NESTING OF BACHMAN'S SPARROW IN OKLAHOMA

BY WILLIAM A. CARTER

A specimen of Bachman's Sparrow (*Aimophila aestivalis*) collected by George W. Stevens in the vicinity of Alva, Woods County, northwestern Oklahoma—presumably during the 1904-1914 period, while Stevens was on the faculty of Northwestern State College—was identified by Outram Bangs of the Museum of Comparative Zoology at Harvard University (Nice, 1931: 42, 185). What has happened to this specimen, no one seems to know. It is not now at the Museum of Comparative Zoology (letter of 7 April 1966 from R. A. Paynter Jr. to G. M. Sutton), nor is it at Northwestern State College. *Aimophila aestivalis* was next found in Oklahoma in late April, 1937, when John B. Semple and G. M. Sutton happened upon a small breeding population near Bethel, McCurtain County, in

BACHMAN'S SPARROW ON NEST

Photographed on 17 June 1969 near Ada, Pontotoc County, Oklahoma by William A. Carter. The nest held five eggs, two of which had hatched by the following day.
the southeastern corner of the state (Sutton, 1938: 507-508). In January, 1965, I found and collected a specimen in a third county, Pontotoc (Carter, 1966). A recently published summary of records revealed that between 1967 and the taking of the first specimen half a century ago, Bachman’s Sparrow had been seen in Oklahoma in 1937, 1953, 1964, 1965, and 1966 (Sutton, 1967: 615-16). The records represented only the three above-mentioned counties, a dozen or so individual birds, and a total of six observers.

December, January, February, and April sightings in McCurtain County indicate that Bachman’s Sparrow is resident, and presumably non-migratory, there. Breeding activities—singing males, carrying of nest material, and a female specimen with egg almost ready to lay—have heretofore been reported only from McCurtain County (Sutton, 1938, 1967). Single birds reported from Woods County (Nice, 1931) and Pontotoc County (Carter, 1966) have thus far been thought to belong in the “accidental visitant” category.

From 6 May to 26 August 1969 I observed Bachman’s Sparrow repeatedly in Pontotoc County—in a mixed woods-and-grassland area seven miles northeast of the city of Ada. On 23 May, 4 June, and 16 June, 1969, I observed the species also in a similar woods-and-grassland area in Okmulgee County—near Dewar, three miles east of the city of Henryetta. The two Bachman’s areas are about sixty miles apart. Near Ada the first nest of Bachman’s for the state was discovered on 16 June. The nest held five eggs on that date. Three of the eggs hatched about 18 June and the three young birds probably fledged about 26 June. Two eggs that failed to hatch I collected on 23 June. A stub-tailed young bird that I caught and banded (61-58071) on 31 July near Ada was of another brood, possibly of a second brood for the season (young birds that fledged about 26 June would have been flying well by 31 July). A full-fledged young bird that I saw on 6 August near Ada was unbanded. No nest or young bird was found near Dewar. Four persons—Larry A. Pulliam, David L. Jones, Jenna Jo Hellack, and Ron Cox—assisted me from time to time. We made a total of 34 visits to the two Bachman’s areas between 6 May and 26 August. On a few of these visits we did not see or hear a Bachman’s. Details of observations follow (time mentioned is Central Daylight-saving):

Ada

May 5: Larry A. Pulliam and I were working with David L. Jones in a tract on the George F. Carter farm late in the afternoon when a distinctive and beautiful song attracted our attention. Jones was studying the birds of that tract as a project for my ornithology class, so he and others had been in the area several times, but he had not heard this song before. The bird was singing from the top of a five-foot bush that was surrounded by small shrubs. As we approached, the bird stopped singing and disappeared in the dense tangle below
the singing perch. After considerable effort we flushed the bird, which flew into a tangle of berry vines. The three of us slowly moved around the ten-foot-diameter tangle and were able to catch brief glimpses of the bird. Fearing it would escape before we were able to identify it, I collected it after it had flown a short distance to a tree. It proved to be a fine male Bachman’s Sparrow. The spot was about 100 yards from that at which I had collected the specimen in January, 1965 (Carter, 1966). I worked the area again on 9 and 11 May but was unable to locate other Bachman’s.

June 6: Pulliam and I heard two or more singing Bachman’s about dusk but were not able to see them.

June 16: Hellack, Pulliam, and I concentrated on the two areas in which we had heard males singing. Pulliam flushed a female (assumed) from a grassy area and discovered a nest. The domed structure, built into the north side of a clump of little bluestem (Andropogon scoparius), held five glossy white eggs. As the eggs appeared to be in an advanced stage of incubation, we decided to photograph rather than collect them. Since two males were singing at some distance from the nest about dark, we felt sure that there were at least three pairs of Bachman’s in the area.

June 17: Ron Cox and I returned to the area and photographed the female (assumed) on the nest.

June 18: The female (assumed) stayed on the nest until I was within two feet of the nest. She then flew about four feet, dropped to the ground, and fluttered another ten feet, feigning injury. After running to a small bush about twenty feet from the nest, she continued to give chip notes until I left. Two eggs had hatched. Since incubation probably required 14 days, we may assume that egg laying had started about 31 May.

June 19: Flushed adult from nest, which held three young and two eggs.

June 20, 21, 23, 24: Observations continued at the nest. As I approached on the 21st, an adult was sitting at the opening to the nest with its head inside. This was the only occasion on which I observed this behavior. Two eggs had not hatched, so I collected these on the 23rd.

June 26: The nest was empty—eighth day after hatching. Both adults were in the area and seemed to be attempting to distract us. We were not able to flush a fledgling from the grassy area around the nest.

June 28, July 1, 4, 5: We did not hear or see a Bachman’s.

July 6: Two adults seen.

July 29: Pulliam and I heard singing near dark (20:40-20:50). We were impressed by the songs. The birds sang briefly in full voice, paused, then repeated the song in subdued voice. Hearing loud songs, then faint ones, from
the very same birds made it difficult to determine how many birds were singing.

July 30: I arrived at the study area at 19:00 and found three Field Sparrows (Spizella pusilla) and two Bachman's Sparrows. I flushed a stub-tailed fledgling (species uncertain) that flew 15 to 20 yards. The adult Field and Bachman's both gave short chip notes as I unsuccessfully searched the area for the fledgling. I moved away and sat quietly for some time but did not see any activity that would lead me to the young bird. The two adult Bachman's flew to a small bush about 15 feet from me. This was in an area some 150 yards from the site of the nest we had located. I heard two brief songs in the nest site area.

July 31: I arrived at 17:00 and went directly to the spot at which most of the activity had taken place on 30 July. As I walked down the gentle slope I flushed two Field Sparrows, then, a bit farther on, an adult Bachman's. As I reached the spot from which the adult Bachman's had flushed, a fledgling Bachman's flew up. After a brief chase, I managed to capture it. After Hellack had joined me we took several pictures of the bird, banded it, and released it. Song period was brief (20:40-20:50), but we counted at least five singing Bachman's.

August 2: I arrived at the area at 05:50 and could hear singing Bachman's at the time. The singing stopped abruptly about 06:15 except for one song at 07:00. I thought that as many as seven individuals might have been singing.

BACHMAN'S SPARROW

Left: Three small chicks and two eggs, 19 June 1969. Right: Stub-tailed fledgling, 31 July 1969. The two photographs, both taken by William A. Carter, represent the same general nesting area seven miles northeast of Ada, Pontotoc County, Oklahoma, but wholly different nestings. The fledgling might well have been of a second brood for the season.
August 4: I arrived in the area at 05:30. Bachman's began singing at 05:57 and stopped at 06:20. I heard only three birds singing.

August 5: No Bachman's.

August 6: Saw two adult Bachman's and one young bird (unbanded) well able to fly in the area where I had banded the fledgling on 31 July. Activity was along the woodland edge, not in the brushy grassland as before.

August 7: Jones and I found two adult Bachman's, heard one singing, and saw the banded fledgling. Activity was along the woodland border.

August 8: Heard singing Bachman's about 06:00. Songs were very brief and the birds seemed to be moving about between songs.

August 26: Jones and I observed an adult Bachman's for 15 minutes in the area where we had found the nest.

Dewar

May 23: Pulliam and I were looking over his study area when we heard a singing Bachman's. The area had been cleared of timber some years before, but many three- to eight-foot second-growth oaks (mostly Quercus stellata and Q. marilandica) were standing among the bluestem (Andropogon spp.) ground cover. We managed to keep the bird in sight for about twenty minutes of careful observation as it flew from bush to bush or brush pile, and occasionally to the ground. It never seemed to be afraid and allowed us to approach closely enough to see the patch of pale yellow at the edge of its wing as it preened.

June 4: Within five minutes after Jenna Jo Hellack, Pulliam, Jones, and I reached the area we heard the Bachman's song. Indeed, we heard two birds singing at the same time. We took identifiable pictures of one bird (slides deposited at East Central State College and at the University of Oklahoma Bird Range).

June 14: Hellack, Pulliam, and I observed two Bachman's for about an hour. Singing perches included the tops of six- to eight-foot second-growth oaks, the top of a large pile of limbs, and a bare limb 15 feet above the ground in a large oak. On one occasion while we were watching a singing male, he dropped to the ground and was not visible for a couple of minutes. He returned to the perch with food (apparently a caterpillar) in his mouth, sang softly for a few seconds, and dropped to the ground. As we moved toward the singing perch we flushed two birds. We searched the area carefully, but failed to find a nest.

July 6, August 3: No Bachman's.

Repeated efforts to locate Bachman's after 26 August near Ada were unsuccessful. This does not mean that the birds were not there. Mengel (1965: 491), writing of Bachman's in Kentucky, expressed his belief that the bird "was established in many areas for years before it began to be recorded with any..."
regularity, and even today workers familiar with the species may experience some difficulty in finding it in given areas." Weston (1968: 959) states: "Actually, this is one of the most elusive of the sparrows and all its actions except the attention-compelling song are shrouded in secrecy."

Observers in Oklahoma should be aware of the possibility that this species may be found in scattered local colonies throughout the eastern part of the state.

**LITERATURE CITED**

**Carter, W. A.**


**Mengel, R. M.**


**Nice, Margaret M.**


**Sutton, G. M.**


**Weston, F. M.**


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**GENERAL NOTES**

Early June waterbird and shorebird records for the Oklahoma Panhandle.— On 3, 4, and 12 June 1969, while driving through the Oklahoma Panhandle to and from Colorado, I noted several bird species whose spring migration has been believed to be over well before 1 June (see Sutton, 1967, *Oklahoma Birds*). Some of these species may have been nesting or preparing to nest. High water levels in impoundments and playa ponds throughout the area certainly were favorable to waterbirds. Late in the afternoon on 3 June at Webb's Lake in Texas County (7 miles east, ½ mile south of Hardesty), I saw at least three Eared Grebes (*Podiceps caspicus*) in full breeding plumage, a pair of Pintails (*Anas acuta*), three pairs of Blue-winged Teal (*A. discors*), and a pair of Ring-necked Ducks (*Aythya collaris*). Later that same afternoon, again in Texas County, I saw a drake and two hen Ruddy Ducks (*Oxyura jamaicensis*) at a playa pond a few miles southeast of Guymon. The latest spring-migration date given by Sutton for the Eared Grebe, a species not known to nest in Oklahoma, is 21 May (p. 10). Both the Pintail and Blue-winged Teal nest infrequently in Oklahoma, the Pintail in the "northern
part" of the state (p. 64). The latest spring-migration date for the Ring-
neck Duck is 18 May (p. 74), for the Ruddy Duck 27 May; for the Ruddy
there are "very few records [of any sort] for Panhandle" (p. 83).

On 4 and 12 June I saw several adult Mallards (Anas platyrhynchos)—
one of them a hen accompanied by six or eight ducklings—at a shallow
sewage pond just east of Boise City, Cimarron County. On 12 June, at a
large playa pond in the same general area, I saw two drake Blue-winged
Teal and two drake Shovelers (A. clypeata). Both of these species may well
have been nesting in the area.

On 4 June I saw two Long-billed Curlews (Numenius americanus)—almost
certainly a breeding pair—in short-grass grazing land in Texas County about
28 miles west of Guymon. All recent breeding records for this species have,
according to Sutton (p. 183), been for northwestern Cimarron County. On
12 June I saw four of the curlews and one Mountain Plover (Eupoda montana)
6 miles north of Boise City.

At the sewage pond just east of Boise City I saw three American Avocets
(Recurvirostra americana) and nine Wilson's Phalaropes (Steganopus tri-
color) on 12 June. The phalaropes presumably were on their way north;
they were in a flock, not in pairs. The latest spring-migration date for that
species is, according to Sutton (p. 210), 6 June. The avocets might have been
nesting. That species nested in 1954 not far from Clayton, NewMexico—
in an area about 50 miles southwest of Boise City (Baumgartner, 1954, Audu-
bon Field Notes, 8: 353; Sutton, op. cit., p. 207).

The above-discussed records make clear that much ornithological work
remains to be done in the Oklahoma Panhandle, especially during "wet"
years when conditions are favorable to waterbirds.—W. Marvin Davis, Depart-
ment of Pharmacology, University of Mississippi. University, Mississippi 38677,
6 November 1969.

Poor-will in Pottawatomie County, Oklahoma.—In the E. B. Webster collection
of birds now housed at Oklahoma Baptist University in Shawnee, Oklahoma,
I recently came upon an adult specimen of Poor-will (Phalaenoptilus nuttallii)
collected in or near Shawnee, Pottawatomie County, Oklahoma, in 1933, pre-
sumably by E. B. Webster himself. The original label reads: "Pott. Co.,
Okla. / 1933 / E. B. Webster." The white tipping of the lateral rectrices is
considerably more restricted than it is in four carefully sexed male specimens
in the University of Oklahoma collection, so the Pottawatomie County spec-
6, p. 549). The specimen is now No. 6522 in the University of Oklahoma
collection.

To the best of my knowledge, the Poor-will has not heretofore been re-
1: 19) has reported the species from Pontotoc County, and Sutton (1967,
Oklahoma Birds, p. 272) states that there are records for Washington and
Murray counties along the easternmost edge of the species' range.—Dan F.
Penney, Department of Biology, Oklahoma Baptist University, Shawnee, Okla-
ahoma 74801, 9 March 1970.
Second recorded nesting of Golden-fronted Woodpecker in Oklahoma.—Most of the bird species that breed in mesquite woodland along Haystack Creek, 4 mi. north and 3 mi. west of Mangum, Greer County, southwestern Oklahoma, are representative of eastern forms, but the Golden-fronted Woodpecker (Centurus aurifrons) replaces the Red-bellied Woodpecker (C. carolinus) there. It was here that my wife Karen, Bill Klitz, and I found a nest of the Golden-fronted Woodpecker on 31 May 1969. The mesquite along Haystack Creek grows to a height of 15-20 feet, being smaller here than in the more extensive stands that I have seen in Texas and elsewhere in the southwestern United States. In the absence of big mesquite, the woodpeckers probably nest in dead parts of large living elms and cottonwoods scattered along the banks of the creek.

We spotted a nest hole when a Golden-fronted Woodpecker flew into the tree and gave a churring call—a cry that vaguely reminded me of that of another piciform bird, the African Honey-guide (Indicator indicator), as it leads a man to a nest of wild bees. I could not help thinking of this similarity again when a bee stung me as I approached the woodpecker’s nest-tree.

The nest hole, 22 ft. up on the underhang of a dead branch in a living elm, was inaccessible to us, so I decided to collect the female bird to make sure that it was breeding. The specimen, now a study skin (UOMZ 6629) in the University of Oklahoma collection, had a completely bare though only slightly swollen and vascular brood-patch. A soft-shelled egg was in the oviduct. I preserved the ovary on the spot in a buffered formalin solution. Microscopic examination of the ovary showed two freshly ruptured follicles, proof of ovulation of the egg in the oviduct and of another egg that was, presumably, in the nest. Also evident in the ovary were three large, yolky, yellow follicles measuring 10.6, 8.6, and 6.6 mm. in diameter. The next largest follicle (3.3 mm.) was whitish. From the number of post-ovulatory follicles and yellow yolky follicles, I judged that the full clutch would have numbered five eggs—clutch-size in agreement with Bent’s statement that Centurus aurifrons “lays four to seven eggs to a set, usually four or five” (Bent, 1939, Life histories of North American woodpeckers, U. S. Natl. Mus. Bull. 174, p. 247).

The only other breeding record for the Golden-fronted Woodpecker in Oklahoma is based on a nest and three small young found by D. F. Parmelee on 18 May 1958 in Harmon County (Sutton, 1967, Oklahoma Birds, p. 307). The Haystack Creek record will help in plotting the distribution of Centurus aurifrons along the northeastern margin of present-day mesquite habitats. Locally the Golden-front appeared to me to be the most common woodpecker in the mesquite lands of southwestern Oklahoma.—Robert B. Payne, Department of Zoology, University of Oklahoma, Norman, Oklahoma 73069, 9 September 1969.

THE BULLETIN, the official scientific organ of the Oklahoma Ornithological Society, is published quarterly, in March, June, September, and December, at Norman, Oklahoma. Subscription is by membership in the OOS: $4.00 single or $6.00 family per year. Treasurer, Ruth A. McNee, P.O. Box 94224, Oklahoma City, Oklahoma 73109; Editor, Sophia C. Mery, 345 S.E. Boston Ave., Bartlesville, Oklahoma 74003.