

(Figure 1). For malar stripe color, which is absent in females, males were compared with total hybrid indices of their mates, after Short (op. cit.). There is no significant intrapair correlation here for any of the characters, using the multinomial Chi-square test for dependence (0.05 level, Table 2). The same was also true for the smaller Rocky Ford sample, which is not shown.

Insofar as pairing in the hybrid zone appears to be essentially random, the results of this study support Short's conclusion that *auratus* and *cafer* are conspecific. The apparent randomness in mate selection based on plumage characters suggests that in the area of contact and interbreeding such characters do not serve as isolating mechanisms.—CARL E. BOCK, *Biology Department, University of Colorado, Boulder, Colorado 80302*. Accepted 1 Dec. 70.

Audubon's Warbler in North Carolina.—On 28 February 1970 I trapped an Audubon's Warbler in a residential neighborhood on the western edge of Rocky Mount, Nash County, North Carolina. The bird was collected and subsequently identified as an immature male of the Pacific coast race, *Dendroica auduboni auduboni*, by Roxie C. Laybourne of the U. S. Fish and Wildlife Service at the U. S. National Museum. This is the first specimen of Audubon's Warbler to be taken in North Carolina, and according to John P. Hubbard (in litt.) only the second authentic record of the form for eastern North America. The specimen is catalog No. 3398 in the North Carolina Museum of Natural History at Raleigh.—BETTY DAVIS, 3325 Amherst Road, Rocky Mount, North Carolina 27801. Accepted 20 Oct. 70.

A transcontinental Mourning Dove recovery.—A Mourning Dove (*Zenaidura macroura*) banded in New York has been reported shot in California. On 25 August 1969, near Palmyra (43° 00' N, 77° 10' W), New York Department of Environmental Conservation personnel placed U. S. Fish & Wildlife Service band 883-97279 on the leg of a hatching-year Mourning Dove of unknown sex. During the first weekend of the dove season in September 1970, Stan Solus (P. O. Box 594, Seiad Valley, California) recovered the band from a dove he shot in the Shasta Valley, Siskiyou County, California (41° 30' N, 122° 20' W). As Mr. Solus included the band with his reporting letter and, in response to my asking him for verification, reaffirmed his original information, the recovery has been accepted as authentic.

I suggest this vagrancy may be explained by assuming that the inexperienced New York bird got emotionally involved with a western bird with which it shared winter quarters, perhaps in Mexico, and thus the following year ended up a flower child in California.—BRIAN SHARP, *Bird Banding Laboratory, Migratory Bird Populations Station, Laurel, Maryland 20810*. Accepted 18 Feb. 71.

House Sparrows feeding young at night.—In the late evening of 24 March 1955 my wife and I waited to embark our plane at the airport at Bangkok, Thailand. Our attention was attracted to a half dozen House Sparrows, *Passer domesticus*, that were engaged in a continuous foray against moths and other insects attracted to a floodlight. The birds came out of the dark, fluttered about the light, crammed their beaks with insects and disappeared, to return in a few moments. Apparently the birds were feeding young. We watched this performance at least a half hour (approximately 10:30 to 11:00) until our departure was announced. It was still another instance of the resourcefulness and adaptiveness on the part of the canny House Sparrow.

In more than 50 years of watching birds this is the first time that I have seen passerine birds in nocturnal pursuit of food. This experience, however, has been paralleled in Europe, according to J. D. Summers-Smith. (The House Sparrow, *New Naturalist Monogr.*, p. 37, 1963).—MAURICE BROUN, *Strawberry Hill Farm, New Ringgold, Pennsylvania 17960*. Accepted 4 Mar. 71.

Food and migration habits of the Eastern Kingbird in Panama.—The Eastern Kingbird (*Tyrannus tyrannus*), a species breeding in temperate North America chiefly east of the Rocky Mountains, is an abundant diurnal migrant through the Isthmus of Panama. It rarely winters in southern Middle America, most of the population moving to South America. I studied kingbird movements in the Panama Canal Zone in 1965–66 and again in 1970. The northward and southward migrations differed in several ways that seem to be correlated with food resources available to the birds in Middle America.

Kingbirds are conspicuous in the field for a longer time during the northward flight than in the southward migration and they appear to be generally more plentiful as migrants during the northward flight. All other common North American migrants show the opposite trend (Willis, 1966; Leck, 1970; pers. obs.). Slud (1960) found this also true for Costa Rica. In the Panama Canal Zone migrating Eastern Kingbirds have been seen from 5 March to 16 May (Eugene Eisenmann, pers. comm.). They are common from mid-March to the second week in May. In contrast, although Eisenmann has Panama records from 29 August to 26 November, most kingbirds transit the Panama Canal Zone during the 3- to 4-week period from mid-September to the second week in October. Russell (1964) notes a comparable difference for the two migration periods in British Honduras, as does Slud (1964) for Costa Rica.

The Eastern Kingbird is more conspicuous during the northward migration. When moving northward, kingbirds fly at or near treetop level in flocks of a few to more than 100 birds. During the southward flight kingbirds generally fly at high altitudes and in relatively smaller groups, although large concentrations are occasionally seen near the ground (Monroe, 1968). In late September I saw flocks of kingbirds flying in an easterly direction (i.e. towards South America) over the central part of the Panama Canal Zone. But, whereas they flew low here in April, now they were so high that I needed binoculars to identify them.

I suggest that these differences in the two migration periods may be due to changes in food availability. In the northward migration, the large kingbird flocks feed mainly on fruit, largely that of the tree *Didymopanax morototoni* (Araliaceae). Nine Eastern Kingbirds collected in late April 1970 had from 1 to 9 *Didymopanax* fruits in their stomachs. None of the stomachs contained insect fragments and I rarely saw kingbirds "hawk" after insects.

Didymopanax occurs throughout the New World tropics in second growth woods and mixed grassland with brush. The fruits, 4–6 mm long and slightly flat, are ripe during the local dry season from January to May in Panama and probably throughout Central America. The fruit occurs in large upright clusters that stick up through the top leaves of the tree. This growth habit probably makes the fruit more visible to migrating kingbirds. As migrating birds carry the seed farther than do resident birds, this strategy would have selective value for the tree through increasing seed dispersal.

Fruit is not common during the northern hemisphere fall in Panama, which corresponds with the height of the local rainy season. The trees then in fruit