August 2014 - Pennsylvania Weather Recap

By: Arthur Person

A series of cool-air outbreaks descending southward across Pennsylvania set the stage for below normal temperatures for this eighth month of 2014. The month began near normal with Pennsylvania situated east of a large-scale upper-atmospheric trough of low pressure. Coastal low pressure brought scattered showers to southeastern Pennsylvania on August 1-2, while a disturbance aloft kicked off more widespread showers across western Pennsylvania on August 3-4. Many sections received 0.5-1.5" of rainfall from this system. The large-scale trough of low pressure finally moved eastward by some cooler, drier air on August 5th bringing with it a cold front that triggered scattered showers and thunderstorms in the northern counties. High pressure took over for August 6-10 with fair skies and temperatures in the 70's to mid-80's. By August 11-12, another Canadian clipper crossed the state bringing 0.5"-2.0" of rainfall to most sections in showers and thunderstorms. This storm was stronger than the previous one and ushered much cooler air southward across the state for August 13-16. August 16 recorded the coldest readings with several in the upper 30's. Clarence (Centre county) reported 37 F, Oswayo (Potter county) 37 F, and Bradford (McKean county) 38 F (2nd coldest in 56 years). A reinforcing cool front crossed the state on August 17 kicking off a few showers across the northwest. Fair weather returned for the 18th and 19th, but another storm once again approached from western Canada. It advanced a warm front as far as Pennsylvania which then stalled, bringing a prolonged period of irregular and widely ranging cloudiness and rainfall to the state before being pushed southward by high pressure in eastern Canada on August 24th. Cooler, drier air prevailed for August 24-27, although a weak cool front crossed the state on the 27th producing a few localized showers. August 28-30 were fair but cool days with temperatures mostly in the 70's. However, some cloudiness crept into the southeastern part of the state on the 30th as moisture-laden southeasterly winds converged across the state ahead of an approaching frontal system from the west. This front brought mostly cloudy skies with scattered showers in the west and southeast for August 31st.

Pennsylvania average temperatures for the month of August were universally below normal (except near Grove City), but central and eastern portions were exceptionally cool (2-4 F below normal) compared to the western one-third and far eastern Pennsylvania (1-2 F below normal). Notable examples include Everett (Bedford county) 4.4 F below normal (ranked 4th in 93 years), Wellsboro (Tioga county) 2.9 F below normal (ranked 8th in 82 years) and Selinsgrove (Snyder county) 2.7 F below normal (ranked 8th in 92 years). The coolness of the August temperatures may seem more pronounced, from a human perspective, when you consider that in the last ten years, 2014 is only the third year recording an average monthly temperature below normal. Precipitation, on the other hand, varied widely across the state during August. Most of the far western counties, Allegheny Plateau, and middle and upper Susquehanna counties received between 100-200% of normal amounts while the far eastern and southeastern counties, and Somerset and Bedford counties, received only 50-100% of normal.

Severe weather summary: 1 tornado report (August 21st), 5 hail reports, and 26 wind reports