

OCURRENCE AND NESTING OF HENSLOW'S SPARROW
IN OKLAHOMA

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The occurrence of Henslow's Sparrow (*Ammodramus henslowii*) in Oklahoma was first confirmed by photographic documentation in 1974 when Dotty M. Goard discovered several singing males and one probable female in Washington County, Oklahoma, during April and May (Goard 1974). Donald W. Verser (1990) reported Henslow's Sparrows in Osage, Rogers, Tulsa and Washington counties during the period 1986-1989. Oklahoma's first confirmed nesting record for this species was included in his account, with four nestlings observed on 30 June 1987 in Washington County. Additional Oklahoma records are summarized in Table 1.

During the spring and summer of 1992, personnel from the Sutton Avian Research Center in Bartlesville, Oklahoma, found large numbers of Henslow's Sparrows on the Tallgrass Prairie Preserve owned by The Nature Conservancy in northern Osage County, about 20 km north of Pawhuska. The birds were first detected on 14 April when Brian Muzny and others observed them on and near several 40-acre study plots. Earliest singing was noted on 16 April and the first of four nests was discovered by Jennifer A. Burley on 25 May. This nest was built on the ground amid tallgrasses and contained five nestlings. When next observed on 29 May, it was empty.

HENSLOW'S SPARROW



Left photo: Henslow's Sparrow nest. Photo taken 19 August 1993 by D. Paul Hendricks. **Right photo:** Juvenile Henslow's Sparrow and Brown-headed Cowbird egg. Photo taken 3 July 1993 by Dan L. Reinking. Both pictures were made in Osage County, Oklahoma.

Table 1. Occurrences of Henslow's Sparrow in Oklahoma

COUNTY	YEAR	DATE	NO.	NOTES
Cimarron	1932 ¹	3 October	1	(Sutton 1934)
Cleveland	1923 ¹	28 April	1	(Nice 1931)
	1951 ¹	24 January	1	(Baumgartner 1992)
Nowata	1989	31 May	4	(Verser 1990)
Osage	1988	4 June	24	(Verser 1990)
	1989	10 June	3	(Grzybowski 1991a)
	1991	7 April - ?		(Grzybowski 1991b)
	1992	14 April - ?		Four nests and several thousand males estimated (present study)
	1993	7 April - 18 Oct		Three nests and substantial numbers of males recorded (present study)
Rogers	1989	30 July	1	(Verser 1990)
Tulsa	1924 ¹	14 March	1	(Force 1929)
	1932 ¹	26 March	1	(Baumgartner 1992)
	1938 ¹	10 January	1	(Baumgartner 1992)
	1940 ¹	22 December	4	(Baumgartner 1992)
	1989	28 July	2	(Verser 1990)
Washington	1967 ¹	20 April	1	(Baumgartner 1992)
	1974	26 April -10 May	4-5	(Goard 1974)
	1986	15 August	1	(Verser 1990)
	1987	2 May-4 Oct	8	One nest (Verser 1990)
	1988	10 April-28 May	7-10	(Verser 1990)
	1989	21 April-15 Oct	8	(Verser 1990)
	1993	24 April	3	(Reinking, pers. observ.)

¹Report occurred before specimen or photographic documentation.

The second nest was found on 4 June and contained five well-developed young. On 5 June one fledgling was recovered near the nest and banded. We assumed that the others had fledged. This nest was 10 cm above the ground and well concealed by dense grass.

The third nest was in a grassy tuft 23 cm above the ground and contained two eggs. By 19 June the number of eggs had increased to four. On 26 June four young nestlings were present and on 30 June we banded the only remaining nestling. The nest was empty on 3 July.

The fourth nest, found on 3 July, had been constructed 17 cm above the ground in a clump of little bluestem (*Schizachyrium scoparius*). In addition to one Brown-headed Cowbird (*Molothrus ater*) egg, it contained one cowbird and two Henslow's Sparrow nestlings, all of which we banded. On 7 July the nest was empty.

Continued field work in 1993 led to the discovery of three more Henslow's Sparrow nests on the Tallgrass Prairie Preserve. A nest containing one Henslow's Sparrow egg and one Brown-headed Cowbird egg was discovered on 18 May by Michael J. Phillips. It was located 8 cm above ground level in a clump of little bluestem. By 21 May an additional cowbird egg was present. A nest check on 1 June revealed the recent hatching of one cowbird egg, but by 4 June the nest had been depredated.

The next nest, containing four nestlings, was discovered by Claudia R. Glass on 16 July in a clump of grass and about 14 cm off the ground. The four well-feathered young were still present on 19 July and were assumed to have fledged by 23 July when the nest was next checked.

The final nest of 1993 was found by Michael R. Nelson on 17 August and contained three eggs. By 20 August one egg had been broken. The broken egg was missing on 23 August, leaving two eggs intact. These were still present on 26 August, but the nest was empty on 30 August.

Estimation of laying dates from the above nests, based on known incubation and nestling periods, indicates a lengthy breeding season in Oklahoma extending from early May through August. It also suggests the likelihood of multiple broods. Of interest is that all nests found were located in areas that had not experienced spring burning, although over half of our 20 study plots were spring-burned sites. This supports widely published accounts (Smith 1963; Robins 1971; Whitmore 1979, 1981; Zimmerman 1988) indicating that Henslow's Sparrows prefer grasslands with large amounts of standing dead vegetation. Indeed, the areas containing the Henslow's Sparrow nests had not been burned since the fall of 1990, and the species was noticeably abundant in these areas while either absent or present in very low numbers at similar study sites subjected to more recent burns.

The presence of a large and seemingly disjunct breeding population of Henslow's Sparrows in northeastern Oklahoma that is utilizing a passively managed area of dense, erect tallgrass prairie, indicates strongly that the absence of such habitat is a major limiting factor in breeding distribution. Continued study of this area as it undergoes controlled applications of fire and grazing by large herbivores will help determine the extent to which these and other factors influence the occurrence of Henslow's Sparrow.

Our study was funded in part by the National Fish and Wildlife Foundation.

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