

times on 4 occasions. When this pair raised a second brood during the last half of the summer, no nest defense behavior occurred. Intense 38°C heat during this time may have inhibited this energy-taxing behavior. The male never approached any closer than 3 m during his dives.

I captured, banded, and color-marked this female in February 1982 and found her length (31 cm), wingspan (62 cm), and weight (168 g) greater than any others captured in my study area. She regularly snatched prey aggressively from her mate with her feet rather than participating in the normal "mannered" beak-to-beak transfer of prey. This exceptionally large and aggressive kestrel raised and successfully fledged 13 young from 16 eggs during the 2 breeding seasons.

I am grateful to William Elder, Leigh Fredrickson, and Curt Griffin for constructive criticism of the manuscript. The observations detailed in this note were part of a study funded by the Missouri Department of Conservation Natural History Section.

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- BRIAN TOLAND, 112 Stephens Hall, University of Missouri-Columbia, Columbia, Missouri 65211. Received 4 Oct. 1983; accepted 25 Apr. 1984.

Territorial Dispute Between Female American Kestrels.—On 12 April 1980, from a blind 100 m away, I watched 2 American Kestrels (*Falco sparverius*) over a 4 ha fallow pasture in Berks County, in eastern Pennsylvania, going through what I thought to be courtship displays. I then noticed that there were 3 kestrels, 2 females and one male. The females were chasing each other over the pasture. The male sat perched in a row of trees at the edge of the pasture, watching the movements of the females. A nesting box which kestrels had used over the past 3 years was in the same row of trees, about 50 m from where the male was perched.

On 15 April, I watched a pair of kestrels perched in the tree with the nesting box, when a second female made a steep dive and hit the perched female in the back. The perched female was knocked head over tail 2 or 3 times before recovering and flying to a nearby tree. She seemed shaken, but unharmed. The second female flew away, never stopping after hitting the perched female. The male just sat and watched.

About an hour later, I watched a pair of kestrels copulating in the nest tree, on the branch where the 2 kestrels had perched before. A second female started making fast, close dives at them, calling "killy, killy" while doing so. She made 4 dives and then left the area. The pair never stopped copulation and completed shortly after the second female flew away. The entire action took place in about 30 sec.

About 45 min later, the male was sitting on top of a dead tree, 75 m from the nesting box and the female he copulated with was sitting on a utility wire that crossed the pasture 25 m in front of the nesting box. A second female came into the area again and made a dive at the first female, physically knocking her off of the wire. The strike was done with talons out, but it did not seem that they took hold. This started an aerial duel. The females chased each other through dives, climbs, rolls, and through and around trees. Whenever there was a pause in the chase, one of the females would go into the nesting box, seeming to claim it as hers. Each time this started the chase over again with renewed vigor. Since the kestrels were not marked, I am not sure if one or both females went into the nesting box. As before, the male sat perched and watched. If one of the females tried to go near the male, the other female was fast after her.

These interactions went on for about 6 h. Towards the end, there was an obviously dominant female in the pasture; the other female stayed out of the area around the nesting box and the male. In the end, the apparently beaten female sat in a tree about 200 m

from the nesting box and called. After about an hour she flew off.

A second female was seen in the area for 3 more days, but never close to the nesting box or the male.—PETER G. SAENGER, RD#1, Box 752, Alburts, Pennsylvania 18011. Received 25 Jan. 1982; accepted 8 Jan. 1984.

NOTES AND NEWS

Joint E.B.B.A. and N.E.B.B.A. 1985 Meeting.—The Eastern and Northeastern Bird Banding Associations announce that they will hold a joint meeting 26 April through 28 April 1985 at the National 4-H Center in Washington, D.C. The meeting will be hosted jointly by the Mid-Atlantic Bird Banding Group and the Maryland Ornithological Society. Accommodations will be available at the 4-H center at an approximate cost of between \$42 and \$127 for the 2-night stay, including meals. Commuter price will be approximately \$26, including Saturday lunch and the banquet. One of the highlights of the meeting will be the opportunity to tour the Bird Banding Laboratory and Patuxent Wildlife Research Center. Field trips to some of the Mid-Atlantic region's best birding spots will be scheduled for Sunday. Those interested in presenting papers or displaying posters should contact Dr. John S. Weske, Box 116, Sandy Spring, MD 20860 (301-774-7564). Anyone willing to give a workshop should contact Joe Schreiber, 2910 Hilcrest Ave., Baltimore, MD 21234 (301-661-8340) or Barbara Ross, 308 Thornhill Rd., Baltimore, MD 21212 (301-435-7166). Please provide a brief description of your topic and biographical sketch. Registration forms will be mailed to E.B.B.A. and N.E.B.B.A. members in late February 1985. However other banders who plan to be in the Washington area during the meetings and who would like to take advantage of these attractive rates and spend extra time in Washington should contact M. Kathleen Klimkiewicz, Biologist, Bird Banding Laboratory, Laurel, MD 20707 (301-498-0423).

E. Alexander Bergstrom Research Awards.—The E. Alexander Bergstrom Memorial Research Fund of the Northeastern Bird Banding Association promotes research on birds. Small grants, usually not exceeding \$400, are available to cover expenses but not salaries or overhead charges. Details and applications may be obtained from Susan Roney Drennan, NEBBA Research Committee, American Birds, 950 Third Ave., New York, NY 10022. The deadline for completed applications is 15 February 1985.

EBBA and WBBA Research Grants.—The Eastern Bird Banding Association and the Western Bird Banding Association each offer a grant of \$250 in aid of research using bird-banding techniques or bird-banding data. Applicants should submit a resume of his or her banding or ornithological background, a project plan, and a budget to the joint selection committee chairman: Robert C. Leberman, Powdermill Nature Reserve, Star Route South, Rector, PA 15677. No formal application forms are available; the amount requested should not exceed \$250. Deadline for receipt of applications is 15 March 1985.

Frank M. Chapman Grants.—The Frank M. Chapman Memorial Fund gives grants-in-aid of ornithological research and post-doctoral fellowships. While there is no restriction on who may apply, the Committee particularly welcomes and favors applications from graduate students; projects in game management and the medical sciences are seldom funded. Applications for all projects in 1985 should be submitted not later than 15 January 1985. Application forms may be obtained from the Frank M. Chapman Memorial Fund Committee, The American Museum of Natural History, Central Park West at 79th St., New York, NY 10024.

North American Bluebird Society Research Grants.—The North American Bluebird Society announces the second annual grants in aid for ornithological research directed toward cavity nesting species of North America with emphasis on the genus *Sialia*. Pres-