Field Notes

The 2010-2011 Winter Season

by Kelly J. McKay

Song Sparrow drawing by Pete Olson.



In terms of weather, the Illinois winter of 2010-2011 was very similar to the two previous winter seasons (i.e. colder temperatures and considerable amounts of precipitation). Temperatures fluctuated throughout the entire winter season, ranging from considerably above to well below normal. Periodic occurrences of higher winds produced severely harsh wind chills. Substantial amounts of precipitation were recorded throughout Illinois during frequent minor and major winter storm events. Overall, 23 individual noteworthy winter storms moved across all or a portion of Illinois during 2010-2011. These frequently occurring storms produced a variety of precipitation types (e.g. rain, freezing rain, hail, and snow), depending on the temperature regime at the time of the storm. There were 182 bird species reported throughout the state. However, this community was less diverse than that reported during the previous two winters (185 and 189 species, in 2009-2010 & 2008-2009 respectively). Nevertheless, this still represents a notable wintering avian community for Illinois.

Temperatures during December varied widely across the state ranging from considerably below to considerably above normal. This month was extremely active in terms of regularly occurring winter storms moving through Illinois. The season began with a major winter storm on 3&4 December which produced variable amounts of snowfall (1-8 inches) throughout the northern 2/3 of the state. Another minor storm skimmed the northern tier of counties, dropping approximately 1 inch of snow on 9 December. Shortly thereafter, another major storm occurred on 11&12 December. During the early half of the storm (11 December), moderate to heavy rainfall (0.5-1 inch) fell across the entire state, turning over to 1-6 inches of snow during the latter half of the storm (12 December). Additionally, this storm was accompanied by 20-35 mph winds which produced severe wind chills of -10 to -25 degrees. A few days later (15&16 December), Illinois was hit by another major winter storm which produced 3-6 inches of snow across the northern 1/3 of the state, 1-3 inches of snow in the central 1/3, and light rain and freezing rain through the southern 1/3. On 20 December, Illinois was again punished by a major winter storm. This event dropped 2-6 inches of snow over the northern half of the state and 1-2 inches of snow through the southern half. These storms were also accompanied by moderate wind chills ranging from 0 to -10 degrees. A slower moving major winter storm slammed into Illinois over the Christmas holiday (24&25 December), resulting in 4-8 inches of fresh snow over the northern portion of the state, 2-4 inches in central Illinois, and 1-2 inches across the southern region. The month ended with a storm event on 31 December, which yielded light rain, high winds, falling temperatures, and substantial wind chills throughout the entire state.

Temperatures during January ranged from slightly above to moderately below normal. Following the extremely active weather pattern of December, early January was relatively quiet, with nothing more than brief snow flurries occurring throughout various portions of the state. However, this respite from winter storms was all too brief. Illinois was pounded by a major storm on 11 January, which produced 2-5 inches of snow across the north, 3-6 inches in the central region, and 1-2 inches of snow through the south. A slightly weaker storm moved across the state on 17 January, resulting in light freezing rain and 2-4 inches of snow in the northern 1/3 of Illinois, light rain and freezing rain in the mid-section, and light rain throughout the south. A very weak storm yielded an inch or less of snow across the northern 2/3 of Illinois on 20 January. During the latter portion of the month, a series of milder storms moved across Illinois in fairly quick procession. On 24 January, an inch of snow fell over the central and northeast portions of the state, followed the next day (25 January) by light rain and freezing rain over the extreme southern region. A more widespread storm dropped 1-2 inches of snow in the north, light freezing rain in the center of the state, and light rain through the south on 27 January. The last day of the month, Illinois was slammed by the first of a massive two-pronged winter storm. The weaker first storm produced 1-2 inches of snow in the north and central portions of the state, along with light rain and freezing rain over the southern 2/3 of Illinois. Following this initial storm, the winds increased substantially and temperatures plummeted.

The extremely powerful second storm, which hit Illinois on 1&2 February, created a major blizzard that paralyzed the country from the Great Plains to the east coast. This storm dropped 12-24 inches of snow throughout the northern 2/3 of the state, along with heavy freezing rain and a major icing event through the southern 1/3. Winds from 25-30 mph, created severe wind chills ranging from -20 to -30 degrees on 2&3 February. Two weaker regional storms followed this monster blizzard. Light rain and freezing rain fell across the extreme southern portion of the state on 4 February, while approximately 1 inch of snow fell across the northern 1/3 of Illinois on 6 February. Strong winds and lower temperatures yielded brutal wind chills of -10 to -30 degrees during 6-9 February. This was followed by a two-week period in which no winter storms and much milder temperatures enveloped the state. A smaller storm produced light rain through northern Illinois, including light freezing rain and flurries over the northern tier of counties on 20 February. The latter portion of February experienced a series of relatively weak winter storm events. On 21 February, light rain and freezing rain changing to light snow fell over the northern 1/3 of Illinois, while light to moderate rain occurred through the southern 2/3 of the