

nested with birds whose former mates failed to return. The other two mated with birds which had not previously nested on the campus. Only one case was found in which the mates of the previous year continued nesting but each had a new mate in 1952. One pair consisted of birds which had not nested on the campus in past years.

There were no threesome or foursome combinations which were known to last throughout the nesting season. However, very little is known about one threesome other than finding the three birds together while the eggs were being incubated. Conditions did not permit continued observations at that shaft; it is possible that they remained together throughout the nesting period. Three other pairs had an occasional visitor (usually the same one with a single exception known) while nesting was in progress; another had two visitors during one night, one of which visited the same pair on other occasions to form a threesome.

Thirteen birds which were trapped before nesting started were later found nesting in the same shaft in which they were first retrapped that season, while eight moved into another shaft for nesting after the initial recapture that year. Four Swifts were captured before and two captured shortly after nesting began which did not remain on the campus to nest. One of them had not been found for two years. Four returns did not nest but were occasional visitors with certain mated pairs as mentioned above (three additional visitors were newly banded in 1952). All but one of these non-breeding returns were banded the previous year.

After nesting was completed, five Chimney Swifts were recaptured which may have been migratory birds. One of them had not been seen since it was banded in 1944 and another not since it was banded in 1947. Two of the returns from 1944 were at least nine years old and are the oldest ones on record. Since banding of Chimney Swifts began in 1944, the writer has banded a total of 595 through the season of 1951 from which the 40 returns reported here were derived. An additional 117 were banded in 1952. An account of returns in 1951 was published in *Bird-Banding* 23 (2): 73-74. 1952.—Ralph W. Dexter, Department of Biology, Kent State University, Kent, Ohio.

Notes on the drumming of some woodpeckers.—Bent's volume on the woodpeckers (*U. S. Natl. Mus. Bull.* 174, 1939) leaves open the question whether drumming is done by both sexes of the Downy Woodpecker, *Dendrocopos pubescens* (Linnaeus); one writer is quoted (p. 54) as believing that only the male drums, and William Brewster (p. 61) as stating that both sexes do. My observations in Baltimore show Brewster to be correct; tracking down drumming Downies whenever possible during the last few years, I have found them to be males eight times and females 20 times. The males have been two color-banded birds and an unbanded one, the females two color-banded birds and one or more unbanded ones.

Drumming is also done by both sexes of the Red-headed Woodpecker, *Melanerpes erythrocephalus* (Linnaeus), and of the Flicker, *Colaptes auratus* (Linnaeus). A Red-headed Woodpecker that I color-banded, and then by three observations of copulation found to be a female, drummed frequently, as did her unbanded mate. I have many times seen drumming done by female Flickers, as well as males.

In the neighborhood in which I live, the Downy's favorite "drum" is distinctive. It is not the tip of a dead stub, but one of the large, projecting scales or plates of bark one-third to two-thirds of the way up the trunk or some other main stem of a tall, living white oak, *Quercus alba* Linnaeus. These bark plates make extremely resonant drums, even if—as is sometimes the case—the bird be clinging to the very plate on which it is drumming. On 36 of 42 occasions that I have recorded the Downy's drumming place it has been such a bark scale; twice it has been unresonant bark of a white oak, and four times it has been dead, barkless stubs.

I have never seen drumming done on bark scales by the Red-head or Flicker, the two other woodpeckers common in my observation areas; in a tree, the tip of a dead, barkless stub is the place usually chosen by them. On the other hand, I have never seen the Downy use any of the "artificial" drums that are sometimes chosen by the other two—the Red-head will drum on wooden electric poles and metal street-light arms, the Flicker on galvanized iron tubs or cans standing on the ground, and both these species on slate roofs and on metal radio and television poles.—Hervey Brackbill, 4608 Springdale Avenue, Baltimore 7, Maryland.