

The Pennsylvania Observer

December 1, 2014



November 2014 - Pennsylvania Weather Recap

By: Arthur Person

Normal weather for mid-November in Pennsylvania ranges from highs in the mid 50's in the southeast to the mid 40's in the northern mountains and only a trace to a few inches of snow for the month. Although this eleventh month of 2014 began near normal, it took an abrupt detour into winter at mid-month and took Pennsylvanians for a wild ride. The month started off near normal in the east but a bit chilly in the west as an intensifying low pressure system brought a few showers to the state while moving up the eastern seaboard. A return flow of southerly air on November 4th brought pleasant weather across the state with temperatures in the mid 60's to near 70 in the southeast, but was chased out by a cold front which crossed the state on the 5th followed by a storm system on its heels for the 6th. This dropped temperatures to normal levels and brought substantial rainfall to many parts of Pennsylvania except the northeast and northwest. Pittsburgh received 0.85", DuBois 0.77", Bradford 0.73", Altoona 0.53", Harrisburg 0.81", Allentown 0.43" and Philadelphia 0.53". After a windy day on the 7th, the 8th brought the onset of another cold front keeping temperatures near normal for the 9th. Temperatures buoyed upward on the 10th as an intensifying cold air outbreak and associated cyclone in the mid-western United States directed warm air northward across Pennsylvania with near record temperatures, especially in western parts of the state. For the 11th, Slippery Rock tied its record high of 75 degrees F while DuBois tied its record high of 68.

The cold air in the Midwest advanced eastward across Pennsylvania on the 12th dropping temperatures by 20 degrees F and bringing an abrupt end to the seasonable November temperatures. Erie picked up its first significant lake effect snow of the season receiving 12.6" of snow on the 13th. High temperatures on the 13th ranged from the 30's in the northwest to the 40's in the southeast. On the 14th and 15th temperatures were in the 30's except in the far southeast, which is about 10-20 degrees F below normal. Despite this drop in temperatures, even colder air was yet to come. A developing storm system in the Mississippi Valley moved eastward on the 17th bringing rain to the southeast and light accumulations of wet snow in the northwest as frigid air advanced eastward. On the 18th, morning temperatures ranged from the 20's in the southeast to the teens in the northwest and failed to rise much through the day. The cold snap continued through the 21st with numerous records

being shattered. Some record low maximum temperatures set on November 18th include Pittsburgh 21 degrees F (previous 28 in 1959), Harrisburg 31 (previous 33 in 1951), Bradford 16 (previous 22 in 1959), and Altoona 21 (previous 30 in 1959).

About the time that Pennsylvanians were accepting the fact that winter had arrived, albeit several weeks early, the frigid air left and an intense warm-up ensued as high pressure in the Mid-Atlantic states began pumping warm air northeastward on the 22nd with temperatures rebounding to normal levels in western Pennsylvania. By the 23rd, temperatures were advancing above normal and continued their upward climb on the 24th ahead of a storm that passed to the north of Pennsylvania. Just two days after breaking low temperature records (e.g. Williamsport 13 degrees F on the 22nd), new record highs were being set. Pittsburgh reached 68 degrees F (old record 66 in 1979), DuBois 67 (old record 61 in 1979), Philadelphia 72 (old record 71 in 1979), and Williamsport 69 (old record 65 in 1999). The record warmth came to an end on the 25th with the passage of a cold front which knocked temperatures down to normal. In the meantime, a disturbance in the jet stream had entered the western United States and was looping southeastward to the southeast coast. There it met up with the cold front and triggered a nor'easter which spread snow across the southeastern two-thirds of Pennsylvania except for the Philadelphia area which received mostly rain. The snow was significant for this early in the season, once again breaking records. A sample of the new November 26th records include Towanda 12.4" (previous 3.0" in 1940), Laporte 11.0" (previous 2.5" in 2002 but there are only 24 years of records), Susquehanna 8.7" (previous 6.0" in 1940), Sunbury 6.8" (previous 4.1" in 1940) and Shippensburg 6.1" (previous 1.5 in 1950). A few lake effect flurries remained on the 27th, but otherwise temperatures were near seasonable levels through the 29th. By the 30th, a southwesterly flow ahead of a cold front once again buoyed temperatures well above normal, though clouds persisted across most of the state.

Overall, cold days outweighed warm days for the month yielding average temperatures that were 3-5 degrees F below normal for central and western sections of Pennsylvania, and 2-4 degrees F below normal in eastern sections. Precipitation was well below normal for most areas by 1.0-1.5" except in the far west where precipitation was only 0.5" below normal and the extreme southeast where precipitation was 1.0" above normal. The weather at Philadelphia was notably different from much of the rest of the state highlighting the contrast between the east and west. While Erie received their largest early snowfall on record for the month of November with 12.6 inches recorded on the 13th and an average temperature of 4.1 degrees F below normal, Philadelphia was only 2.4 degrees F below normal, recorded only a trace of snowfall compared to the normal of 0.3", and received precipitation of 4.07", which was 1.08" above average.

Severe weather summary: 0 reports

Here are the weather extremes across Pennsylvania (**observations taken at 8AM EDT**) during November 2014 from the NWS Cooperative, ASOS, and CoCoRaHS Networks of which our office receives routine observations. The extremes occurred in the 24-hour period prior to the date listed.

Parameter	Location	Value	Date (8 AM EDT)	County
Highest Temperature	Slippery Rock	77°F	November 12 th	Butler
Lowest Temperature	Jamestown 2 Mi. NW	-2°F	November 19 th	Crawford
Greatest Cumulative Liquid Precipitation	Neshaminy Falls	5.09"	November 1 st – 30 th	Bucks
Least Cumulative Liquid Precipitation	Confluence 1 Mi. SW Dam	1.38"	November 1 st – 30 th	Somerset
Greatest Cumulative Snowfall	Meadville 1.0 Mi. NNE	27.9"	November 1 st – 30 th	Crawford

Links to Pennsylvania Weather Stories during November, 2014

Global warming likely to cause more lightning

<http://www.durangoherald.com/article/20141113/NEWS03/141119777/Global-warming-lighting-up-sky->

Big snows in western NY elicit help from PA Turnpike Commission and PennDOT

http://www.pennlive.com/midstate/index.ssf/2014/11/buffalo_snow_penndot_turnpike.html

How do schools decide on weather delays?

<http://www.wtae.com/news/how-do-schools-decide-delays/29780512?absolute=true>

Some argue that climate quietly won the election in Pennsylvania

<http://www.nationaljournal.com/energy/climate-quietly-wins-midterm-victory-20141105>