2014 Year in Review for Central and Southeast Illinois

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The common theme during 2014 was for temperatures to be cooler than normal. This was especially highlighted during the first few months of the year, which featured one of the coldest and snowiest winters since the brutal winters of the late 1970's. As a result of the cooler weather pattern, severe weather occurrences were less than normal, with only 13 tornadoes reported in the 35-county coverage area of our office.

Winter Season	**(December 1, 2013 to February 28, 2014)**
Temperatures: Much below normal	***Precipitation:*** Below normal

A winter storm in early January produced 6-10" of snow in much of central Illinois, although higher totals in excess of a foot were found along the I-70 corridor. Photo taken near Effingham by Beau Dodson.

Temperature Review:

Much of the Midwest was locked into a persistent pattern of much colder and snowier than normal weather much of the winter. Many locations in central and southeast Illinois ranked in the top 10 coldest winters on record, and rivaled the bitter cold winters of the late 1970s. Early January featured some of the lowest wind chills observed in many years. Some highlights of the bitter cold:

- January 6 was one of the coldest days of the winter. Low temperatures of 15 below zero occurred as far south as Effingham, and widespread teens below zero occurred over the northern 2/3 of the state. Record lows were set at Charleston, Decatur, Effingham, Galesburg, Normal, and Urbana. Normal observed its coldest high temperature on record, reaching only 10 below zero that day. Brutal wind chills of 30 to 45 below zero were observed, with the lowest readings at Bloomington (44 below), Champaign (41 below) and Danville (40 below).
- Several days during the first half of February featured bitter cold air. Temperatures fell to around 20 below zero on February 3 across Knox and northwest Fulton Counties. More widespread teens below zero were observed on February 7, as far south as I-70, and another surge of teens and 20s below zero occurred February 10-12 north of I-74. However, this was followed about a week later by highs in the 50s and 60s.

Weather Review:

Frequent snowfalls led to one of the snowiest winters on record across central and southeast Illinois. Some of the more significant winter storms included:

- December 5-6: Snowfall totals of 8 to 11 inches occurred south of I-70 in areas from Flora to Lawrenceville, as a storm system tracked through the Ohio Valley. The snow tapered off sharply to the north, and little to no snow fell north of I-70.
- December 13-14: Two areas of heavy snow occurred further north in central Illinois, one from Rushville to Bloomington northward, and the other from around Taylorville to Danville. Each of these produced 6 to 9 inches of snow, with the highest total of 10 inches in southwest Fulton County near Astoria.
- December 20-21: With more warmer air with this system, rainfall totals of 1 to 3 inches were common in eastern Illinois, with a few totals of 3.5 inches south of I-70; this caused some flooding to develop as the snow pack was quickly melting. Further northwest, between a tenth and quarter inch of ice occurred west of I-55.
- January 4-5: Six to 10 inches of snow fell across much of central and southeast Illinois, with heavier totals up to 14 inches roughly along the I-70 corridor. The heaviest amounts included 14 inches at Casey, 13 inches at Pana, and a foot at both Effingham and Neoga. Amounts of 10 inches fell as far northwest as the Jacksonville area. Extreme southeast Illinois, around Olney and Lawrenceville, only saw 1 to 3 inches as much of the precipitation fell as rain.
- February 4-5: Six to 9 inches of snow fell in a broad corridor extending across northern Missouri, central Illinois, and central Indiana. The highest total locally was 8.5 inches south of Sullivan.
- February 17: Snowfall amounts of 3 to 5 inches were common along and north of I-74, but locations south of there observed a tenth to third inch of ice accumulation as far southeast as I-70, as well as 1 to 3 inches of snow. The precipitation was accompanied by scattered thunderstorms. As windy conditions developed and temperatures warmed above freezing, snow rollers began to form in some areas. Snow rollers are log-shaped snowballs that form and are driven by the wind. They are usually several inches in diameter.

Portions of central Illinois saw severe weather occur on February 20, as a power winter storm system moved through the Midwest and drove temperatures upwards into the 50s and 60s. As areas north of I-72 still had several inches of snow on the ground, the severe weather occurred along and south of I-72, where the atmosphere was better able to destabilize. Several tornadoes touched down, located northwest of Jacksonville, east and south of Springfield, near Pana, and north of Paris. The strongest tornado tracked 22 miles from northeast Montgomery, far southeast Christian, and western Shelby Counties, ranked as an EF-2 with maximum winds of 115 mph. In the wake of a cold front that passed afterward, winds gusted from 45 to 55 mph at times, with a peak wind gust of 64 mph observed at the Springfield airport. Some flooding occurred on area roads and rivers as well, due to the rapidly melting snow being unable to penetrate the frozen ground.

Spring Season	(March 1 through May 31)
Temperatures: Below normal	***Precipitation:*** Below normal

Severe thunderstorms on May 21 produced hail as large as grapefruit in Tuscola, causing $100 million damage to building roofs and vehicles.

Temperature Review:

The trend continued of well below normal temperatures as spring began, with average temperatures 6 to 8 degrees below normal. Some recovery took place during the second week of March, but then it cooled off again, and the area was subjected to frequent cool surges into mid April. Freezing temperatures occurred over all of central and southeast Illinois on April 15th, with many areas seeing lows in the 20s. The cool conditions resulted in spring planting running behind typical schedules. Temperatures in May averaged above normal, but that was not enough to reverse the trend for the entire season.

Weather Review:

The dominant northwest flow as March began kept conditions drier than normal as spring began, but there were still snowfall events that occurred through March and even into mid April. Measurable snow occurred on April 14th north of I-72, with as much as an inch of snow near Bloomington and Roanoke.

Severe thunderstorms in east central Illinois in May produced very large hail in some areas. Storms on May 11th produced hail up to tennis ball size along the I-70 corridor in Cumberland County, and baseball size northeast of Bloomington near Towanda. On May 21st, portions of Douglas and Piatt Counties received hail of tennis ball to grapefruit size. The largest hail was in Tuscola, where 4 inch diameter hail broke out car windows and caused severe roof damage to many buildings. Damage estimates in Tuscola were reported to be as much as $100 million. The storms also produced 3.76 inches of rain at Willard Airport south of Champaign, as well as a 63 mph wind gust.

A week later, on May 28th, landspouts formed along a weak boundary that was producing showers. These were primarily in eastern Woodford and northwest McLean County. A landspout is different than a typical tornado, in that there is no organized large-scale rotation. These landspouts remained in open areas and caused no damage.

Summer Season	(June 1 through August 31)
Temperatures: Below normal	***Precipitation:*** Above normal

Flash flooding occurred in Champaign the morning of July 12, with 3-6" of rain common. Picture posted to WCIA-TV's Facebook page.

Temperature Review:

While June temperatures were slightly above normal, high temperatures were consistently in the 80s, with a few days reaching the lower 90s. This was followed by one of the coolest July months on record in much of the area, with new record cool Julys set at Decatur, Effingham, Lincoln, Olney and Urbana. Because of this cool July, the summer as a whole ranked in the top 10 coolest summers on record.

With that trend persisting into August, the number of 90 degree days was only a small fraction of normal. Decatur did not reach 90 degrees until August 21st, and only had 4 days of 90 degree highs the entire year, setting a record low number. The warmest stretch of the summer was from August 24-26th, when highs were in the lower to mid 90s, and dew point temperatures in the upper 70s to near 80 degrees resulted in heat indices of 105-110 in many areas.

Weather Review:

One of the wetter summers on record occurred over central Illinois, with amounts of 4 to 8 inches above normal. The higher totals occurred in an area from Galesburg to Beardstown east to near Rantoul. Springfield observed its 4th wettest summer on record with a total of 18.04 inches of rain, while Peoria's 18.10 inches was its 7th wettest summer.

Heavy rain of 1.5 to 3 inches occurred late evening and early morning of June 3-4th, as a large thunderstorm complex moved through the region. With most of this occurring in just an hour or so, areas of flash flooding occurred. Another thunderstorm complex early on June 11th produced 3 to 5 inches of rain across Scott and Morgan Counties. Numerous roads in Jacksonville and much of northern Scott County were impassible for a time due to flooding.

During the morning of July 12th, a warm front caused thunderstorms to repeatedly develop over the same areas of east central Illinois, generally from Pontiac to Champaign. Rain totals of 3 to 6 inches were common, prompting widespread flash flooding from Champaign northwest toward Mahomet and Farmer City.

Isolated thunderstorms developed along a warm front during the evening of August 28. Due to the slow-movement of the storms and copious amounts of moisture contained within the atmosphere, very high rainfall rates occurred. Rainfall totals across portions of Sangamon, Logan, and Menard counties generally ranged from 2 to 4 inches, with the highest amount of 5.10 inches being reported on the southeast side of Springfield. As a result of this rainfall over a short amount of time, widespread flash flooding was reported. Over 200 water rescues were performed in Springfield.

Autumn Season	**(September 1 through November 30)**
Temperatures: Below normal	***Precipitation:*** Above normal

An EF-2 tornado touched down just northeast of Moweaqua on October 13, and tracked northeast 10 miles to near Mount Zion. The most intense damage was at this farmstead on the Macon/Shelby County line.

Temperature Review:

A late season surge of hot weather resulted in highs in the lower to mid 90s on September 4-5, but temperatures quickly returned to below normal. The last several days of September warmed up again with highs in the mid to upper 80s, although temperatures much of October averaged below normal. A significantly colder pattern set up in the fall, and temperatures of 15-25 degrees below normal were common during much of November. However, highs in the 60s returned as November came to a close.

Weather Review:

As unseasonably cool air settled over Illinois on October 4th, sleet and snow mixed with some rain showers over the northeast half of the state. Many areas along and north of the I-74 corridor received some sleet. The flurries that fell in Peoria were the 2nd earliest snowfall on record there, behind the 1 inch that fell on September 25, 1942.

Severe weather occurred over much of the middle and lower Mississippi Valley on October 13th. Three tornadoes occurred in central Illinois, the strongest of which (EF-2) affected northwest Shelby and southern Macon Counties. The other two tornadoes briefly touched down near the Decatur Airport and near Argenta.

Light snow spread across much of the area the day before Thanksgiving, although locations north of I-74 were generally limited to flurries. Heavier snow totals of 2 to 3 inches occurred from Rushville southeast to Jacksonville and Springfield, with 2 to 4 inches from Pana southeast to Effingham.

Winter Season to date	(December 1-31)
Temperatures: Near normal	***Precipitation:*** Above normal south of I-70 Below normal north of I-70

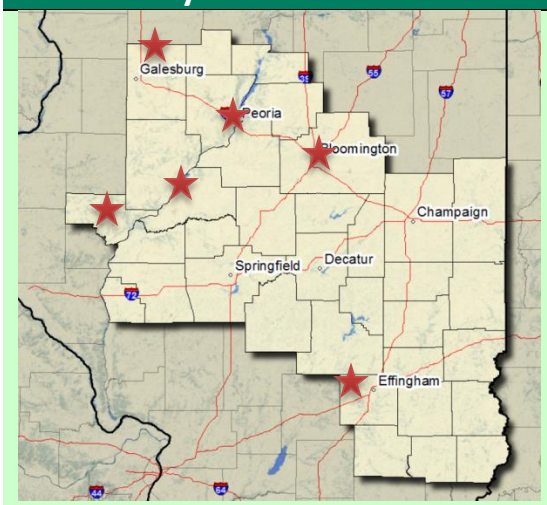
Temperature Review:

The colder pattern from November eased up, and much of December has been warmer than normal. The warmest period was from the 13-15th, when highs were in the upper 40s to mid 50s, and temperatures stayed well above freezing at night.

Weather Review:

As the temperatures moderated, little if any snow was reported across the area through the 17th. Some light snow did move the morning of the 18th, with locations from Rushville southeast to Taylorville reporting around a half inch of accumulation. One of the more notable items during the period was the extended period of cloudy weather, with only two days (3rd and 7th) seeing mostly sunny conditions.

Preliminary Statistics for the Lincoln NWS Coverage Area:



Highest Temperature	97°F at Normal (August 26)
Lowest Temperature	-24°F at Altona (February 11)
Most Rain in 24 Hours	6.96” at Rushville 4NE (September 10)
Most Snow in 24 Hours	12.2” at Beecher City (January 6)
Most Rain in 1 Month	11.51” at Peoria 5NW (June)
Most Snow in 1 Month	24.6” at Havana (February)
Reported Tornadoes	13 By County: Shelby 4, Macon 3, Morgan 2, Sangamon 2. One each in Cass, Christian, Edgar, Effingham, McLean, and Woodford. (Total >13 due to border crossers.)