

Kansas Ornithological Society

BULLETIN

PUBLISHED QUARTERLY

Vol. 17

June, 1966

No. 2

NOTES ON THE BREEDING OF THE SONG SPARROW IN KANSAS

BY TED R. ANDERSON

Johnston (1965:60) terms the Song Sparrow (*Passerella melodia*) a summer resident in northeastern Kansas, this statement being based on a knowledge of the observations herein reported. An earlier assertion that Song Sparrows breed in Kansas, based on fall-taken juvenal specimens (Hays, 1956:20), was discounted by Johnston (1960:65); to my knowledge, the present observations represent the only evidence for breeding.

Song Sparrows were found in the summer of 1965 in an extensive tract of willow (*Salix* sp.) bordering the Missouri River at Wolcott, Wyandotte County, Kansas. Three singing sparrows, presumably males (see Nice, 1964:127), were heard on four occasions from 12 to 22 June. Two of the singing males occupied contiguous tracts of short willows immediately adjacent to the river and separated by a stone dike. The river had deposited silt in large triangular fills on both sides of the dike. Upriver from the dike was an extensive growth of willows of more or less uniform height, about 7 feet, an area which henceforth will be designated as territory A. Downriver from the dike, territory B, the willows of the fill were less uniform, many being 12 feet in height. The ground under these willows was primarily open, much of it damp, affording excellent foraging areas for the sparrows (see Marshall, 1948:213). Bordering the fills and representing the permanent riverbank were more mature stands of willow and some cottonwood (*Populus deltoides*) 20 to 25 feet in height, with rank herbaceous understory and some sapling silver maple (*Acer saccharinum*), sycamore (*Platanus occidentalis*), mulberry (*Morus rubra*), and elderberry (*Cambucus canadensis*). This habitat continued back from the river to the earthen levee, a distance of about 200 yards. Near the levee was territory C, an area of more mature willows (25 feet) bordering a small lake created by the dike.

Red-winged Blackbirds (*Agelaius phoeniceus*) and Indigo Buntings (*Passerina cyanea*) were the only other breeding birds known to occupy the short willows of territories A and B, and several nests of the former and one nest of the latter were discovered while I was searching for nests of the Song Sparrow. Additional species occupying the adjacent taller growth and territory C were: Green Heron (*Butorides virescens*), Yellow-billed Cuckoo (*Coccyzus americanus*), Downy Woodpecker (*Dendrocopos pubescens*), Willow Flycatcher (*Empidonax brewsteri*) (*sensu* Stein, 1963; formerly included with *E. traillii*), Black-capped Chickadee (*Parus atricapillus*), Catbird (*Dumatella carolinensis*), Bell Vireo (*Vireo bellii*), Red-eyed Vireo (*V. olivaceus*), Warbling Vireo (*V. gilvus*), Yellow Warbler (*Dendroica petechia*), Yellowthroat (*Geothlypis trichas*), Yellow-breasted Chat (*Icteria virens*), Orchard Oriole (*Icterus spurius*), Baltimore Oriole (*I. galbula*), Cardinal (*Cardinalis cardinalis*), and American Goldfinch (*Spinus tristis*). Brown-headed Cowbirds (*Molothrus ater*) were seen flying over the area occasionally, but this species apparently does not exploit the habitat very successfully (of 35 nests of Willow Flycatchers, Bell and Red-eyed vireos, Yellow Warblers, Orchard and Baltimore orioles, Red-winged Blackbirds, and Rose-breasted Grosbeaks (*Pheucticus ludovicianus*) located from 1963 to 1965 in this and in other similar willow thicket habitats along the Missouri and Kansas rivers, only two were parasitized by cowbirds).

In the following account of my observations on Song Sparrows, individual birds will be designated by their presumed sex and by the letter representing their territory (i.e., sparrow singing in territory A equals "male A").

Male A was heard singing on 12, 19, and 22 June, and on 19 and 22 June was seen at several singing perches near the tops of taller willows in territory A and willows of the border. Observed singing perches ranged from eight to 20 feet in height.

Male B was heard singing on 12 and 13 June. On 12 June, while male B was scolding me from a perch in the taller willows bordering territory B, female B suddenly appeared from behind me (territory B) walking rapidly on the ground with her wings raised vertically above her back in a distraction display. The bird walked rapidly in a circle around me twice at a distance of about 20 feet. No nest or young were found in the vicinity. At 6:05 a.m. on 13 June, male B was taken while singing from a perch 15 feet high in a willow bordering territory B. The specimen (T. R. Anderson original no. A101) proved to be a male in breeding condition with testes enlarged to $8 \times 7\frac{1}{2}$ mm and weighing 22.5 gms with little subcutaneous or visceral fat.

Male C was heard singing on 13, 19, and 22 June, but was not seen.

No Song Sparrows were observed after high water flooded the three territories twice in early July. Territories A and B were greatly altered as a result of the high water, particularly the former where 95 per cent of the willows were razed, principally by driftwood deposited by the receding water.

Although neither occupied nests nor newly-fledged young were found, there can be little doubt that Song Sparrows nested in Kansas in 1965. The distraction display of female B, described above, constitutes evidence of this: Nice (*op. cit.*, 248) reports that this display is commonest with females having young, and does not report any occurrence of the display by non-nesting birds. The specimen of the male in breeding condition further substantiates the probability of breeding.

LITERATURE CITED

- HAYS, H. E., JR.
1956. Nesting record of the Song Sparrow in Kansas. *Bull. Kansas Ornith. Soc.*, 7:20.
- JOHNSTON, R. F.
1960. Directory to the bird-life of Kansas. Univ. Kansas Mus. Nat. Hist., *Misc. Publ.*, 23:1-69.
1965. A directory to the birds of Kansas. Univ. Kansas Mus. Nat. Hist., *Misc. Publ.*, 41:3-67.
- MARSHALL, J. T., JR.
1948. Ecologic races of Song Sparrows in the San Francisco Bay region, Part I. Habitat and abundance. *Condor*, 50:193-215.
- NICE, M. M.
1964. Studies in the life history of the Song Sparrow. Vol. II. The behavior of the Song Sparrow and other passerines. Dover Publications, New York, 4-328.
- STEIN, R. C.
1963. Isolating mechanisms between populations of Traill's Flycatcher. *Proc. Amer. Phil. Soc.*, 107:21-50.

7803 Summit, Kansas City, Missouri, 13 January 1966.

CHUCK-WILL'S-WIDOW BREEDING IN GEARY COUNTY, KANSAS

BY THOMAS G. SHANE

Although the history of the Chuck-will's-widow (*Caprimulgus carolinensis*) in Kansas is poorly known, they seem to have spread and increased in numbers since the first record from the state was taken in 1898 by R. Matthews (Lantz, 1899:187). Goss (1891) gave no record of the Chuck-will's-widow from Kansas. Snow (1903:17) listed the Chuck-will's-widow as an accidental visitor to Kansas. This species, however, was found as far northeast as Douglas County by 1923 (Johnson, 1927:

157) as it extended its range northward and westward across Kansas. Johnston (1960a: 18) has summarized the distributional history of the Chuck-will's-widow in Kansas. Goodrich (1945:224-225) reported that the Chuck-will's-widow was a relatively common summer resident in southeastern Kansas, and Tordoff (1956:331) stated that this species was a locally common summer resident in eastern Kansas, with the western limit of its distribution poorly known. Johnston (1960b:31-32) stated that the Chuck-will's-widow was a locally common summer resident and was found west to at least Shawnee and Stafford counties. Johnston (1964:618) listed five breeding records for Kansas, all from south of Wyandotte County and east of Shawnee, Greenwood, Stafford, and Sedgwick counties; the species has recently been found breeding as far south and west as Clark County (Rising, 1965:26). Dates of the five breeding records known for Kansas fall between 21 April and 31 May. The following data, obtained in the summer of 1964, extend our knowledge of the northwestern distributional limits of the Chuck-will's-widow in Kansas.

On 31 May 1964, John LaShelle flushed a Chuck-will's-widow while he was walking along a wooded hillside along Humbolt Creek in Geary County. Investigating the area in which the bird had been sitting, he found its nest which contained two eggs.

On 14 June, John LaShelle, Mrs. Ralph White, and I returned to the nest site to take pictures. When we arrived at the area, the bird flushed and flew through the woods and out of sight. The eggs were white and blotched with dark blue and brown, and were placed on fallen sticks. About 45% of the area adjacent to the nest site was covered by eastern red cedar (*Juniperus virginiana*), about 45% chinquapin oak (*Quercus prinoides*), and the remaining 10% by redbud (*Cercis canadensis*), American elm (*Ulmus americana*), and ash (*Fraxinus* sp.).

Near the northern limit of its range in eastern United States (Adams County, Ohio), the species also lives in a similar habitat of mixed deciduous trees and red cedar (Thomas, 1932:479), whereas in the southeastern United States the species usually nests in mixed oak and pine forests (Bent, 1940:147-162). The occurrence of evergreens in the Chuck-will's-widow's nesting habitat may be important, and further radiation of the species in Kansas may depend on the concentrations of red cedars north and west of the present range.

John and I left the nest area while Mrs. White stayed to get a picture of the bird. The bird returned to a limb above the nest sitting crosswise on the limb. Although goatsuckers characteristically sit lengthwise along a tree limb, Mrs. White took a picture showing the bird perched crosswise, a habit which is mentioned as occasional for the Chuck-will's-widow by Bent (*op. cit.*).

On 16 June, Mrs. White and I returned to the nest. The eggs had apparently hatched or had been destroyed by predators. A portion of the egg shell remained in the nest. We made a search of the area within 100 feet of the nest, but neither the parent nor the young could be found.

From 16 May to 25 June, John and I attempted to determine the occurrence and density of the Chuck-will's-widow in the county by counting the number of singing birds. In this six-week period we recorded the singing birds by counting the number of birds per section. The largest count made for a particular section was used as the total number of birds in that section for the period. Singing birds were recorded in 31 different sections with a total of 89 birds counted for the entire county. The 31 sections formed four major areas in the county where the birds were found. Area 1, along the Republican River, 5 miles northwest of Junction City, contained seven inhabited sections, and the density of birds was 2.57 per square mile here. This area contains one of the largest stands of red cedar in the county. Area 2, on the south side of the Smoky Hill River, 2 miles southeast of Junction City, contained five inhabited sections, and the density was 2.20 birds per square mile. This area also contains a large number of red cedars. Area 3, at the northern or lower end of Clark and Humbolt creeks, about 6 miles east of Junction City, contained 12 inhabited sections, and the density was 4.08 birds per square mile. This was the largest area, and it was the area in which the nesting bird was found. Area 4 is the southern or upper end of Clark Creek. In this area the deciduous trees are still heavily concentrated, but the density of red cedars here is

less than that at the lower end of the creek. Area 4 contained five inhabited sections, and the density was 1.80 birds per square mile. Two isolated birds were found, one 4 miles west of Area 4 on Otter Creek, and the other 5 miles east of Area 4 on Dry Creek.

Considering the number of birds present, the Chuck-will's-widow may be listed as a common summer resident in Geary County in suitable habitat.

LITERATURE CITED

- BENT, A. C.
1940. Life histories of North American cuckoos, goatsuckers, hummingbirds, and their allies. *Bull. U. S. Nat. Mus.*, 176:ii-viii, 1-506.
- GOODRICH, A. L.
1945. Birds in Kansas. Kansas State Board of Agriculture, 64:3-340.
- GOSS, N. S.
1891. History of the birds of Kansas. G. W. Crane & Co., Topeka, Kansas, 5-692.
- JOHNSON, C. E.
1927. Notes on some less common birds of Douglas County, Kansas. *Wilson Bull.*, 34:156-158.
- JOHNSTON, R. F.
1960a. Distributional history of the Chuck-will's-widow in Kansas. *Bull. Kansas Ornith. Soc.*, 11:18.
1960b. Directory to the bird-life of Kansas. Univ. Kansas Mus. Nat. Hist., *Misc. Publ.*, 23:1-69.
1964. The breeding birds of Kansas. *Univ. Kansas Publ., Mus. Nat. Hist.*, 12: 575-655.
- LANTZ, D. E.
1899. New and rare birds in Kansas. *Auk*, 16:187.
- RISING, J. D.
1965. Distributional notes on birds from western Kansas. *Bull. Kansas Ornith. Soc.*, 16:25-27.
- SNOW, F. H.
1903. A catalogue of the birds of Kansas. Fifth Edition, *Trans. Kansas Acad. Sci.*, 18:1-23.
- THOMAS, E. S.
1932. Chuck-will's-widow, a new bird for Ohio. *Auk*, 49:479.
- TORDOFF, H. B.
1956. Check-list of the birds of Kansas. *Univ. Kansas Publ., Mus. Nat. Hist.*, 8:307-359.
- 713 W. 8th, Junction City, Kansas, 8 January 1966.

OFFICERS

- President J. C. Johnson, Kansas State College, Pittsburg, Kansas
 Vice President
 David F. Parmelee, Kansas State Teachers' College, Emporia, Kansas
 Secretary Carl S. Holmes, 1728 N. Sheridan, Wichita 12, Kansas
 Membership Secretary Amelia Betts, Baldwin, Kansas
 Treasurer L. B. Carson, 1306 Lincoln, Topeka, Kansas
 Editor . . . Richard F. Johnston, University of Kansas, Lawrence, Kansas
 Associate Editor James D. Rising
- Regular Membership, \$2.00 Student Membership, \$1.00 Sustaining Membership, \$5.00
 Dues payable January 1 to the Treasurer
Subscription to the Bulletin is included in any class of membership

* * * * *

Published June 1, 1966