mynas, and the parrots—that have unmelodious harsh voices, intimate social attachments (including the attachment to man as a substitute conspecific), and a remarkable versatility in copying foreign sounds. It is possible that the brief, noise-like vocalizations of such birds, including the House Sparrow, are compressed melodies that may contain many characteristics of a melody except its sequential arrangement.

I thank L. F. Baptista, A. M. Dufty, Jr., and D. Schmidl for valuable comments.

## LITERATURE CITED

- Baptista, L. F., & M. L. Morton. 1981. Interspecific song acquisition by a White-crowned Sparrow. Auk 98: 383–385.
- Barrington, D. 1773. Experiments and observations on the singing of birds. Philosophical Transact. London No. 63, part i: 249–291.
- CONRADI, E. 1905. Song and call-notes of English sparrows when reared by canaries. Amer. J. Psychol. 16: 190–198.
- Deckert, G. 1969. Zur Ethologie und Ökologie des Haussperlings (*Passer d. domesticus* L.). Beitr. z. Vogelkunde 15: 1–84.
- Dost, H. 1954. Handbuch der Vogelpflege und Züchtung. Leipzig/Jena, Urania-verlag.

- KANT, I. 1803. Über Pädagogik. Königsberg, Friedrich Nicolovius (I. Kant's Vermischte Schriften, K. Vorländer ed., Verlag Felix Meiner, Leipzig 1922).
- KIPPS, C. 1956. Clarence der Wunderspatz. Zürich, Die Arche (original English title: Sold for a Farthing).
- NICOLAI, J. 1973. Das Lernprogramm in der Gesangsausbildung der Strohwitwe *Tetraenura fischeri* Reichenow. Z. Tierpsychol. 32: 113–138.
- PORTMANN, A. 1956. Vum Wunderspatzen zum Spatzenwunder. Pp. 72–79 In Clarence der Wunderspatz (Kipps, C., author). Zürich, Die Arche.
- SANBORN, H. C. 1932. The inheritance of song in birds. Comp. Psychol. 13: 345–364.
- STONER, D. 1942. Longevity and other data on a captive English Sparrow. Auk 59: 440–442.
- Spalding, D. A. 1873 (reprint 1954). Instinct. Brit. I. Anim. Behav. 2: 2-11.
- WICKLER, W. 1965. Über den taxonomischen Wert homologer Verhaltensmerkmale. Naturwiss. 52: 441–444.
- WITCHELL, C. A. 1896. The evolution of bird song, with observations on the influence of heredity and imitation. London.
- Wooller, R. D. 1978. Individual vocal recognition in the Kittiwake Gull, *Rissa tridactyla*. Z. Tierpsychol. 48: 68–86.

## Nest-sharing by a Lark Sparrow

DIANA K. CROWELL, CHARLES C. CARPENTER, AND DAVID G. HUFFMAN<sup>3</sup>
<sup>1</sup>Biology Department and <sup>3</sup>Aquatic Station, Southwest Texas State University, San Marcos, Texas 78666 USA, and
<sup>2</sup>Zoology Department, University of Oklahoma, Norman, Oklahoma 73019 USA

Both the Lark Sparrow (Chondestes grammacus) and the Mockingbird (Mimus polyglottos) commonly nest in weedy fields, grasslands with scattered trees and bushes, pastures, and prairies. During a study of Lark Sparrow nesting behavior, a nest was observed that was shared by both species. The nest was located 2.2 m above the ground in an eastern red cedar tree (Juniperus virginiana) in Willis Cemetery on Highway 99 near Willis, Oklahoma. The cemetery consists of 4 ha of grasses beneath a 30% cover of ornamental trees and shrubs.

When first discovered on 15 June 1981, the nest consisted only of a base of twigs. On the same day, two Lark Sparrows were observed copulating on a nearby grave marker. On 16 June, the Lark Sparrows were observed to make 13 attempts at building the nest, but a Mockingbird interfered with the building. Bent (1968) noted a similar example of interference in this same area in 1957 when a Lark Sparrow attempted to build near an active Mockingbird nest.

Whenever a sparrow approached the nest with building material, the Mockingbird would fly to the nest and chase the sparrow to the ground. On 18 June, the nest was completed, with a cup composed primarily of horse hair, and it contained one Mockingbird egg and one Lark Sparrow egg. The Mockingbird egg was pale blue with dark splotches, while the Lark Sparrow egg was cream-colored with dark brown scrawl markings on the blunt end of the egg. On 19 June, another Mockingbird egg was observed in the nest. On 20 June, a third Mockingbird egg was present, but no Lark Sparrow egg could be located in the nest or on the ground near the nest. During this period and for several days that followed, a Lark Sparrow was found incubating the eggs more often than the Mockingbird, but the Mockingbird always had priority if both birds were present. A Lark Sparrow usually remained in the upper branches of the tree, if not on the nest. On 22 June, two additional eggs had been laid in the nest by the Mockingbird

(one was laid between 1000 and 1610). On 25 June, a Lark Sparrow was heard vocalizing in the upper branches of the tree but was not seen incubating the eggs even when the Mockingbird was absent. By 29 June, the sparrows had disappeared. On 2 July the Mockingbird sat on the nest for longer periods than had been previously noted and did not move more than 3 m away from the nest. It is not known whether or not the eggs hatched, because on 9 July the nest was empty, perhaps the result of predation.

Based on comparisons of size and composition of this nest with other Lark Sparrow and Mockingbird nests in the area, it appeared that the base of this nest was built by a Mockingbird but that the cup was built by a Lark Sparrow. Typical Lark Sparrow nests in this area average 3.7 cm inner cup diameter and are composed primarily of *Evax* species stems and horse hair or small rootlets. Those of Mockingbirds average 7.9 cm inner cup diameter. The study nest had an inner cup diameter of 4.5 cm and was composed of cedar and greenbriar stems and a small amount of *Evax* spp.

## LITERATURE CITED

BENT, A. C. 1968. Life histories of North American Cardinals, grosbeaks, buntings, towhees, finches, sparrows, and allies. U.S. Natl. Mus. Bull. 237.

Received 23 October 1981, accepted 1 February 1982.