



Field Notes: The 2012 Breeding Season

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Field notes drawing of Gray Partridge drawing by Peter Olson.

Summer 2012 weather: Drought and its effects on birds

This summer's severe drought conditions over much of the state likely played a key role in the timing and movement of breeding birds into Illinois, as well as in their eventual nesting success. To understand how bad it was, we need to go back before the summer breeding season even began and I can do no better than to quote from the Illinois State Water Survey summary for the period. "Illinois meteorological conditions in the fall of 2011 were trending toward dry in the southernmost counties, while central Illinois counties were experiencing below normal precipitation. The winter of 2011 to 2012 produced little snowfall across Illinois, and was warmer than most winters in Illinois. Spring precipitation was well below normal. When considering Illinois, the National Drought Monitor shows a progression of the drought from south to north, with the drought conditions in southern Illinois having begun in the fall of 2011, progressively worsening across southern Illinois into March of 2012 with central Illinois showing moderate drought, then extending to eventually covering all Illinois counties by July 2012. Generally dry conditions prevailed from January to April with slowly growing deficits by the end of April. However, the core months of the 2012 drought were May, June and July, when deficits grew substantially. Even by the end of 2012, areas throughout the state were, on average, 8 inches below normal, with significant portions of some areas of the state still 12 to 20 inches below normal precipitation."

Temperatures throughout Illinois were much above normal and precipitation was below normal for every month between March - July. For instance, the statewide March precipitation average of 2.11 inches represented a 1.10-inch deficit or only 66 percent of average for the month. This played havoc with many of the early nesting passerines in the state. March days in the 70s and even 80s were not uncommon, bringing a much earlier leaf-out and, more importantly for the birds, also a likely earlier insect emergence. Species such as Tree Swallows, bluebirds, robins and chickadees began nesting and even egg-laying on almost record-early dates. The heat and drought conditions hardened the ground, likely making finding and catching worms, one of the robin's primary prey items, much more difficult, which was the likely causal factor in the unusually late-nesting instances noted for that species in August, when they likely used alternative food (including fruit) to feed their young and themselves. The warm, dry weather only continued into May, where the statewide average of 67.9° F was **5 ° F** above normal and the statewide average of 2.48 inches of precipitation represented a 1.78-inch deficit or only

58 percent of average for the month.

The temperatures for both June and July were also much above normal and precipitation was once again much below normal. The warmest reading for June was 109° F at Kaskaskia on the 29th. The statewide average of 81.1° F for July was **6.1° F** above normal, making temperatures across Illinois for July much above normal once again. The warmest reading for the month was 109° F at Hidalgo on 7 July, with temperatures of 100° F or more, common across Illinois in July, making it the second warmest July on record. Every month for 2012 between January - July was warmer than normal, making the statewide average temperature for that period the warmest on record.

Precipitation for June was again much below normal statewide, making it the eighth driest June on record. Rainfall totals were in the 1.5- to 2.5-inch range in the northern half of the state, while the southern half of the state was much drier with amounts ranging from 0.5 to 1.5 inches. Precipitation amounts for Illinois in July were also much below normal with the statewide average of 1.46 inches representing a 2.37-inch deficit or 38 percent of normal for the month. Parts of central and northwestern Illinois reported less than one-half an inch of precipitation for the entire month of July. Meanwhile, rainfall totals were in the 2- to 4-inch range in both far southern and northeastern Illinois. It was the fourth driest July on record. Consequently, the statewide average precipitation for January-July was 14.05 inches, making it the third driest on record. However, even during a drought, a few places reported above normal precipitation. One of the largest monthly totals was at Kankakee with 6.56 inches of precipitation.

Drought and its effects on this summer's birds

With shrinking water levels in virtually all natural wetlands, especially in wetland-rich northeastern Illinois, there seemed to be a paucity of records for most rail and other wetland breeding species, even to include such species as Sedge and Marsh Wrens. For instance, a pair of Marsh Wrens appeared (but late in the season) at a heavily birded east-central Illinois wetland and nested, the first such breeding record for that species in the county. Meanwhile, I noted many fewer Marsh Wrens in most of the wetlands I censused and visited in northeastern Illinois and other areas of the state. And by early July, the usual arrival time for the bulk of Illinois's breeding Sedge Wren population, the grasslands and shallow wetlands that they favor to nest in were mostly bone dry. Undoubtedly because of this, the abundance of insects that are usually to be found in such moist locations, were likely not present in many of the areas that Sedge Wrens favor for breeding. Although the drought seemed