°; March 22, 84°; April 16, 90°; June 20, 96° (tie); June 21, 95° (tie); July 17, 96° (tie); Nov. 12, 66°; Nov. 13, 64°. *No record low temperatures were recorded.*

2012 high temp: 96 degrees, June 20 & July 17; low temp: -13 degrees F/Jan. 16

Wettest 24 hours: 2.20 inches/Oct. 29 & 30; snowiest 24 hours: 7.75 inches/Dec. 26-27

Date of last freeze: April 30, last frost: April 7; first frost: Oct. 12, first freeze: Oct. 13