July 2014 - Pennsylvania Weather Recap

By: Kyle Imhoff

For much of the month of July, Pennsylvania was positioned within a persistent trough covering much of the eastern United States, resulting in only brief intrusions of warm air and consistent unsettled weather. In fact, the warmest temperatures statewide occurred at the very beginning of the month with most places between 5-10 degrees above normal. A slow-moving front provided a focus for showers and thunderstorms across the region for the first couple of days of the month, with hail/damaging wind reported in eastern PA on the 2nd and 3rd. Hurricane Arthur moving on a trajectory northward along the East Coast threatened outdoor Fourth of July plans across the eastern third of the state, although the storm’s effects were primarily confined to far southeastern Pennsylvania where power outages occurred as a result of thunderstorm activity associated with the storm (see weather stories). After the passage of the front and Arthur’s exit from the region, high pressure built in for the following few days bringing drier weather with seasonable temperatures.

The approach of another cold front provided a spark for widespread severe weather across the state on July 8th. Five tornadoes were reported statewide on the afternoon/evening of the 8th along with numerous reports of damaging winds. Drier and more seasonable weather, again, followed the frontal passage heading in to the middle of the month. A vigorous disturbance swept into the region on the 14th and 15th providing most areas with substantial rainfall between 0.50-1.00”. The main storyline with this feature was the abnormally cold air ushered in. The western half of the state experienced lower temperatures than its eastern counterparts, but statewide temperatures were well below normal for the next 4-6 days.

Temperatures rebounded to near normal by the 21st, but the seasonal weather would not last long. A series of disturbances associated with the aforementioned East Coast trough induced several intrusions of cooler air back into the region for the remaining days of the month with near-daily occurrences of showers and thunderstorms. Precipitation was near-to-below normal for the month for northern and southern Pennsylvania while parts of central Pennsylvania experienced well above normal precipitation for the month (150-200% of normal). July ended with temperatures well below normal, with fall-like minimum temperatures in the upper 40s-lower 50s and average temperatures anywhere between 5-15 degrees below normal.

Severe weather summary: 5 tornado reports (July 8th), 42 hail reports, and 242 wind reports