eyases was almost exclusively small birds. Most of these were House Sparrows, an abundant and fecund species at the very height of its reproductive season in late May and early June. One prey item might have been a Mockingbird, but no Mockingbird remains were among those found by the authors on the PSB roof.

The utter silence of the parent birds throughout the whole observation period was noteworthy. Perhaps they had become so thoroughly accustomed to urbanized man that they were not disturbed by his comings and goings.

818 WEST BROOKS, NORMAN, OKLAHOMA 73069; DEPARTMENT OF BIOLOGY, CAMERON UNIVERSITY, LAWTON, OKLAHOMA 73505, 27 OCTOBER 1979.

## AMERICAN KESTREL POSSIBLY TWO-BROODED IN CENTRAL OKLAHOMA

BY ELIZABETH A. BLACK

The American Kestrel (Falco sparverius) is believed to be "one brooded" in Oklahoma (Sutton, 1967, Oklahoma birds, Univ. Oklahoma Press, Norman, p. 127). In the summer of 1979, however, two broods were reared at a nest in downtown Oklahoma City, central Oklahoma. The first of these (three young) left the nest on or about 17 June, the second (four young) in mid September. Whether the same female produced all seven young is conjectural, for neither of the old birds was banded or color-marked; but departure of the two broods was witnessed by Ernest Craig, who has been watching the comings and goings of the kestrels from his window on the fourth floor of an office building at the corner of Fourth and Broadway since the spring of 1971. Year after year the nest has been just outside this window in a cavity at the top of a concrete column about 45 feet from the ground. The cavity's entrance, about 6 inches wide and 4 high, faces west, but it is shaded from the afternoon sun by part of the column's ornate capital. To the best of Mr. Craig's knowledge, this is the first time two broods have been reared in one season at this nest.

Examining the nest has been next to impossible, so no one knows how many eggs were laid in 1979. One bird of the first brood was a male, but the sex of that male's two siblings was not ascertained. All four of the second brood were males. Departure from the nest may have been a bit premature for both broods, since each of the young birds was seen to "crash-land" on the street or sidewalk below the nest. So incapable of flight were the four of the second brood that they were caught and turned over to me, one by one, respectively on the 7th, 10th, 11th, and 12th of September. When I first handled them, they were short-winged and short-tailed. On 30 September, when I released all four in the wild, they flew strongly.

Summer after summer, from mid-February to mid-June, Ernest Craig and others in his office have watched the parent kestrels coming and going. Broods have, as a rule, numbered three or four young. From 1971 to 1976, the female parent was recognizable as an individual, for one of her legs was deformed. Departure of the young from the nest has usually been before mid-morning. Never has the whole brood left at the same time. So poorly have the young ones flown on their first flight that only one or two of them have managed to reach an open field across the street. Most of them have

gone down to the sidewalk or street below the nest. There, unattended by their parents, they have been rescued by Mr. Craig and his fellows, who have halted traffic, etc., in their behalf.

After the first brood left the nest in 1979, Mr. Craig was surprised to observe what he believed to be mature birds still flying about the area. He did not know, of course, how many of the young had survived, or where these young might be. Nor could he be sure that the old birds were the same as those that had cared for the first brood. But presently he noticed that the kestrels were bringing such prey items as mice, lizards, and grasshoppers to the nest just outside his office window. By mid-August he thought he could see young kestrels just inside the entrance to the nest. From that point on everyone watched the nest with special interest until 7 September, when the first of the second brood departed from it.

1308 THOMPSON AVENUE NORTH, OKLAHOMA CITY, OKLAHOMA 73105, 10 OCTOBER 1979.

## IS THE AMERICAN KESTREL TWO-BROODED IN OKLAHOMA?

BY GEORGE M. SUTTON

Elizabeth A. Black's important paper in this issue brings into focus the need for careful work on multibroodedness in birds. Two broods of American Kestrels (Falco sparverius) certainly were reared to near fledging at a nest in downtown Oklahoma City in the summer of 1979: there can be no doubt of this.

As Mrs. Black wisely states, however, no one knows whether the two broods were reared by the same pair, for the adult birds were not banded or color-marked or in any way recognizable as individuals. One female may or may not have laid the seven eggs. Two wholly different pairs of adults could have reared the two broods. So the two-broodedness that demands our attention is not that of a given female, or of a given pair, but of a given nest. Every young bird that left that nest in the summer of 1979 did so under human surveillance, and every one did so before being able to fly well. It occurs to me that human activity observed by the eyases through the office window might have led them to leave the nest before they were quite ready to go; furthermore, that if the first brood of three left so prematurely that they survived for only a few days, they cannot be considered a fully reared brood. In that case, the parent birds (if they were, indeed, the same pair), driven by the urge to reproduce, proceeded to try again. Their second attempt was successful, but would it have been so without the help of those who rescued the young birds and turned them over to Mrs. Black? The question is not unreasonable.

If we assume that the same pair of adults did bring the two broods to near fledging, can we state that they actually produced even one brood? Do not misunderstand me. I am not blaming Ernest Craig for watching over the nest too closely. I am not blaming anyone for anything. But I do feel that those three young of the first brood might not have survived and that, scientifically speaking, we cannot consider them a brood at all since they