

(several of which were broken); the short, spread tail; and even the black head and livid feet. I may add that I am familiar with the two vultures in both the southern States and South America.

More interesting than the addition of another record of the Black Vulture to the very few existing for the State (where it is regarded as accidental or casual by Chapman), has been the phenomenal increase of Turkey Vultures (*Cathartes aura septentrionalis*) in this county during the last decade. Until recent years the species was known from the region by only one record, in 1922. My first was in June, 1925. Since then the bird has become ever more frequently observed in northern Westchester County, until now it must be considered a common transient. With March 17, 1935, as the date of its earliest arrival (recorded by Louis J. Halle, Jr., Pound Ridge, whose experience with the species locally parallels my own), the period of its maximum abundance extends from the beginning to the end of May, when four birds at once may frequently be seen in the sky, rarely as many as six. One or two at a time are met with commonly throughout June and the first three weeks of July. After that it is exceptional to find any until the southward migration, which begins during the last week of August. The species is not quite so common in autumn as in spring. October 12, 1934, is my latest date. The question of whether it breeds here remains open, and the object of this spectacular annual migration is a provoking mystery, deepened by the status of "rare" in the Bronx region, forty miles to the south, accorded it by Chapman in 1932.—CHARLTON OGBURN, JR., *Salem Centre, New York*.

The proportion of sexes in hawks.—In the older European literature it is frequently stated that a considerable surplus of females exists among hawks. The proof most frequently quoted is that a female killed at the nest will soon be replaced by a new female, while the nest will be abandoned if the male is killed. This seems to be true for the European Sparrow Hawk (*Accipiter nisus*) and for the Goshawk (*Astur gentilis*), but the fact does not necessarily prove very much. It is possible that one of the biological functions of the male is to hold nest and territory, and that the female will go in search of a new mate if the "holder of the territory" is killed. However, in some of the cases in which the sex ratio was determined in the genus *Accipiter*, the preponderance of females was fully substantiated. Gunn (Proc. Zool. Soc. London, p. 67, 1912) examined two nests of *A. nisus* in England and found in one nest one male and five females, in the other two males and four females. E. Maniquet (Rev. Franç. d'Ornith., p. 423, 1927) examined three nests in France, and found only four males among the fifteen young. The total sex ratio of the five broods would be seven males to twenty females, or three females to every male. Stanley's figures (Journ. Morph., 61: 333, 1937), which seem to indicate an equal sex ratio, are inconclusive because he does not state to how many nests the young belonged nor whether or not all the young of each nest were examined. In the Goshawk flight of 1936-37, among 291 specimens killed in Pennsylvania there were 110 males and 181 females (Auk, 55: 124, 1938). It is of course possible that this unequal sex ratio is due to the greater migratory urge of the females, and only an investigation of nests can establish the true sex ratio.

Hawks are, as a rule, monogamous, but the existence of a surplus of females has led to polygamy in exceptional cases. There are at least two cases known in the Sparrow Hawk (*Accipiter nisus*) where two females laid in the same nest and tried to raise their broods under the protection of a single male. The conditions that apply to certain species of the genus *Accipiter* do not necessarily hold true for the other

hawks. We know very little about *Buteo*, but one case is reported in which the male left the nest after the female had been shot, and joined another pair. In the American Sparrow Hawk (*Falco sparverius*) I know of a pair in which the lost partner was repeatedly replaced whether it was the male or the female. A case is reported of two female Kestrels (*Falco tinnunculus*), that were mated with the same male and laid eggs in the same nest (or rather hollow) (British Birds, 19: 180, 1925). In the genus *Circus* (harriers) polygamy has been reported for three species (*cyaneus*, *pygargus*, and *hudsonius*). In all cases the two females that belonged to one male had separate nests. On the other hand, there are reports that in pairs of the Marsh Harrier (*Circus pygargus*) the lost male is as readily replaced as the female (Journ. f. Ornith., 75: 430, 1927, and Naumannia, p. 400, 1854).

All these observations indicate that there may be a surplus of one sex in certain species of hawks. It seems definitely desirable to pay more attention to this question and to publish all the available data on the proportion of the sexes among the young in the nest.—ERNST MAYR, *American Museum of Natural History, New York City.*

Eastern Goshawk nesting in central Michigan.—On April 16, 1937, the writer found a nest of the Goshawk (*Astur atricapillus*) in the Houghton Lake Forest, in Rosecommon County, Michigan. Dr. Josselyn Van Tyne, Curator of Birds at the University of Michigan, believes that this is the southernmost nesting record for the State. The birds had chosen a site in a dense stand of white birches and quaking aspens less than fifty feet from the fire lane. The nest was situated in a crotch formed by several main branches of a white birch at a height of twenty-five feet from the ground. Three old nests in the immediate vicinity indicated that the hawks had been using this area for several years. The female remained on the nest until I approached the base of the tree and then flew off with a harsh scream longer and shriller than the *cuck-cuck-cuck* of the Cooper's Hawk.

On May 21, Mrs. Baumgartner and Miss Margaret Gross visited the area and heard a young bird peeping feebly after the old bird had left the nest. Two days later Mrs. Baumgartner climbed to the nest and found one very small nestling and one addled egg. I quote from her field notes: "The nest was very bulky, composed of fresh sticks and lined with green white-pine and hemlock twigs and a few shreds of bark. The young bird, at least two days old, was covered with grayish down with pinkish skin showing through. The cere and feet were yellowish horny; the bill black, pearl gray at the union with the cere; the egg tooth, still present on May 25, was white; the inside of the mouth pale pinkish. Its soft call notes in the nest, probably for food or warmth, were a gentle clitter not unlike that of young Horned Owls, *k-k-k-k-k-k*. The cry of fear or annoyance when handled and photographed was a loud scream."

On May 25, Dr. Arthur A. Allen and Mr. Albert R. Brand managed to reach the nest with the Cornell University sound truck and made movies and recordings of both the old and the young birds. With the exception of a threatened assault upon one of the Cornell party, the old bird never attacked, although two persons climbed to the nest and the young bird, protesting loudly, was brought down for photographing. Only one adult, the female, was ever seen in the region. The writer visited the nest area at the end of June but found no evidence of the birds. It is hoped that the nesting may have been successful and that the area will be inhabited again another year.—FREDERICK M. BAUMGARTNER, *Department of Conservation, Lansing, Michigan.*

Early nesting of the Short-tailed Hawk.—Since any reference these days to the Short-tailed Hawk (*Buteo brachyurus*) is of interest, it is with peculiar pleasure