

I saw Mrs. Crandall early the following morning and identified the hawk as an immature Broad-winged. Mrs. Crandall, who lives alone, does not have chickens or other birds or animals about, which might have attracted the hawk.

When Albert W. Cheevers and his family, of Pittsfield, saw the story and picture in the paper, they declared that they believed the bird was the same one they had released on the 11th, after having made a pet of it for a month. They said the bird had been found badly injured and that the whole family fed and nursed it back to health. The Cheevers live about five air-line miles from Mrs. Crandall's home. Although we could not positively prove it, I do not doubt that the hawk was the same individual Mrs. Crandall killed. Her reactions were those of any self-reliant woman who has spent her life in the country. The case is one of those rare ones in which an extraordinary behavior on the part of a wild bird can be logically explained; the bird was thin and presumably hungry, and being used to people it merely tried to alight on the woman's head, hoping to be fed. Or possibly, because of the thick growth of trees and shrubbery, it misidentified its landing field!—BARTLETT HENDRICKS, *The Berkshire Museum, Pittsfield, Massachusetts.*

**Duck Hawks breeding in the business center of Philadelphia, Pennsylvania.**—In 1942 (Auk, 59: 176-204, April) James J. Hickey published a comprehensive report on the nesting sites of the Duck Hawk, *Falco peregrinus anatum*, in North America east of the Rocky Mountains. A total of 408 nesting sites were located. Of these, 275 were in the United States, 116 in Canada, and 17 in Labrador and Greenland. Actual nesting on man-made structures was reported by Hickey in only two instances—one on an abandoned stone-bridge pier and the other on a Canadian skyscraper where, in 1940, a pair of falcons brought off two fledglings.

Since Hickey's investigation, another pair of Duck Hawks was found nesting on a hotel building in New York City. Mrs. C. N. Edge, in a report of the Emergency Conservation Committee to the A. O. U. Committee on Bird Protection for the year 1943, states: "In May, 1943, a Duck Hawk's nest was destroyed by the management of a hotel in New York and the young birds were given into the charge of the American Society for the Prevention of Cruelty to Animals. The agent for the Society destroyed the young Duck Hawks. The excuse given by the executive was that his men could not identify the birds" (Auk, 61: 629, 1944). This makes the third record of Duck Hawks actually breeding on man-made structures and only the second record of which I am aware of their breeding on high buildings in cities.

The central business district of Philadelphia has been, for many years, wintering quarters for Duck Hawks. Twenty-eight years ago, January 29, 1918, two Duck Hawks were seen wintering in the center of Philadelphia, and were reported by Delos E. Culver (Auk, 36: 108-109, 1919). These falcons made their headquarters on the City Hall Tower, which is 547 feet high, and used one of the high ledges for perching, 361 feet above ground.

For the past seven years, I have observed Duck Hawks present on the ledges of this tower and in the air around it, during the spring, fall and winter months. Some of the members of the Delaware Valley Ornithological Club, particularly James Bond and Frederick C. Schmid, Jr., of the Academy of Natural Sciences of Philadelphia, have noted these birds on many occasions in the center of Philadelphia. Also, Mrs. Quintin Kramer, who is an excellent and very careful field observer, has seen them in the center of Philadelphia since January, 1939, and has noted them almost continuously about the City Hall Tower not only during the winter but also in the spring months. Within the last few years, she observed a pair together on April 4, 1944, and

May 23 and 29, 1945, and she also saw two together at the Tower on July 21, 1943, which indicated possible breeding in the center of Philadelphia.

I have had an excellent opportunity to observe these birds from my office windows in the Land Title Building, which is 225 yards south of the City Hall Tower. My windows face north and enable me to observe what occurs on the south and east sides of the tower and in the air between the tower and the skyscrapers about 100 yards to the eastward.

The Peregrine Falcons have been attracted to the tower, no doubt, because it offers many advantages to them. It is a square tower, with two ledges on each side, the lower one approximately 300 feet high and the upper one 361 feet high—heights equal to many of the high cliffs these birds are accustomed to using, and giving them the necessary safety. Also, by flying two or three minutes westward from this tower, the falcons can reach Fairmount Park, a natural park containing 3,597 acres of land, much of it wooded and with the Schuylkill River running through it. This park is teeming with bird life. If the falcons fly eastward two or three minutes, they reach the broad Delaware River, where there are hundreds and sometimes thousands of gulls and other water birds, and by crossing the river to New Jersey they find a great abundance of bird life. In addition, there is also a plentiful supply of pigeons always present about the tower and other buildings, which makes food easily available whenever they are unsuccessful in their forays at other places.

During the months of February, March and April, 1946, one or two falcons were observed almost daily on the tower or in the air close to it. On June 3, 1946, on looking out of my office windows I saw four falcons in a small flock, making short, semicircular flights from the tower eastward and back. There were about ten of these flights made by the four falcons within half an hour. These four birds, flying together, gave the impression of possibly two adults giving two young falcons flying exercises. Two days later, June 5, two falcons were in the air a short distance east of the tower, one following the other flying eastward. The next day, June 6, I observed three falcons for one hour, 4:30 to 5:30 P. M., at the tower. One of these birds remained perched on the upper ledge on the east side, while another was on the ledge below. This lower bird did not remain quiet, but walked around to the connecting ledge on the south side, where it proceeded to flap its wings continuously, indicating that it was a young bird exercising its wings. The third bird was also on the lower east-side ledge, but remained only for a few minutes and then flew around to the north side of the tower where it was lost to view.

On the evening of June 6, 1946, at a meeting of the Delaware Valley Ornithological Club, my observations of the falcons at the City Hall Tower were made known to the members, especially the occurrence of the four falcons together on June 3. At this meeting I suggested to the members the possibility of the falcons breeding on the tower or its vicinity. The next day, several of us—Mr. Waldemar H. Fries, Mrs. Quintin Kramer and I—went to the roof of a high office building about 35 yards from the tower, and with 8 x 30 Zeiss binoculars, had a splendid view of one of the adult falcons perched on the upper ledge on the east side. Later the same day, Mr. W. H. Fries, Mr. William W. Lukens, Jr., and Mr. and Mrs. Quintin Kramer spent two hours on this same roof and reported they had observed three falcons at the same time perched on the ledges of the tower. One of these birds was flapping its wings almost continuously and was possibly a young bird.

Three days later, June 10, a Philadelphia newspaper published an account and a photograph of a young falcon on a set-back on the 21st floor of an office building, approximately 100 yards from the City Hall Tower. The following day, Frederick

C. Schmid, Jr., William W. Lukens, Jr., and I paid a visit to the newspaper office, where we were informed that the tenant on the 21st floor of the office building wanted this bird removed from the set-back in front of his office windows. Mr. Love, a pigeon fancier located in the newspaper building, was asked to remove the bird which he proceeded to capture, afterward turning it over to Dr. Robert M. Stabler of the Department of Zoology, University of Pennsylvania, one of the leading falconers in the Philadelphia region, who kindly consented to take care of it.

Dr. Stabler informed me that the falcon, when captured, was about five weeks old and still unable to fly since the wings were not fully developed. Dr. Stabler also stated that it is probable that the young falcon reached the set-back (which is 225 feet above ground and recessed 10 feet), by gliding downward and eastward from a ledge on the tower. The superintendent of the office building informed me that the young falcon had been on the set-back three days before it was removed, and that the parents had been feeding to it pigeons and other food, the remains of which were still on the set-back floor.

Edgar Zander and Edgar Zander, Jr., who are on the 23rd floor of this same office building, told me that they had been observing the falcons on the tower with 6 x 30 binoculars, daily since early spring, 1946, and in the latter part of May and early June, had noted adult falcons capturing pigeons and taking them to the young. Also occasionally, when the young were flying, an adult and a youngster would perch on a narrow off-set from the window sills. The Zanders also photographed the birds perching at their windows.

Although the nest was not definitely seen, I have information which I believe indicates the exact place. I think it is inadvisable to disclose this information at this time in order to protect these birds next year, should they breed here again. However, the facts that four birds were observed at the same time on June 3, three birds were seen together several times by different observers, the young falcons were seen being fed by the parents, and a young bird about five weeks old was captured within 100 yards of the tower where the adults always perched would seem to be adequate and sufficient evidence that a breeding record was established for the Peregrine Falcon in the center of Philadelphia. This makes the third breeding record, so far as I know, of the Peregrine Falcon on a high man-made structure in eastern North America.—HORACE GROSKIN, *Glenn Road, Ardmore, Pa.*

**Evidence of polyandry at a Bluebird nest.**—In the 1946 nesting season, the eleventh year of the Warner Parks Bluebird Nest-box Project at Nashville, Tennessee, a remarkable situation occurred at Box 17. In the course of the three nesting periods of the season, the box, eggs, or young were defended by two male Eastern Bluebirds (*Sialia sialis sialis*) which appeared to be on the most amicable terms with each other. They made vigorous swoops at my head repeatedly on each of some twenty visits that I made to the box. They came with great speed and some bill snapping, coördinating well with each other, one male in the lead, the other a foot or two directly behind him. At times the female participated in the defense, but her behavior was less pugnacious and she usually retired to a tree to watch, as the males came at me time after time, always swerving just above my head. The three birds never showed any pugnacity toward each other, flying together or perching in close proximity in the same tree.

Although the two males may have been on the territory earlier, I first became aware of this apparent instance of polyandry on April 23, when both males and the female displayed much concern as I handled the three nestlings for banding. Both males wore bands on the left tarsus, indicating they had been banded in some previous