

SCARLET TANAGER NESTING IN NORTH-CENTRAL  
OKLAHOMA

BY MAXINE KASTL

In the summer of 1979 a pair of tanagers nested in my yard near Perkins, Payne County, north-central Oklahoma. My house is 3 miles north and half a mile east of town. It stands in fairly thick, mature oak woods well away from any highway. The male of the pair was a handsome, normally colored Scarlet Tanager (*Piranga olivacea*), while the female almost certainly was a Summer Tanager (*P. rubra*), a species known to nest regularly in the area. The buffy tinge throughout the yellow underparts of this bird was striking. The pair raised four young, three of them tanagers, one of which was banded and photographed in color on 18 July. The fourth member of the brood could, for all anyone really knows, have been a Brown-headed Cowbird (*Molothrus ater*).

I first saw the male parent tanager at about 1130 on 28 May, a warm, humid day. He dropped suddenly from an oak in my yard to the edge of a shallow bird-bath about 10 feet from me. Seemingly quite unafraid of me, he



A PAIR OF TANAGERS AND ONE OF THEIR BROOD

Photographed in the summer of 1979 near Perkins, north-central Oklahoma, by Wesley S. Isaacs, the male parent (a Scarlet Tanager) at left, on 6 July, and his mate (probably a Summer Tanager) and their recently fledged chick, on 18 July. Note the strongly buffy tinge on the underparts of the female parent, a feature that does not show in greater enlargements of the original photo.

drank, bathed briefly, returned to the oak, and flew off. When I next saw him, just before dusk on 16 June, a female tanager was with him. Both birds scolded as I walked along my driveway, convincing me that I had entered their nest territory. The scolding call of the male was so subdued that I made no special note of it; that of the female, on the other hand, was an incisive, almost strident, three-syllabled *the teacher* that occasionally was lengthened to a five-syllabled *the teacher gitcha*.

At about 0730 on 17 June I watched both birds as they moved about among dead branches in the lower part of oak trees near the house. Presently they went to the ground, where the female picked up and dropped slender twigs. I now suspect that she was after nest material, but I did not see her carry anything to the nest.

I continued to see and hear the pair near my house day after day. The male was remarkably confiding. He often allowed me — as well as groups of visitors — to approach him closely. His song I transcribed as a soft *sweet cheery, cha-weer, cha-weery*, sometimes uttered with beak closed. The female I did not often see clearly, though her outbursts of scolding told me that she was not far away.

On 7 July the behavior of the male changed noticeably. No longer was he calm and docile. Several times I saw him chasing another bird out of the yard. I felt sure that he was defending a nest, though I had no idea where the nest was. I now suspect that one or more of the eggs in it had hatched by 7 July.

On 13 July I saw the male take food directly to the nest, which was in a small post oak on a slim, almost horizontal branch about 12 feet out from the main trunk and about 15 feet from the ground. It was at a forking of the branch, well supported by twigs. I had walked right under it dozens of times. Indeed, it was only about 30 feet from my front door, but leafage surrounding it made it difficult to see.

Early in the morning on 15 July I could clearly see the beaks of four young birds protruding above the nest's rim. Both parent birds shared the task of feeding, though it seemed to me that the female made three times as many trips to the nest as the male did. So far as I could tell, the food that the old birds brought was insects exclusively.

Late that same morning I found one of the brood on the ground directly under the nest. Several members of the Payne County Audubon Society who had come to observe the tanagers also saw the baby bird. It was, in the opinion of Helen Miller (of Stillwater, Oklahoma) and of Deloris Isted (of Cushing, Oklahoma), about a week old. It was a pinfeathery, bare-bellied little thing, with tail about half an inch long. I put it in a small plastic bucket and hung the bucket well above-ground in the nest-tree. There was no way to hang the bucket directly under the nest, for there was no long branch under the one that supported the nest. Presently the mother bird began feeding the nestling. She usually delivered the food from the bucket's brim, but occasionally she hopped down into it. The father bird also carried food to the young bird in the bucket.

On 17 July the nestling left the bucket. It could not fly well on that date, but it was obviously strong and healthy. My daughter, Patti Muzny (of Oklahoma City), caught it, banded it, and put it on the branch that held the nest, 4 or 5 feet out from the tree's trunk. She also climbed the tree for a look down into the nest. What she saw there was two (not three) young tanagers, both of them at the point of jumping from the nest. Both were conspicuously large-billed. Patti made no attempt to catch the two for banding. She did not want them to leave the nest prematurely.

The following day the banded chick was well photographed in color by Wesley S. Isaacs and John S. Shackford of Oklahoma City. The nest was now empty.

The possibility that the missing chick was a cowbird cannot be dismissed as unthinkable. The fact that one young bird of the four was found on the ground long before any of the brood was capable of flight might well have roused my suspicion that something was amiss at the nest. Ejection of eggs and nestlings of the host species has been well documented for that well known avian social parasite of the Old World, the Common Cuckoo (*Cuculus canorus*). Indeed, a young Common Cuckoo in the very act of ejecting the egg of a Tree Pipit (*Anthus trivialis*) has been superbly photographed (see Welty, 1962, *The life of birds*, W. B. Saunders Co., Philadelphia & London, p. 311). No one, so far as I know, has photographed a young cowbird ejecting an egg or chick, but note what happened at the nest of an Indigo Bunting (*Passerina cyanea*) in southeastern Michigan in the summer of 1942: on 17 July of that year a nest holding four recently hatched chicks (three buntings and one cowbird) was found at the edge of a marsh; on 20 July there were two bunting chicks (only) and one cowbird chick in the nest and a third bunting chick, still alive, but very weak, was on the ground under the nest. Between that date and 22 July the other two bunting chicks disappeared, leaving one hale, hearty cowbird in the nest (see Sutton, 1956, *Jack-Pine Warbler*, 37: 97). It is conceivable that one or more adult female cowbirds were responsible for the disappearance of the bunting chicks, but the suspicion lingers that it was the chick cowbird itself that elimi-



**THE SCARLET TANAGER'S MATE**

*Note the bigness of the bird's bill. Photographed by Wesley S. Isaacs near Perkins, Oklahoma on 18 July 1979.*

nated its nestmates.

In the opinion of every person who saw and heard the parent tanagers, the female was a Summer Tanager. I had noticed the brightness of the bird's underparts the first time I had seen her. When Deloris Isted and Helen Miller saw her they pronounced her a "Summer" almost immediately. Among the careful bird students who saw her well—aside from those mentioned above—were Elizabeth Hayes and Hannah Bass of Tulsa and Carolyn Gritzmaker of Oklahoma City. Repeated attempts were made on 17 July to net the bird so that measurements could be taken, but all attempts failed.

The Scarlet Tanager breeds widely in wooded parts of the eastern third of Oklahoma. There is one valid record for its nesting as far west as Woodward County (1967, Audubon Field Notes, 21: 584). The late Zella Moorman — as well as others who saw the pair at that nest, which was along a road not far from Boiling Springs State Park — assumed quite naturally that the female bird was a Scarlet Tanager.

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## BREEDING OF BLACK-BILLED MAGPIE IN NORTHEASTERN OKLAHOMA

BY GARY W. SALLEE

On 17 June 1979, while banding nestling herons near Sapulpa, Creek County, northeastern Oklahoma, I found two dead young Black-billed Magpies (*Pica pica*) not far apart on the ground. The heronry was in a wooded area near a small tributary to the Arkansas River. The heron nests were in blackjack oak, hawthorn, hackberry, and persimmon trees, most of which were from 4 meters (14 feet) to 10 meters (35 feet) high.

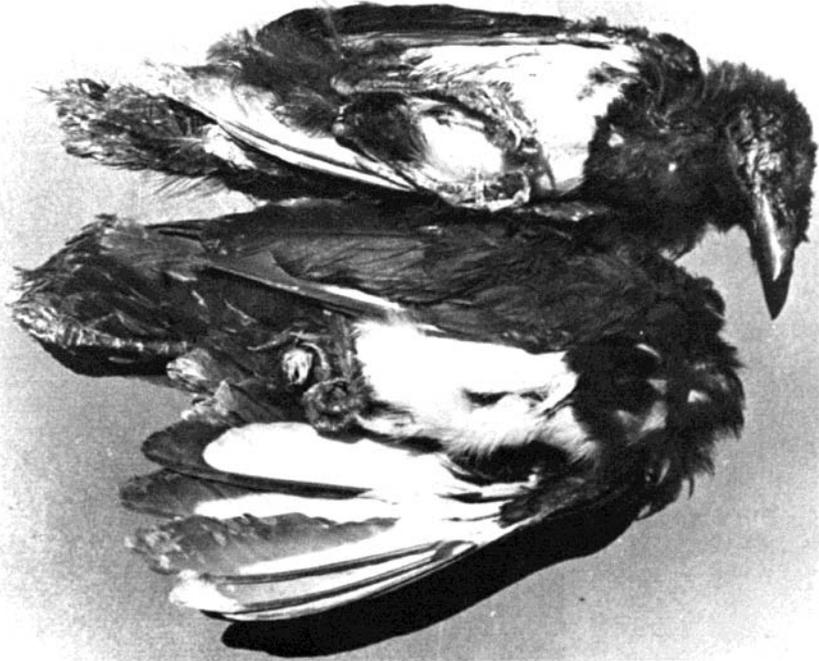
Before entering the heronry that day, I had instructed my companions — Vicki Hatfield and my wife Sheryl — to listen and watch for Great-tailed Grackles (*Quiscalus mexicanus*), a species I had heard there on an earlier visit without being sure that it was nesting. While I was on my ladder at a heron nest, I saw on the ground, not far from the foot of the ladder, what I took to be two dead young grackles. These proved, however, to have bold white markings and feathered nostrils, features instantly declaring them to be magpies, a species I had seen much of while living in southeastern Colorado.

The two young birds were much alike, each being about 30 centimeters (12 inches) long, with tail-length of 10.8 centimeters (4¼ inches). The basal part of the major wing and tail feathers was sheathed for a considerable distance, indicating that the nestlings probably had died well before being able to fly. I guessed that they had been dead about five days. No nest in the immediate vicinity looked much like magpie nests I had seen in Colorado, but some high heron nests drooped over lower ones in such a way as to create a domed-over effect, and I suspect that the young magpies had occupied such a nest. Recent heavy rains may have damaged the structure, causing the nestlings to fall

through to the ground. I continued to wonder why I had not seen or heard an adult magpie in the area.

The Black-billed Magpie breeds commonly today in woods lining streams in Cimarron County at the west end of the Panhandle. There it nests in cottonwood, hackberry, willow, and walnut trees 3.6 to 9.14 meters (12 to 30 feet) from the ground (Sutton, 1967, Oklahoma birds, Univ. Oklahoma Press, Norman, p. 374). It has been reported also from Texas, Beaver, Woods, Grant, Payne, Oklahoma, Hughes, and Payne counties, though it has not been observed to nest successfully anywhere east of Cimarron County. A nest found in Oklahoma County — one that never, so far as known, held eggs or young (1962, Audubon Field Notes, 16: 489) — may have been built by a pair that escaped from the Oklahoma City zoo (Sutton, *loc. cit.*).

Certain corvids are obviously expanding their breeding ranges in Oklahoma. We have no information as to when the Blue Jay (*Cyanocitta cristata*) and Common Crow (*Corvus brachyrhynchos*) first bred in the Panhandle, but both are now well established there, along larger streams, westward to the New Mexico state line. While the Black-billed Magpie may be moving eastward following these same streams, the White-necked Raven (*C. cryptoleucus*) does not appear to be extending its range eastward anywhere in the state.



#### BLACK-BILLED MAGPIE NESTLINGS

Found dead on the ground at a heronry near Sapulpa, northeastern Oklahoma, on 17 June 1979. Photo by Gary W. Sallee.

Magpies first bred in Oklahoma in 1919 (Tate, 1927, Condor, 29: 244). Subsequent magpie sightings east of Cimarron County do not, according to George M. Sutton's summary of *Pica pica* records, indicate a steady movement eastward since that year, though R. H. Davy's several sightings from 1955 to 1960 at Guymon, Texas County, W. E. Lewis's early sightings near Gate, Beaver County (Nice, 1931, Birds of Oklahoma, p. 127), L. E. Dunn's winter sightings at the east end of the Panhandle from 1958 to 1961, and repeated sightings in Woods and Grant counties in the spring of 1937 (Sutton, *loc. cit.*) all suggest range-extension eastward. The Fish Crow (*Corvus ossifragus*), which has followed the Red and Arkansas rivers into Oklahoma from the southeast, has been exploiting heronries since its advent here. The young magpies that I found in Creek County may well have been the progeny of a pair that were exploiting the Sapulpa heronry.

Heronries are, in other words, important "ecological stepping stones" for corvids, as well as for various other animals. For Common Crows, Fish Crows, and Black-billed Magpies the ready availability of nest sites, nest materials, and food in the form of heron eggs and nestlings must be highly conducive to their establishing themselves in or near a heronry.

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## GENERAL NOTES

**Fourth winter record of Dickcissel in Washington County, Oklahoma.**—Early in the afternoon on 31 December 1978, in Bartlesville, Washington County, northeastern Oklahoma, I saw a Dickcissel (*Spiza americana*) among the several House Sparrows (*Passer domesticus*) that were perched in shrubbery along the edge of our backyard. Air temperature was about 18°F., and sleet covered the ground. Later that day, my husband John and I saw the Dickcissel several times as it fed with the sparrows on the ground. Each time the sparrows were disturbed and flew into the shrubbery, the Dickcissel remained for a full minute or more, giving us a chance to see the warm yellow front, finchlike bill, black streak at each side of the throat, faint eye-ring, and light streak above the eye. We did not notice the chestnut wing-patches. Since we saw no black on the lower throat, we assumed that the bird was a female.

This observation represents the fourth winter record for the Dickcissel in Washington County, Oklahoma. For other Washington County records, see Delap, Ella, 1979, Bull. Oklahoma Orn. Soc., 12:34.—Emma H. Messerly, 344 S.E. *Elmhurst*, Bartlesville, Oklahoma 74003, 25 January 1979.

**Subspecies of Savannah Sparrow found in Oklahoma.**—When I examined the seven Savannah Sparrows (*Passerculus sandwichensis*) that James L. Norman had found dead under the TV

tower 2 miles north of Coweta, Wagoner County, northeastern Oklahoma on the morning of 27 October 1976 (1977, Bull. Oklahoma Orn. Soc., 10: 7), I perceived at once that they represented more than one geographical race. Four of them I identified provisionally as *P. s. nevadensis*, a pale form that breeds from southern Nevada, northern Arizona, central Colorado, and western Nebraska northward to western Canada (AOU Check-list, 1957, p. 588); that occurs widely in Oklahoma as a transient and winter resident; and that has been misidentified from time to time since in fall and winter its super-ciliary area is, contrary to pictures in most birdbooks, without a trace of yellow. Three of these *nevadensis* had not been badly damaged by striking the tower, so I decided to prepare them as study skins along with the three others, none of which was pale enough, over-all, for "straight" *nevadensis*. What race or races did these "others" represent? In other words, what part or parts of the continent lying to the north of Oklahoma had they come from?

I decided to send all six specimens to my friend and former student, John S. Weske, now a Research Associate of the Bird Section at the National Museum of Natural History in Washington, D.C., for him to compare directly with carefully identified material there. Dr. Weske's letter of 8 August 1977 states that my identification of three of the six as *nevadensis* was correct. Two of the others he found to be "intergrades between *nevadensis* and *oblitus*," the latter a race that breeds chiefly in central Canada; that winters from northern Oklahoma, northern Mississippi, and northern Georgia south to southern Louisiana, southern Texas, and the Mexican states of Coahuila and Nuevo Leon (AOU Check-list, p. 587); and that is represented in the University of Oklahoma bird collection by at least 14 specimens taken in Oklahoma (Sutton, 1967, Oklahoma birds, Univ. Oklahoma Press, Norman, p. 605). One bird of the three "others," an individual as dark as the two just mentioned, but "decidedly browner" on the upperparts, was so puzzling that Dr. Weske asked John W. Aldrich to examine it with him. Dr. Aldrich identified this specimen as "an intergrade of *mediogriseus* toward *oblitus*," *mediogriseus* being a race described by Aldrich himself and stated by him to breed "from the Gaspé Peninsula south (excluding Nova Scotia) to New England and New Jersey west to Minnesota and Iowa" and to winter "to southeastern United States" (Aldrich, 1940, Ohio Journ. Sci., 40: 5).

What is stated above deserves discussion. The variation easily observable within the seven specimens found dead by J. L. Norman was more than individual variation. Any lot of specimens of whatever species will show variation, of course, no matter where they were collected. This is a truism. But when the limits of variation within one part of a species' range are found—through careful collection, preserva-

tion, and comparison of specimens—to differ from those of another pair, (either adjacent or far-removed), the biologist has reason to suspect, and eventually to believe, that some over-all characteristic of environment has favored survival of individuals that imitate or reflect that particular habitat-characteristic, thus bringing into being through what has been called “natural selection” pale forms in desert areas, dark forms in areas of heavy rainfall, etc. The Savannah Sparrow may not exhibit geographical variation as dramatically as some species do, though the fact that a large, pale race, *P. s. princeps*, the so-called Ipswich Sparrow, which breeds exclusively on Sable Island off Nova Scotia, was until recently considered a full species (see AOU Checklist, p. 586 and Auk, 1973, 90: 417) is good proof of its considerable variability. Long ago I spent a summer on the Labrador coast, where *P. s. labradorius*, a very dark race, breeds. There was something wholly fitting about the darkness of every Savannah Sparrow that I collected there, for that whole coast — rocks, ocean, weather, what not — seemed essentially dark, this despite the presence of icebergs, gulls with pure white underparts, and pretty flowers, not to mention occasional glimpses of the sun.

So the three forms of Savannah Sparrow found dead on 27 October 1976 at one point in northeastern Oklahoma are evidence of an interesting funnelling into an important flight lane of birds from at least three more or less discrete parts of the species' extensive breeding range.—George M. Sutton, *Stovall Mus. Sci. & Hist., Univ. Oklahoma, Norman, Oklahoma 73019, 20 December 1977.*

FROM THE EDITOR: Roger Vandiver, Director of Exhibits at the Stovall Museum of Science and History at the University of Oklahoma, is to be thanked for his assistance with positioning the two color photos of tanagers that appear on the first page of this issue.