

The Pennsylvania Observer

September 3, 2008



Summer 2008 Weather Summary

Written by: Brian Thompson

The opening days of June started dry, but a warm front brought a widespread rain a couple of days into the month, with many places picking up nearly an inch of rain from June 3-5. Behind this warm front, the first heat wave of meteorological summer was felt as temperatures soared into the 90s across much of the central and eastern parts of the Pennsylvania. This was the hottest weather of the summer for the state. A ridge of high pressure over the southeast U.S. kept fronts and widespread precipitation away between the 6th and the 9th, although a few afternoon thunderstorms did occur. A cold front finally brought an end to the heat on the 10th with some of the thunderstorms responsible for numerous reports of wind damage across the eastern half of the state. Another front moved through on the 14th, bringing isolated severe thunderstorm reports statewide. Yet another cold front passed through on the 16th, causing widespread severe weather, but hail proved to be more prevalent, with golf ball size hail reported in parts of Wayne, Washington and Greene counties.

An upper-level low caused unseasonably cool, but fairly dry weather from the 17th through the 19th, with highs only in the 60s for much of central and western Pennsylvania. A typical summertime pattern followed with an increase in thunderstorm coverage. There were areas of heavy rainfall, especially to the north and west.

Otherwise, much of the rest of the month was dominated by a persistent upper-level trough, which brought locally rainfall to some sections while leaving others dry. When the month was over, much of western Pennsylvania had seen a bit above average temperatures and near to above average rainfall, with Pittsburgh recording 6.17" for the month. Farther east, it was a different story as the month as temperatures were generally 3 to 4 degrees above average and rainfall was lacking, with many places registering a rainfall deficit.

July began fairly dry with a weak cold front bringing some widespread showers and thunderstorms from July 3rd into the 4th. It was a rather cool holiday across much of central and western PA thanks to cloud cover, but little rain during the evening. In the following days, a weak upper-level disturbance across the Ohio Valley helped to spark some showers and thunderstorms across mainly the southern third of the state. A cold front helped provide more widespread rain from the 9th into the 10th, but very little in the way of severe weather. Another weak front pushed through on the 13th, but did spawn a confirmed EF0 tornado in Lebanon County. Weak high pressure remained in control for much of the upcoming week with just some afternoon thunderstorms, a few of which were locally severe. A stalled frontal boundary brought some locally heavy rainfall from the 21st through the 23rd, with some places picking up over two inches of rain. A cold front moving through on the 26th spawned an EF1 tornado in Warren County as well as reports of golf ball size hail in northwest PA. The severe weather spread southeast on the 27th with reports of nickel to golf ball size hail across parts of the Lower Susquehanna Valley.

Perhaps the most unique feature about July 2008 was how little temperatures varied for the month. Major reporting stations from Pittsburgh to Harrisburg to Philadelphia did not record a day that was ten degrees or more above or below average. With this in mind, temperatures for the month were within a degree or two of average. Rainfall, in general, was below average for the month. However, the northwest section, such as Bradford and Erie were generally near average for the month.

August began with a few weak disturbances that brought scattered showers and thunderstorms to some areas. Some storms were on the strong side and there were reports of hail up to 2.00" in diameter across parts of York County on the 2nd. A cold front on the 5th brought some widespread rains across western and central parts of the state, with many areas picking up more than a half inch. The following seven to ten days proved to be rather cool and unsettled as an upper-level trough settled across the Great Lakes with temperatures as much as 5 to 10 degrees below average from the 7th through the 12th. Some areas saw at least a trace of rain every day for over a week, although most rainfall amounts were light. The pattern flipped during the second half of the month, though, as it went from unsettled to very dry with high pressure generally in control of the weather across the Mid-Atlantic. Many observing sites saw less than 0.1" of rain between the 15th and 27th. Numerous areas of high pressure moved through during the nearly two-week span, but one sitting over New York moved far enough east on the 27th that some moisture from the remnants of Tropical Storm Fay brought much-needed rainfall (over half an inch in many spots) to parts of central and western PA from the 27th through the 29th. Behind Fay, high pressure brought dry weather and above average temperatures to conclude August.

Overall, August was a cool and dry month for much of the state, with most reporting stations in central PA not even receiving 50% of the normal rainfall. Temperatures were about 2 degrees below average for the month, with the coolest temperatures relative to normal centered over the eastern half of the state.

August 2008 - Pennsylvania Weather Recap

Written by: Drew Anderson

The last full month of summer began with warm temperatures across the Commonwealth as highs were in the mid to upper eighties. Temperatures cooled down slightly below average after a low pressure system moved through at the end of the first work week. A different low, this time embedded in an upper level trough, helped trigger a few scattered and isolated showers during the second weekend of the month. A cold front passed through on Sunday, August 10th, bringing severe weather and plenty of severe weather warnings for many of the counties across the Susquehanna and Delaware Valleys. There was widespread hail associated with those storms, including reports of golf-ball sized hail from both Lancaster and Chester Counties. The cold air aloft, associated with the strong upper level low, helped fuel the powerful thunderstorms and allow the hail to reach the surface. As the cold front moved off the coast, beautiful weather and low humidity followed in its wake. Temperatures dipped down into the seventies across the state on the 11th and persisted for much of the week. Thursday was a wet day for western Pennsylvania and a day with strong afternoon thunderstorms for other parts of the Keystone State. Drier air moved in for the third weekend of the month while conditions remained sunny and warm. On Monday, a frontal boundary moved down from the north and brought with it an increase in humidity for the day. As the high pressure settled in, humidity levels lowered, and by midweek, maximum temperatures dipped down to around eighty degrees for Pennsylvania. Warmer weather with above average temperatures returned on the 22nd, and lasted for the weekend. The last work week of August started with a few isolated showers triggered by a frontal system, but behind that cold front was more pleasant weather and a high pressure system that kept the remnants of tropical storm Fay out of the state until Thursday, the 28th. Scattered showers from Fay lingered into the day on Friday and there were a handful of scattered storms on Saturday from a cold front that moved across Pennsylvania. August ended with sunny and above average temperatures that endured for Labor Day and for the beginning of September.

Weather Stories

Scientists Debate Whether We Are Changing the Climate

[http://www.philly.com/philly/living/20080811 THE CLIMATE S HOT TOPIC.html](http://www.philly.com/philly/living/20080811_THE_CLIMATE_S_HOT_TOPIC.html)

Gov. Rendell Announces Funding in Pennsylvania, US to Stimulate Life Long Learning

<http://www.egovmonitor.com/node/20461>

'Farmer's Almanac' Predicts Cold Winter

<http://www.phillyburbs.com/pb-dyn/news/113-08262008-1581656.html>

Townhouse Struck as Storms Hammer Area

http://www.pottstownmercury.com/site/news.cfm?newsid=19902963&BRD=1674&PAG=461&dept_id=18041&rft=6

What You Should Know About Lightning

http://www.cedarcityreview.com/articles.php?id=4750&art_title=What_You_Should_Know_About_Lightning

Powerful Hurricane History

<http://fredericksburg.com/News/FLS/2008/082008/08232008/388808>

Here are the weather extremes across Pennsylvania (**observations taken at 8AM EDT**) during August 2008 from the NWS Cooperative & ASOS 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	Middletown	91°F	August 6 th	Dauphin
Lowest Temperature	Chandlers Valley	38°F	August 20 th	Warren
Greatest Cumulative Liquid Precipitation	Morgantown	4.80"	August 1 st – August 31st	Berks