

which showed more individual variation (in other characters) than the adults, and believe this was more or less by broods.—J. T. Nichols, The American Museum of Natural History, Central Park West at 79th St., New York 24, N. Y.

Eye Color in the Brown Thrasher.—Many bird-banders, no doubt, make careful note of the color of the "soft-parts" of birds they handle. What I have to offer will be familiar to many, likely but a fragment of what some could, and so far as I know have not, placed on record, which is regrettable.

The eye of adult Brown Thrashers (*Toxostoma rufum*) is yellow, occasionally orange. The variation in color is for the most part an individual matter. I have not differentiated the sexes, but thought that one season an individual with orange, was mated to another with deep orange-yellow eye, a close approximation at the limit of color variation. The former (No. 34-237848) was captured as an adult in four successive years, dates ranging from June 20 to August 21 in the first three, eye consistently orange. In the fourth year, July 3, its eye was noted as a little yellower, deep orange yellow, possibly because it was ageing. There is also probably little if any seasonal color change from April to August. My data suggest that there is a slight difference in eye-color by localities, at Garden City, and Mastic, Long Island, New York.

At Garden City I find record of the following individuals: with dull yellow eye, 1 (August 30); with yellow eye, 4 (April 29 to August 29); deep yellow eye, 8 (April 27 to August 5); orange-yellow to yellow-orange, 4 (May 8 to August 3, molting); orange, 1 (June 20 to August 21).

Comparable figures at Mastic are as follows: with dull yellow eye, 3 individuals (August 5 and 29); with yellow, 6 (August 21 to Sept. 10); strong, deep, and bright yellow, 3 (May 19, June 1, and August 29, respectively); orange-yellow, 1 (June 12 and July 3).

Young thrashers, when fully grown and independent, have a rather pale ashen or pearl grey eye. I have a record of eleven birds-of-the-year, at Garden City, and Mastic, with grey or greyish eye, from July 3 to September 19. As our thrashers sing little, when at all, after June 30, and presumably complete their nesting cycle early, it would seem to take the young some time to acquire a yellow eye. I have had no repeats over a sufficient period to estimate how long, probably because they are drifting rather than established in a given locality, as seems to be the rule with young birds. On the other hand, the grey eye becomes quickly tinged with yellow. One individual with an ashy grey eye on July 14, had a yellowish grey one on July 18. That of another became slightly pinkish between July 28 and August 4. Three of the said eleven had a yellowish grey, two a pale greyish yellow, one a pale pinkish grey eye when banded.

A bird with pale yellowish white eye on July 22 was presumably, one with the eye pale yellow on August 3, and another with it dull pale yellow on August 12, were most likely young. There is no proof that those with dull yellow eye classed above as adults, were so, but one or more looked and behaved like such. The dull yellow eye of one August 30, was not noticeably dull when it was taken again October 2.—J. T. Nichols, The American Museum of Natural History, Central Park West at 79th St., New York 24, N. Y.

The 1952 Returns of Chimney Swifts at Kent, Ohio.—During the spring and summer of 1952 a total of 40 banded Chimney Swifts (*Chaetura pelagica*) returned to the campus of Kent State University. They were present from April 20 until October 5, 1952, although they did not all arrive or depart at the same time. There were 13 males, 12 females, and 15 which have not yet had their sex determined. The number of returns from each year's banding was as follows: 1944 (4); 1945 (1); 1946 (1); 1947 (5); 1948 (2); 1949 (8); 1950 (7); 1951 (12).

Thirteen pairs nested in separate air shafts of four campus buildings. There were 86 available shafts, although nine of these were not very suitable. Those chosen were well spaced over the roof tops; no two were in juxtaposition. Six pairs returned to the same air shaft with the same mate as in the preceding year for another nesting season. Another pair from the previous year remained mated but moved into a different shaft for nesting in 1952. Four birds continued nesting in the same shaft as in 1951, but with a different mate. Two of these

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.