

XIV. SOME OBSERVATIONS ON THE EXTENSION IN RANGE OF CERTAIN BIRDS IN THE OKLAHOMA PANHANDLE

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The subject of the extension in range of birds is on which has as a rule received but very little attention in many sections of the west, chiefly because the stretches of uninhabited land have been so large and consequently the number of local nature students small, while trained ornithologists have been unable to spend enough time in such regions to give the matter the attention it deserves.

The following data was collected by me during a period of fifteen years, and in the majority of cases is from personal observation, but in one or two instances I am indebted to several reliable old settlers in the region for valuable information which has been of much assistance to me in preparing this article.

From the data at hand it appears to me that the extension in range of birds is generally caused by one of three things:

First: Variations in the amount of natural food from year to year.

Second: The changes brought about by settlement and cultivation of large tracts of land formerly uninhabited, or until the past few years only thinly settled, and by the planting of trees on some of these tracts.

Third: Violent storms with high winds which sometimes carry certain birds many miles from their former range, and leave them in localities, where they were formerly unknown, but where conditions may prove so much to their liking that they remain there permanently.

If the extension in range has been brought about by a quest for food the birds usually follow some water-course into the new range, and then spread out to the surrounding country on both sides of the stream.

The following list of ten species relates to Cimarron county, Oklahoma alone, unless otherwise stated.

1. *Colinus virginianus virginianus*: Bob-white. Has extended its range west twelve miles during the past ten years and is now found nearly to the Oklahoma-New Mexico line north and west of Kenton.

2. *Callipepla squamata pallida*: Arizona Scaled Quail. Has extended its range east and northeast into Kansas, during a period of eighteen years. The distance covered in this time is about sixty miles and the birds appeared to have followed down the Cimarron river and worked out on each side as they went. They have been along the Cimarron valley in the western half of Cimarron county for over thirty years, according to old settlers, but did not begin working east until about 1905, or 1906.

3. *Tympanuchus pallidicinctus*: Lesser Prairie Chicken. These birds, once numerous on the plains and then scarce for a number of years, are now increasing rapidly in numbers and are extending their range west and north having appeared during the past two years along the Oklahoma-New Mexico line between the Cimarron river, and Currumpaw creek, and also in the edge of the hills along the Cimarron. The distance they have extended their range west is about fifteen miles and to the north about ten miles.

4. *Geococcyx californianus*: Road-runner. This interesting bird has extended its range east and north over seventy miles during the past ten years and is now found in Texas county, Oklahoma, and in southwestern Kansas, in large numbers.

5. *Tyrannus verticalis*: Arkansas Kingbird. This warrior of the air has extended its range south across the entire Oklahoma Panhandle and into Texas during the past fourteen years.

Prior to that time its range was along the Cimarron river in Cimarron county and along the Beaver river in Texas and Beaver counties. But in Cimarron county along the Currumpaw and Seneca creeks and where these creeks join and become the Beaver river, they were unknown until either in 1909 or 1910 although there were trees at many places along these streams, while in Texas and Beaver counties they did not breed along the creeks at the south sides of these counties. For four or five years before the dates mentioned I worked through the southern parts of these counties after cattle every summer and never saw one of them although I was frequently out for days along the streams on that side of the Oklahoma Panhandle. In 1909 or 1910 they appeared to spread south suddenly and in 1911 I saw them on the South Canadian river in the Texas Panhandle. The trees planted on the flats all over the counties by the settlers who had come in 1905 and 1906 had by that time reached a size where they were attractive to the birds and this condition may have been responsible for their extension of range.

6. *Pica pica hudsonia*: American Magpie. Has extended its range thirty miles east and into Oklahoma from New Mexico and Colorado during the past four or five years. A flock of sixteen or twenty are ranging on the A. L. Brookhart Bros. ranch, fourteen miles east of Kenton.

7. *Cyanocephalus cyanocephalus*: Pinyon Jay. This bird has extended its range east along the valley of the Cimarron river for a distance of seventeen miles during the past ten years.

8. *Carpodacus mexicanus frontalis*: House Finch. This bird has extended its range south and east a distance of eighteen miles during the past three years. It was first recorded in the extreme northwestern corner of Cimarron county in 1919 and is now found twelve miles south and east of Kenton.

9. *Passer domesticus*: English Sparrow. In its campaign to inhabit every county in all states this bird has extended its range from the north and east on to the west and south all over the Panhandle. The first members of this species were reported in what is now north central Cimarron county, late in 1903 and worked on west and south.

10. *Sialia currucoides*: Mountain Bluebird. For the past two summers several of these birds have nested in northwestern Cimarron County, one mile east of the New Mexico line and two miles south of the Colorado boundary. The nests, four or five in number, were around the mouth of an old copper mine

prospect hole. This record extends their breeding range at least twenty miles southeast.