

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.

EDS 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

may not have reached full self-sufficiency. A truly two-brooded species brings two broods to the point at which at least one young individual of each brood can care for itself.

I am publishing this paper not to justify my calling *Falco sparverius* "one brooded" in Oklahoma, but rather to stimulate thinking on what the phenomenon of two-broodedness actually is.

818 WEST BROOKS ST., NORMAN, OKLAHOMA 73069. 15 OCTOBER 1979.

## GENERAL NOTES

**Large aggregation of Great Blue Herons in Kiowa County, Oklahoma.**—From 1305 to 1330 on 26 November 1978 (50° F., heavy overcast, north wind 10-15 m.p.h.), Jack D. Tyler, James Calaway, Charles Clemons, Robert Hollander, Edward Sands, Edith Scott, Terry Zupan, and I observed about 190 Great Blue Herons (*Ardea herodias*) on the extensive mudflats along the eastern shore at the shallow north end of Lake Altus in Kiowa County, southwestern Oklahoma. Groups of from five to 30 of the birds were wading among thin clumps of salt cedar (*Tamarix gallica*), while scattered individuals fed in somewhat deeper water well out from the lake's edge. Also feeding and loafing in the area were about 300 Ring-billed Gulls (*Larus delawarensis*), a few Hooded Mergansers (*Lophodytes cucullatus*), some Green-winged Teal (*Anas crecca*), and about 150 diving ducks of the genus *Aythya*.

During the preceding summer and fall, this part of Oklahoma received very little rain. This dryness and the local demand for irrigation water were doubtless responsible for the unusually low lake-level. The herons were probably taking advantage of the concentrations of animal food in the shallow water. So far as I know, there is no breeding colony of Great Blue Herons at all close to Lake Altus. Colonies near Taloga, along the Canadian River in Dewey County, west-central Oklahoma, and near Fargo, Ellis County, in the northwestern part of the main body of the state, are, respectively, about 80 miles to the northeast and 100 miles to the north of Lake Altus.

What we observed might well have been the greatest number of fully fledged Great Blue Herons ever seen at one time in Oklahoma. In large heronries, the totals of young and old birds countable at the height of the breeding season might, of course, be equally large. On 31 December 1963, W. Marvin Davis counted 51 Great Blue Herons standing on the frozen surface of Canton Reservoir in Blaine County, west-central Oklahoma (1964, Audubon Field Notes, 18: 256).—Michael F. Smith, Box 3223, Fort Sill, Oklahoma 73503, 29 November 1978.

**Inca Dove in Comanche County, Oklahoma.**—On 19 December 1977, while I was driving through a seldom used part of the "shop area" near the headquarters buildings of the Wichita Mountains Wildlife Refuge in Comanche County, southwestern Oklahoma, my pickup truck flushed a