

Hawk skimming above the tree tops, realizes that this event has meaning to the group, and a meaning which causes immediate action. As I have pointed out in an article, "The Mentality of the Crow," published in the WILSON BULLETIN (March, 1927), a number of Crows feeding on the ground attract other Crows to their feast. Similarly vultures perceiving Crows in a compact group about an object realize that often this means food for them. It is by such signs that the vultures found Mr. Lewis' bait although they could not see it. In these particular instances, it was unquestionably not Crows that attracted the vultures. However there are other creatures which through smell detect the presence of carrion and are attracted to it. Carrion beetles and some small rodents feed upon decomposing meat and undoubtedly find their food by following up the scent. Although such small creatures could not be seen by a human being at any considerable distance, the carrion beetles, some of which are brightly colored, and the larger forms of mice and ground squirrels converging upon a rotting carcass might be easily distinguishable to the keen eyed vulture flying over-head in search for just such indications; and having perceived these signs the vulture through long experience knows that this means food.

I therefore wish to advance the theory that vultures find their food by observing the actions of carrion feeding creatures, as well as by discovering the food for themselves by direct vision.

KANSAS, ILLINOIS.

A SOUTHWARD MOVEMENT OF BREEDING SAVANNAH SPARROWS IN OHIO?

BY LOUIS W. CAMPBELL

It is a general fact accepted by ornithologists that the trend of breeding ranges of birds is always northward. Familiar examples in Ohio are the Carolina Chickadee and the Bewick's Wren. But occasionally one observes a species which apparently is either not obeying this rule or is returning to its original nesting ground. At present it is the Savannah Sparrow (*Passerculus sandwichensis savanna*), whose normal breeding range is given as southern Canada, which seems to be spreading southward through Ohio.

The history of this species in the state as a nesting bird is soon told. Dr. Wheaton in 1879 lists it as a probable breeder in the northern counties but states that it was not recorded by Dr. Kirtland or Mr. Read. In fact, his only positive record was that of Mr. H. C.

Benson at Gambier, Knox County, in the central part of the state. The next nesting accounts were those of the Rev. W. F. Henniger (WILSON BULLETIN, XVII, p. 91), in Scioto County, and Mr. E. A. Doolittle (WILSON BULLETIN, XXIX, p. 161), in Lake County. Both Dr. Lynds Jones and Mr. W. L. Dawson state in their publications that they have never found this species breeding, nor was it reported to Dr. Jones by his large number of correspondents, among whom, incidentally, were two observers from Lucas County. This makes a total of but three published records for the state of Ohio up to the year 1926. It is also interesting to note that in "Michigan Bird Life," by Professor Barrows (1912), there is no mention of its occurrence in the bordering counties of Michigan.

In the years 1926 to 1928, however, there was a very decided increase in the number of breeding Savannah Sparrows in Ohio. I am indebted to Mr. Charles Walker for the following records of the Wheaton Club of Columbus, Ohio. In 1926 this species was found "breeding commonly" at Camp Perry in Ottawa County by Mr. E. S. Thomas. In 1926, 1927, and 1928 a few pairs were found in Huron County by Mr. Walker, and in 1928 Mr. Trautman located one or two pairs in southern Delaware County. Besides these records of the Wheaton Club, there is a report in *Bird-Lore* of July-August, 1928, of a pair nesting at Youngstown, Trumbull County (Mr. Christy). From Lake County Mr. Doolittle sends word that his small colony of from one to three pairs still persists. These birds, therefore, do not enter into the picture.

My own observations of bird-life in Lucas County began in 1926. In 1927 I found four pairs of Savannah Sparrow: rather widely separated. The year 1928 brought a very great increase, due to some extent, no doubt, to my greater familiarity with the song of the species. Counting each singing male in the nesting time a pair, I have the following records: Wood County, 1; Ottawa County, 4; and Lucas County, 41, which includes a single colony of about 20 pairs on the east shore of Maumee Bay. The remaining were mostly in small groups of two or three pairs. It must be borne in mind that I did not make any special search for these sparrows, merely listing them on the usual field trips. All of these recent records would certainly seem to indicate a southern movement throughout Ohio.

Any change which may have been made in the physical condition of the state through clearing or drainage would in all probability be unimportant when dealing with a bird as easily suited as the Savannah Sparrow. Its choice ranges from a "pasture of rather barren soil with many granite boulders scattered about" in Lake

County, to a cranberry bog in Huron County. I have found this species on the borders of wet prairies with Henslow's Sparrows, in hay fields and meadows with Grasshopper Sparrows, and in clover fields with the Dickcissel. The only requisite seems to be the presence of water nearby, whether it be a narrow drainage ditch or Lake Erie itself. In fact there is a tendency to group in large numbers along the lake. This is brought out by Mr. Thomas' observations at Camp Perry, which is on the lake, and my own on Maumee Bay.

It would, of course, be foolish to attempt to draw any conclusions from the records of three years but I am presenting these facts for the consideration of other observers. Perhaps this species has always been present through the state, but I cannot believe that such pioneer ornithologists as Dr. Kirtland and Dr. Wheaton, and, in later years, Dr. Lynds Jones and Mr. W. L. Dawson could have so consistently and unanimously overlooked a bird as comparatively easy to identify as the Savannah Sparrow.

TOLEDO, OHIO.

NESTING HABITS OF THE SEASIDE SPARROWS IN FLORIDA

BY DONALD J. NICHOLSON

The Seaside Sparrows are well represented among the extensive coastal marshes on the Florida Peninsula, which, taking all the curves and indentations, is about 3,000 miles of coast line. For miles along the Atlantic side, the Halifax and Indian Rivers parallel the ocean with a narrow strip of land between. In the river at places there are many islands and marshes with a network of creeks and sloughs running among them. Most of the marshes have heavy, extensive growths of *Salicornia*, or pickleweed, marsh grass, salt grass, and a sharp pointed grass or reed—a species of *Juncus*. In spots on Merritt's Island where the Dusky Seaside Sparrow breeds, and at Cape Sable where the Cape Sable Sparrow nests, there are large patches of bunch or switch-grass. Also among the *Salicornia* marshes small mangroves are found and are sometimes used for nest-sites by the Macgillivray's Sparrow. Among the bayous and mouths of the various rivers that flow into the Gulf, are favorite habitats of the Seasides of the West coast.

Florida has six breeding species and subspecies of Seaside Sparrows. The Macgillivray's and Dusky, both found breeding only on the Atlantic side; the Cape Sable Sparrow at the extreme southern end of the mainland at Cape Sable; and Scott's, Griscom's, and Howell's Seaside which range from Clear Water to Tarpon Springs north to the Alabama line.