

SAGE SPARROW: A NEW SPECIES FOR OKLAHOMA

BY JOHN S. SHACKFORD

On 21 January 1988, in a large field of annual sunflowers (*Helianthus annuus*) 8 miles west and 1¼ miles north of Boise City, in Cimarron County, far western Oklahoma, I observed two Sage Sparrows (*Amphispiza belli*) and photographed one of them. This species has not previously been photographed or collected in the state.

At 1100, I began "squeaking" from my truck parked on a dirt road at the western end of the extensive sunflower plot, a quarter-mile wide and a full mile long, east to west. Within five minutes, I had attracted 40 Pine Siskins (*Carduelis pinus*), 15 American Tree Sparrows (*Spizella arborea*), 5 White-crowned Sparrows (*Zonotrichia albicollis*) and a Dark-eyed Junco (*Junco hyemalis*) into viewing range. With my 9 x 36 binocular, I scanned the loose assemblage of finches. A gray-headed bird that came into view showed a light breast bearing a single black spot. The bird resembled a Black-throated Sparrow (*A. bilineata*) without its black throat. Closer scrutiny revealed a white eyering. Moments later I noticed a similar bird only several yards to the west. When I consulted a field guide, I realized that only one sparrow at this time of year bore this combination of field marks: the Sage Sparrow.

The two Sage Sparrows disappeared eastward, under cover of the dense, erect sunflower stalks. With my camera, I walked toward them and squeaked



SAGE SPARROW

Photo taken 30 January 1988 by John S. Shackford 8 miles west and 1¼ north of Boise City, Cimarron County, Oklahoma.

again, but got only a fleeting glimpse of one bird. Though I tried repeatedly to relocate them during the following eight days, I was unsuccessful.

In the same spot on 30 January, however, one Sage Sparrow responded to my squeaking at approximately 0900. The hastily composed photograph I snapped was much too poor to provide proper identification. A little over an hour later, I succeeded in flushing a good-sized flock of finches into an open pasture of short grasses interspersed with yucca (*Yucca* sp.) and sandsage (*Artemisia filifolia*). For the next 15 minutes, I cautiously stalked the group until only three birds remained that had not doubled back to the sunflowers. I was delighted to discover that two, and possibly all three of them, were Sage Sparrows. Fortunately, two of the four color photographs I shot of one bird (420 mm magnification) were adequate to verify my identification (see cover pictures.)

When I returned from a quick trip back to the car for a larger lens, the birds were gone. Nor could I find them again between 31 January and 2 February. It was simply too easy for the sparrows to slip away under cover of the vast field of dense, chest-high sunflowers.

Alone or in combination, the cover photos show the gray crown, dark breast spot, light underparts and dark malar stripe indicative of *A. belli*, all traits I had noted in the field. The white outer tail feathers shown in one picture I did not actually see. An additional behavioral characteristic I did observe at least once was tail-flicking. I do not recall the slight flank streakings hinted at in the cover photographs.

A few notes regarding the habitat where the Sage Sparrows were found are in order. To the southwest and south of the sunflower patch stretched considerable fields of unharvested milo (*Sorghum* sp.); the native yucca-sandsage pasture in which I photographed the birds lay to the northwest. All these fields centered about the junction of a westward dirt section line road that dead-ended with a north-south one. Approximately 350 yards south of this point was a large field covered with dense grass averaging about a foot in height. Into it late one evening I noticed many small birds flying, apparently to roost. I suspect that the Sage Sparrows were among them.

The foregoing constitutes the first documentation of *A. belli* in Oklahoma and places it on the list of species officially recognized from the state. There is one earlier sight record for Oklahoma. On 2 January 1982, Nanette Johnson, Carrie Swink and JoAnn S. Garrett saw two Sage Sparrows 1½ miles north and ½ east of Kenton in Cimarron County (Garrett, J. S., 1982, Bull. Oklahoma Ornithol. Soc. 15:33; Amer. Birds 36:653, 1982). There appear to be no records from contiguous areas of New Mexico and Colorado, but the species is a "casual to rare migrant and winter resident in the High Plains" of the Texas Panhandle (Texas Ornithological Society, 1984, Checklist of the birds of Texas, 2nd ed., Austin, p.123). In Kansas, it is considered to be a "winter resident in southwest, in xeric scrublands" and there are records from Morton and Seward counties in the time span between November and January (Johnston, R. F., 1965, A directory to the birds of Kansas, Mus. Nat. Hist., Univ. Kansas, Lawrence, p.58).

COMPOSITION OF RUBY-THROATED HUMMINGBIRD POPULATIONS IN NORTHEAST OKLAHOMA

BY A. MARGUERITE BAUMGARTNER

This paper analyzes more than a decade of banding records of Ruby-throated Hummingbirds (*Archilochus colubris*) in northeast Oklahoma. During the 11 seasons from 1977 through 1987, a total of 2290 individuals have been trapped and/or netted in our rural backyard south of Jay, in Delaware County, Oklahoma. Here a wide variety of native tubular wildflowers and escaped species from abandoned housesites are scattered throughout the semi-open wooded hills and broad valleys of the Ozark Plateau. Natural food sources are augmented by feeders, garden flowers, trees and vines provided by increasing numbers of urban and rural home owners, enticing hummingbirds into countable proximity. Whether there has been a real or perceived increase in numbers, Ruby-throats currently rank among the more abundant breeding species in the region.

Attracted by the bowers of coral honeysuckle (*Lonicera* sp.) that festoon the fences around our spacious yard, these little birds have readily accepted the feeders used to bait our two traps, supplied with sugar water consisting of one part sugar to four of water, and boiled to discourage fermentation. Each wire mesh cylinder trap had a yawning drop door, operated manually several days each week throughout the hummingbird season. Mist-netting several mornings a week supplemented our captures and proved no more hazardous for hummingbirds than for other species.

Our earliest spring arrival, a male, was noted on 12 April (1981). Females usually followed several days to a week or more later. The first young birds began to appear in July, rapidly increasing our hummingbird population. There was no indication that these Oklahoma Ruby-throats reared more than one brood a year. Departure dates for the species usually occurred between mid- and late September, with the latest record on 25 October (1985).

During the early part of the season, when all the birds were in adult plumage, the sexes were easily distinguished. The male had a ruby throat; the female did not. The male in silhouette showed a forked tail, whereas the female's was rounded. With the arrival of the hordes of young-of-the-year after the first week in July, four categories had to be recognized. *Adult males* now appeared sparingly, as most had already departed southward by mid- to late July. *Immature males* resembled females, but at close range showed distinct streaks of tiny red dots on their white throats. Their crown feathers were usually edged with buff, creating a scaly appearance. Compared with adult females, their bills appeared definitely "stubby". *Immature females* could often be distinguished from *adult females* by their scaly crowns. The safest criterion, however, was bill length: in young females 17 to 18 mm, in adult females 19 mm. Although these differences may sound absurdly minute, they became more obvious with a few years' practice.

Table 1 shows the ages and sexes of the 2290 individuals banded in the Jay area. There have been consistently more males than females in the annual counts. The highest count, in 1987, included 388 new (unbanded) birds and 85 returns from previous years, a total of 473 individuals. During 1987, the sex-age

proportions of newly banded birds were true to form, i.e., 242 (62%) were males (114 adults, 128 young) and 146 (38%) females (82 adults, 64 young). I do not believe that these figures represent a capture bias. Both sexes have used the traps freely. In fact, there have been periods lasting several weeks when the only birds captured were already banded, suggesting a fairly complete catch of the yard's population.

Table 1. Age and sex of 2290 Ruby-throated Hummingbirds banded in northeast Oklahoma, 1977-87 (% of total).

	Males	Females	TOTAL
Adults	583 (25.5)	494 (21.6)	1077 (47.0)
Young	<u>685 (29.9)</u>	<u>528 (23.0)</u>	<u>1213 (53.0)</u>
TOTAL	1268 (55.4)	1022 (44.6)	2290 (100.0)

The return ratios of banded hummingbirds have followed a different pattern. The 334 return birds represent 19.6% of the total number banded, and include about the same percent of birds banded as adults as those banded as immatures (see Tables 1 and 2). Although more males than females were banded during the study, only 112 males (33.5%) were recaptured, as compared with 222 females (66.5%).

Table 2. Age and sex of 334 Ruby-throated Hummingbirds recaptured in northeast Oklahoma, 1977-87 (% of total).

	Males	Females	TOTAL
Adults	48 (14.4)	130 (38.9)	178 (53.3)
Young	<u>64 (19.2)</u>	<u>92 (27.5)</u>	<u>156 (46.7)</u>
TOTAL	112 (33.6)	222 (66.4)	334 (100.0)

Analysis of these 334 Ruby-throat returns provides insights into the longevity of these tiniest of birds. As expected, the majority return from one to three years after the year of banding. A four-year-old is exceptional. Of the 1268 males banded in 11 years, two were at least five and one bird lived to age four. Females definitely outlived males. Of the 1022 banded females, 26 attained the age of four or more years, as follows: 6 four-year-olds, 14 five-year-olds, 3 six-year-olds, 2 seven-year-olds and 1 nine-year-old. These hardy hummers comprise only .011 percent of the 11-year total. The oldest, a lone female banded as an adult (No. 20239), survived for at least nine years, representing less than one percent of the 110 birds banded during her first season, and an infinitesimal proportion of all Ruby-throats banded to date.

Difficult to ascertain is the extent of range inhabited by the hordes that visit our feeders. For several years we maintained substations from .3 to 6 miles from the home station. These were manned during 68 sessions for a total of

175 hours, and 92 hummers were banded there. There were only four interchanges, including an adult female, an immature female, and two adult males. Three of these birds represented 100% of the catch at the nearest substation. The fourth was captured on our deck in late April, and recaptured during mid-July about 1½ miles away.

During early June of 1983, our summer intern, Dale Gawlik, located three active nests in the nearby open woods by following female birds from our yard during the nest-building stage. Spaced approximately .2 mile apart, they formed a loose triangle about .3 mile east of the home station. A single female nestling, banded on 15 July, fledged the following morning, her stubby tail and short bill barely half grown. Assuredly, No. 29589 was not yet ready to fly to the feeders, but three weeks later, on 4 August, she buzzed into the trap on our deck.

Female No. 29588, a regular summer resident of our study area for three years, was last recorded on 14 August, 1985. On 16 September of that same year, she was found dead in Midland in southwest Texas. Thus she established not only a time schedule, but a migratory course considerably west of her place of origin. (Baumgartner, A. M., 1986, Bull. Oklahoma Ornithol. Soc. 19:21-23).

LITTLE LEWIS WHIRLWIND NATURE SCHOOL AND SANCTUARY, JAY, OKLAHOMA 74346, 1 SEPTEMBER 1988.

GENERAL NOTES

Black-shouldered Kite in Greer County, Oklahoma. At 1030 on 17 September 1988, Tom McKay and I noticed a gray, medium-sized raptor perched in a dead mesquite tree (*Prosopis juliflora*) about 100 yards off, and not far from Deer Creek in northwestern Greer County, Oklahoma. It was feeding on a lizard, but even through my spotting scope, I could not tell which species. This bird closely resembled a Mississippi Kite (*Ictinia mississippiensis*) in size and shape, but its underparts and tail were essentially white, and at each shoulder was a distinct black patch. For about 10 minutes, we studied it carefully. Presently, it soared out from the mesquite and resumed hunting, frequently hovering not very high up. We agreed that this graceful, strikingly colored bird was an adult Black-shouldered Kite (*Elanus caeruleus*), a species I had never seen during 25 years of field work as a game ranger in southwest Oklahoma.

At the time of our observation, skies were cloudy, but the light was still good. A 10-15 mph south wind was blowing and the temperature (°F) registered in the 60s. According to the National Weather Service in Oklahoma City, heavy rains had been unleashed on the area earlier in the day by the remnants of Hurricane Gilbert as it swept into Oklahoma from the southwest.

This sighting took place on the Sandy Sanders State Wildlife Management Area, an extensive tract of wild, eroded mixedgrass brushland and gypsum hills bordering the Elm Fork of Red River. Mesquites, Pinchot junipers (*Juniperus pinchoti*) and hackberries (*Celtis* sp.) are common upland species, whereas cottonwoods (*Populus deltoides*) and black willows (*Salix nigra*) dominate the lower reaches. Principal grasses include buffalograss (*Buchloë dactyloides*), little bluestem (*Schizachyrium scoparium*) and needlegrass (*Aristida* spp.).

There are only a handful of Oklahoma records for *Elanus caeruleus*, and

about half are from the southwest (Comanche and Tillman counties; see Bull. Oklahoma Ornithol. Soc. 16:30-31, 1983 and 17:22, 1984). The present sighting is the first for Greer County. This bird may well have been ushered northward from its normal range in south Texas by Hurricane Gilbert. — Wesley Webb, *Route 1, Box 40B, Lone Wolf, Oklahoma 73655, 22 September 1988.*

Mississippi Kite strikes Purple Martin. — At 1405 on the hot, slightly windy day of 9 July 1986, we were watching two Mississippi Kites (*Ictinia mississippiensis*) and six or eight Purple Martins (*Progne subis*) circling together about 200 feet above the Cameron University campus in Lawton, Comanche County, Oklahoma. The kites were playfully diving at one another, but the martins appeared to be excited by their proximity. Several of the martins were calling simultaneously while circling the larger birds, and at least twice, struck one kite from above. The entire group was gradually drifting to the northwest when a martin swerved in front of one of the kites, approximately 50 feet below it. The kite suddenly stooped, struck the martin, carried it for about 10 seconds, then released it. Still alive, the martin followed a shallow glide path to the ground until we lost it from sight. The kite showed no more interest in its victim, and drifted off to the northeast with the other birds. Thirty minutes later, we returned to the area where we had seen the martin go down, but could not find it.

Mississippi Kites prey almost exclusively on large insects taken on the wing (Terres, J. K., 1980, *Encyclopedia of North American birds*, Alfred A. Knopf, Inc., N. Y.). Based on information from a variety of sources, Bent (1937, Bull. U. S. Natl. Mus. No. 167, Vol. 1, p.68) stated that birds "are apparently never molested . . ." However, the chasing and knocking to the ground of a Chimney Swift by a kite was observed by Waggener (1975, Bull. Oklahoma Ornithol. Soc. 8:27), and Ports (1976, Bull. Oklahoma Ornithol. Soc. 9:14) found wings of at least two swifts beneath a nest in central Oklahoma containing a young kite almost ready to fledge. This species has also been known to capture bats in midair (Taylor, J., 1964, *J. Mamm.* 45:300-301; England, M. N., 1987, Bull. Oklahoma Ornithol. Soc. 20:6-7). England (1987) even watched one dine on a bat it had just snatched in flight. — Richard T. DeVilbiss, *4504 Gore Blvd. and Richard C. George, 2408 Atlanta, Lawton, Oklahoma 73505, 9 July 1986.*

Notes on a Prairie Falcon. — On 8 December 1985, we were surveying the northwest area of Tulsa County, Oklahoma, in preparation for the upcoming annual Audubon Christmas Bird Count. We stopped in midafternoon approximately a mile west of the intersection of U.S. Highway 75 and 126th Street North, at the southern edge of a two-mile stretch of tallgrass prairie. At this particular spot, the land was eroded and badly overgrazed. The weather was bright, clear, and calm. We were setting up our spotting scope to look at two Northern Harriers (*Circus cyaneus*) perched on fence posts when a flock of meadowlarks (*Sturnella* sp.) took to the air about 25 yards away. At this time, Seibert saw a small falcon dive on one of the meadowlarks and snatch it in midair. The falcon flew approximately 100 yards up the hillside, landed, and proceeded to eat its catch. Through the telescope we identified the raptor as a

Prairie Falcon (*Falco mexicanus*) from its size, color, and facial marks. As we watched, a Red-tailed Hawk (*Buteo jamaicensis*) swooped at the Prairie Falcon, forcing it to drop the meadowlark. The larger hawk continued to harass the falcon for a short distance before returning to pick up its booty and gradually drift out of sight, meadowlark in tow. — Patricia Seibert, 2145 S. Florence Ave., Tulsa, Oklahoma 74114, and Jo Loyd, 6736 E. 28th St., Tulsa, Oklahoma 74129, 2 December 1986.

Unusually high number of Short-eared Owls in northeastern Oklahoma in winter. — Between 3 and 12 January 1988, at their farm about 10 miles southwest of Muskogee, in Muskogee County, northeastern Oklahoma, Mr. and Mrs. Vincent Flushe witnessed an astonishing winter concentration of owls. A foot or so of snow covered the ground and for the entire week temperatures remained well below freezing, usually in the low 20s.

The Flushes began to notice the owls wherever they looked: hunting low above open fields, perched atop fenceposts and other prominences, or huddled within crevices in snowdrifts along ditches. Here the birds were especially numerous, apparently taking refuge from the wind. Never before had the Flushes beheld such a spectacle, and they estimated not less than 200 owls could be seen at times!

Mr. Flushe took several photographs of the owls, which he could not identify. However, he did not have the film developed until almost a year later, when he asked me to identify them from the prints. Because some shots had been taken at fairly close range, I had little difficulty: they were Short-eared Owls (*Asio flammeus*), a species that winters in open prairie regions of Oklahoma, but that has never before been reported in such numbers.

In nearby Wagoner County to the north, near the town of the same name, approximately 100 Short-eared Owls were flushed from tall grasses within a half square mile on 8 December 1956 by Don H. Baepler, William E. Southern, George M. Sutton, James L. Norman and Vaud A. Travis, Jr. Stomach contents of three owls that were collected revealed a diet of cotton rats (*Sigmodon hispidus*), and a majority of these birds remained all winter (Sutton, G.M., [1982], Species summaries of bird records, Oklahoma Mus. Nat. Hist., Univ. Oklahoma, Norman). This was the largest number heretofore reported for the state. In California, J. G. Tyler (1913, Pac. Coast Avifauna No. 9) described an aggregation of "as many as 200" Short-eared Owls hunting over stubblefields at sunset during December near Fresno. — Jeri McMahon, Rt. 1, Box 50, Fort Gibson, Oklahoma 74434, 11 February 1989.

Eastern Screech-Owl in McCurtain County, Oklahoma. — On 19 March 1983, while conducting a spotlight survey of white-tailed deer (*Odocoileus virginianus*) in northern McCurtain County, Oklahoma, Jana Nelson, Steve Conrady and I discovered a small owl perched about 4 feet up in a winged sumac (*Rhus copallina*). We were approximately 3½ miles east of the community of Mount Herman. The owl's height we estimated to be 9 or 10 inches.

Blinded by the spotlight, the owl allowed me to approach to within five feet as I photographed it at successively closer intervals. Curious to see just how close I could get, I crept up and actually *touched* its breast! This prompted

it to fly across the road into the woods and attempts to relocate it with a flashlight were not successful. We concluded that the owl was an Eastern Screech-Owl, *Otus asio*. One of my slides of the screech-owl is on file with the Oklahoma Bird Records Committee.

The importance of this sighting cannot be overemphasized. Apparently, only one other record is known for extreme southeastern Oklahoma: on 4 October, 1919, J. Stokley Ligon collected a female now in the University of New Mexico Collection of Vertebrates (UNMCV 1675) 4 miles northeast of Page in LeFlore County (Ligon, J. D., 1969, Bull. Oklahoma Ornithol. Soc. 2:29). — M. Earl Stewart, 701 N. 11th St., Duncan, Oklahoma 73533, 15 September 1987.

A late fall record for the Painted Bunting in Stephens County, Oklahoma. — At our home located 6½ miles southeast of Marlow, in Stephens County, southwestern Oklahoma, my husband Julian and I are always delighted each summer whenever a Painted Bunting (*Passerina ciris*) visits our birdbath. We live in an open blackjack-postoak forest with substantial undergrowth not far from Clear Creek Lake.

Although the species is a summer resident here, its lilting, somewhat warbling song reveals its presence much more often than does the bird itself. But this singing ceases by late summer, and the buntings apparently migrate southward before September. In this part of Oklahoma, there are only a few records for fall, the latest on 16 and 26 October 1976, when C.A. and O.J. Felis saw a male each date in Lawton, Comanche County (Tyler, J.D., 1979, Birds of southwestern Oklahoma, Contrib. Stovall Mus. Sci. & Hist. No. 2, Univ. Oklahoma, Norman, p. 49).

I was therefore greatly surprised when a male Painted Bunting, apparently in fine health, appeared at the feeding tray near our breakfast room window at about 0815 on 6 December 1987. Numerous American Goldfinches (*Carduelis tristis*) were eating sunflower seeds from a suspended tube feeder and had dropped many of them onto the tray. When I first noticed the bunting, it was in one corner of the tray and did not seem disturbed by the comings and goings of the goldfinches. Not once did I see it feed during the few moments it remained. There was no question as to its identification, for its dark blue head, yellow-green back, and red underside were obvious.

The latest fall date for this species in Oklahoma heretofore was 27 October when one was banded in Cleveland County (Sutton, G.M., 1974, A check-list of Oklahoma birds, Contrib. Stovall Mus. Sci. & Hist. No. 1, Univ. Oklahoma, Norman, p.42). The preceding therefore represents the latest date for this species in Oklahoma. — Estella R. Howard, Rt. 2, Box 339, Marlow, Oklahoma 73055, 18 April 1988.

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