Table 2. Species composition of nest trees on Ralston Island, Salt Plains NWR, Oklahoma, 7 October 1995.

Tree Species	% Comp.	% with nests
Salt cedar (dead)	35	8
Salt cedar (live)	29	79
Sumac	29	7
Hackberry	2	4
Honey locust	2	0
Elm	1	1
Cottonwood	1	1
Red mulberry	1	0

GENERAL NOTE

Nest competition in Eastern Meadowlarks — Interspecific and intraspecific nest competition or sharing has been documented in many passerine species (e.g., Holland 1923; Raney 1939; Farber 1972), but I was unable to find any record of intraspecific nest sharing in Eastern Meadowlarks (*Sturnella magna*). Northern Bobwhite (*Colinus virginianus*) eggs have, however, been found in meadowlark nests on a few occasions (e.g., Roseberry and Klimstra 1970). Saunders (*in* Bent 1958) reported that polygyny is frequent in Eastern Meadowlarks, with about 50% of the males in his study having more than one female. Knapton (1988) reported that 66 (64.1%) of the 103 nests he studied belonged to polygynously mated females, and that their nest success was higher than for monogamously mated females. Most blackbirds in North America practice polygyny, with Red-winged Blackbirds (*Agelaius phoeniceus*), Yellow-headed Blackbirds (*Xanthocephalus xanthocephalus*), and Great-tailed Grackles (*Quiscalus mexicanus*) usually having three or more females in each male's harem (Orians 1980; Webster 1992). It would seem that polygyny might occasionally lead to intraspecific brood parasitism or nest sharing.

In 1994, I observed two apparent cases of nest sharing or competition in Eastern Meadowlarks in Osage County, northeastern Oklahoma. The first nest was found on 10 May 1994 along a county roadside about a half mile east of Foraker by Gary A. Cress, Charles L. Lamd, Greg S. Um, Yan Wu, and the author. A meadowlark that flushed from the roadside ditch prompted an immediate search for a nest. When the nest was found, a second meadowlark, presumably a female, flushed and revealed a well-domed nest containing nine eggs. Egg measurement revealed two distinct size clusters. Volumes of eggs in one cluster (five eggs) ranged from 5056 to 5594 (mean = 5286.6) mm^3, while those in the second (four eggs) ranged from 6143 to 6604 (mean = 6373.0) mm^3. Egg volume was calculated using Hoyt's (1979) formula (LxBxBx0.507). The difference in egg volume between these egg sets was significant ($t=9.195$, $df=7$, $p<0.001$). The next day, the nest contained only five eggs, and three additional ones were about one m from the nest. On 20 May, one chick had hatched and all of the remaining eggs were broken. On 24 May the nest was empty and assumed depredated. I speculate that the removal of the eggs was due to competition for the nest between the two females.

A second similar nest, with eight eggs, was located on 6 June 1994 by Lachovia C. Parrish, Stephanie R. Schmidt, Sandy L. Stevens, and the author on the Nature

Conservancy's Tallgrass Prairie Preserve north of Pawhuska. It was discovered when two meadowlarks flushed from it. All eight eggs were similar in size, ranging from 6316 to 6747 mm^3 (mean = 6568.9), but the presence of two birds suggested that the nest contained two separate small clutches rather than a single large one. By 10 June, only six eggs remained in the nest. These six hatched by 14 June. On 20 June the nest was empty, and feces in the nest indicated that the young had likely fledged.

Of 420 Eastern Meadowlark nests found by George M. Sutton Avian Research Center personnel in Osage and Washington counties from 1992 through 1994, most held four or five eggs and eight contained six eggs. However, a 1993 nest in Osage County held four eggs during two visits but three more were deposited at least a week after the clutch was completed. This nest was subsequently abandoned.

It would appear that nest sharing is much less common than either intraspecific or interspecific nest parasitism. Many authors have reported instances of species that are not generally brood parasites, i.e., laying their eggs in nests of other species. Harms et al. (1991) documented intraspecific parasitism in Red-winged Blackbirds, Yellow-headed Blackbirds and Brewer's Blackbirds (*Euphagus cyanocephalus*) following nest destruction during the egg-laying period. Perhaps a similar fate occurred in the aforementioned meadowlarks, but due to the large number of eggs and the presence of two birds at each nest, I suggest that two females were either sharing or competing for the same nest. Because some eggs had been removed from the nest before the second visit in both cases, competition may be the most likely explanation and such events may occur more frequently than observations would indicate.

The National Fish and Wildlife Foundation partially funded our field work.

LITERATURE CITED

Bent, A.C. 1958. Life histories of North American blackbirds, orioles, tanagers, and allies. *Bull. U.S. Natl. Mus.* No. 211.

Farber, H. 1972. Evidence of two Tree Swallow females sharing the same nest box. *Wilson Bull.* 84:204.

Harms, K.F., L.D. Beletsky, and G.H. Orians. 1991. Conspecific nest parasitism in three species of New World blackbirds. *Condor* 93:967-974.

Holland, H.M. 1923. Black Phoebes and House Finches in joint use of a nest. *Condor* 25:131-132.

Hoyt, D.F. 1979. Practical methods of estimating volume and fresh weight of bird eggs. *Auk* 96:73-77.

Knapton, R.W. 1988. Nesting success is higher for polygynously mated females than for monogamously mated females in the Eastern Meadowlark. *Auk* 105:325-329.

Orians, G.H. 1980. Some adaptations of marsh-nesting blackbirds. Princeton Univ. Press, Princeton, New Jersey.

Raney, E.C. 1939. Robin and Mourning Dove use the same nest. *Auk* 56:337-338.

Roseberry, J.L., and W.D. Klimstra. 1970. The nesting ecology and reproductive performance of the Eastern Meadowlark. *Wilson Bull.* 82:243-267.

Webster, M.S. 1992. Sexual dimorphism, mating system and body size in New World blackbirds (Icterinae). *Evolution* 46:1621-1641.

—Donald H. Wolfe, *George M. Sutton Avian Research Center, P.O. Box 2007, Bartlesville, Oklahoma 74005, 1 March 1995.*

From the Editor.—The American Ornithologists' Union updates its *Check-list of North American birds* (1983) with supplementary revisions that appear periodically in *The Auk*. In the 40th Supplement recently published (*Auk* 112: 819-830, 1995), several changes are pertinent to Oklahoma birds. The scientific name of the Great Egret is now *Ardea alba*. The word "American" should be dropped from "American Swallow-tailed Kite." "*Pluvialis dominica*" becomes "*P. dominicus*." Both the scientific and common names of the Scrub Jay are changed; "*Aphelocoma coerulescens*" is now "*A. californica*" and the common name is "Western Scrub-Jay." The Spotted Towhee reclaims full species status as "*Pipilo maculatus*." The Sharp-tailed Sparrow that might be seen in Oklahoma is now "*Ammodramus nelsoni*," "Nelson's Sharp-tailed Sparrow," rather than "*A. caudacutus*," the "Sharp-tailed Sparrow." The "Northern Oriole" reverts to two full species, the "Baltimore Oriole" (*Icterus galbula*) and "Bullock's Oriole" (*I. bullockii*). —The Editor.

THE BULLETIN, the official 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: $5 student, $7.50 regular, $10 family, $15 or more sustaining, per year. Life membership $125. Treasurer, Marty Kamp, 6422 Indianapolis Pl., Tulsa, OK 74136. Editor, Jack D. Tyler, Department of Biology, Cameron University, Lawton, Oklahoma 73505. Associate Editors, John S. Shackford, 429 Oak Cliff Drive, Edmond, Oklahoma 73034, and Dan Reinking, Sutton Avian Research Center, P.O. Box 2007, Bartlesville, Oklahoma 74005. Questions regarding subscription, replacement copies, back issues or payment of dues should be directed to: Mickie Duggan, OOS Membership/Circulation Chairman, P.O. Box 65, Ada, Oklahoma 74821-0065. ISSN 0474-0750.