

During this past spring (1940), a careful check of this tract, now being cut over, failed to locate a single Ivory-bill, and only seven were seen in the remaining forest in which no cutting has yet started, and some of these were probably duplications. When cutting begins on this last stand of virgin timber in Louisiana, Ivory-billed Woodpeckers will disappear, and the demands of civilization will have exterminated one more famous creature through environmental changes.—E. A. McILHENNY, *Avery Island, Louisiana*.

Tree Swallows and highways.—Apropos of Mr. Toner's note with this title in 'The Auk' (58: 98, 1941) I can record a similar occurrence at Preston, Connecticut, on August 20, 1940. While driving through the outskirts of the town I noted many Tree Swallows (*Iridoprocne bicolor*) on the road. They rose reluctantly in front of the car. About ten (all young of the year) were found killed. A large flock was feeding on the ground in an adjacent harrowed field. About a mile farther on a similar concentration of dead birds was found.—CHARLES H. BLAKE, *Lincoln, Massachusetts*.

Brown Thrasher wintering in northern Illinois.—From the windows of our home in Winnetka, we, or one of us, saw a Brown Thrasher (*Toxostoma rufum*), in good weather and bad, on the following days: December 23, 25, 29, 1940; January 1, 12, 20 (other members of our family reported it on other days in January), February 4, 5, 6, 8, 9, 10, 12, 16, 20, 21, 23, 28, March 2, 8, 12, 17, 22, 23, 26, 28, 31, April 3, 8, 11, 14, 19 (several thrashers seen), 1941. On many of these days the bird was seen at our feeding station. Nutmeats and sunflower seed are all that were ever in the feeder. The bird was seen at the feeder when it contained only sunflower seed. One of our near neighbors informs us that he saw a thrasher several times during the winter where his cook fed the birds.

Ford, Sanborn and Coursen, in their 'Birds of the Chicago Region,' 1934, give a few winter records, but no evidence of winter residence.—WALTER T. FISHER, FRANCIS D. FISHER, 949 Fisher Lane, Winnetka, Illinois.

***Hylocichla fuscescens salicicola* in Tamaulipas: a correction.**—In Mr. Burleigh's and my 'Birds observed on the 1938 Semple Expedition to Northeastern Mexico' (Louisiana State University Occ. Pap. Mus. Zool., no. 3: 38, 1931) the Willow Thrush is listed on the basis of a male specimen taken near Gomez Farias, Tamaulipas, on February 28. This is a mistake. The bird is a Russet-backed Thrush, *Hylocichla ustulata ustulata*. It is identifiable by its distinct, buffy eye-ring and brownish rather than gray sides and flanks. I am at a loss to account for the error, regret that it has occurred, and am grateful to my student, Mr. Allan R. Phillips, for calling it to my attention.—GEORGE MIKSCHE SUTTON, *Cornell University, Ithaca, New York*.

Starlings at a blackbird roost.—A very large blackbird roost was discovered several years ago and it seemed unusual enough to warrant description and comment. If the Starling continues to increase in numbers, perhaps such large roosts will become fairly common. McAtee (Auk, 43: 373, 1926) has already called attention to a number of blackbird roosts in the eastern United States.

About fifteen miles southeast of Lexington, Kentucky, U. S. Highway 25 crosses the Kentucky River at Clay's Ferry. At this scenic spot between Fayette and Madison Counties the river has cut through solid rock making a very narrow valley hedged in by rocky walls and slopes which mark the channel of long

ago. The river at this point makes an S-shaped meander, thus causing the rim of the gorge to wall in the little Clay's Ferry valley on all sides. On the east bank of the river in Madison County, immediately north of the proposed site of the new bridge, is an area of about three acres comparatively sheltered from winds and storms. Here the temperature is perhaps somewhat higher than in the open during the colder days and nights. Fairly large and closely planted deciduous trees line the bank, and smaller trees, including some cedars, cover the more gentle slope which extends for about a hundred and twenty-five yards from the river bank to the highway. A large number of blackbirds chose to roost in this sheltered spot, which is less than a hundred feet above the normal water level in the narrow gorge and perhaps one hundred feet below the level of the surrounding Lexington penepain.

Intensive observations were made at the roost this year (1941) during the month of March. On fair evenings the birds began to appear in the trees along the top of the gorge at about six o'clock. They seemed to converge in small flocks from all directions during the next half-hour. The smaller flocks aggregated into larger ones, but did not descend to the roost until about dusk, probably because the inhabitants of the valley in attempting to break up the roost, shot into the flocks frequently. The skillful maneuvering by the close formations of these large flocks as they veered sharply first in one direction and then in another while flying around before settling was an impressive sight not easily forgotten by any observer. When the birds settled, the trees appeared, from a few hundred yards distant, as though in full leaf. The small grove in which the birds settled did not exceed four acres, but the birds were so numerous that many limbs of the trees were broken and dung in places was four inches deep. It was impossible to estimate accurately the total number of blackbirds. Local ornithologists set the figure at anywhere from a half to around several million. The roost was probably populated by migrating flocks as well as by local birds within a radius of fifteen miles, since in travelling to the place we passed small flocks of blackbirds ten to fifteen miles away from and flying in the direction of the river gorge.

Of the three species seen at the roost, Starlings (*Sturnus vulgaris vulgaris*) were by far preponderant, outnumbering Bronzed Grackles (*Quiscalus quiscula aeneus*) at least twenty-five to one. A number of Cowbirds (*Molothrus ater ater*) were there during early March, but few were seen late in the month.

Residents of the valley told us that blackbirds had roosted there for the last seven years and that very large flocks regularly congregate each fall and spring. This was the first time, however, that the birds had remained all winter, which may have been due to the mildness of the weather. Observations from week to week indicated that the population of the roost was decreasing from its maximum. By early spring and summer, of course, the flocks are mostly dispersed. Although large flocks of Starlings were still there on March 27 and 28, on the 29th the birds no longer returned at night. Continued shooting into the flocks, coupled with seasonal impulses, probably caused the birds to leave suddenly. Three weeks of observation after March 29 indicated that no birds returned at dusk.

Collecting was done on March 21, 22, 27 and 28 by firing a shotgun into the roost in a number of places. A few grackles were taken, but the proportionate number was very small. Of 285 Starlings, 129 were males and 156 females, a ratio of one male to 1.2 females. The ratio of male to female birds in this

rather small sample is lower than that reported by Hicks (Bird-banding, 5: 103-118, 1934), and by Odum and Pitelka (Auk, 56: 451-455, 1939), who stated that male Starlings exceeded females by almost two to one in birds taken at roosts.

It is interesting to compare sex ratios of Starlings with the secondary sex ratios of other birds, especially those established from banding records by McIlhenny (Auk, 57: 85-93, 1940). Among wild ducks, for example, the males usually outnumber females by anywhere from one up to three or more. The Mallard (*Anas platyrhynchos platyrhynchos*) is exceptional, however, since there are about equal numbers of males and females. Trapping records reveal that males are 1.9 times as abundant as female Cardinals (*Richmondia cardinalis cardinalis*). The preponderance of males to females of the Cowbird (*Molothrus ater ater*) is 2.82 to one. The greatest sex variation reported by McIlhenny is for the Gulf Coast Red-wing (*Agelaius phoeniceus littoralis*), in which he states there are 5.43 males to each female. Only in the Boat-tailed Grackle (*Cassidix mexicanus*) do females outnumber males by two to one.—JOHN B. LOEFER, *Berea College, Berea, Kentucky*, AND J. A. PATTEN, *University of Kentucky, Louisville, Kentucky*.

Myology of *Fregilupus varius* in relation to its systematic position.—*Fregilupus varius* was a starling that inhabited the island of Réunion and became extinct there about the middle of the last century. The last specimen was taken on Réunion in 1835 and two were taken on Mauritius in 1837 (Rothschild). The cause of its extinction is not certainly known, but it may have been due to the killing of the birds by natives when the birds were feeding on the coffee berries of the numerous coffee plantations or they may have succumbed in competition with introduced Indian Mynahs (Renshaw, *Zoologist*, (4) 9: 418, 1905).

Buffon was the first to describe the bird and in doing so he placed it among the Upupidae. Boddaert later named it *Upupa varia*. The bird had a crest which endowed it with a hoopoe-like appearance. However, the investigations of later workers, Levaillant, Vieillot, Hartlaub, and Schlegel, determined from external characteristics alone that this bird was a starling (Murie).

Murie (Proc. Zool. Soc. London, p. 474, 1874) made a study of the skeleton of *Fregilupus varius* from which he concluded that on the basis of its osteological characteristics, the bird was a starling closely related to the genera *Pastor*, *Sturnus*, and *Gracula*. He states further that the osteology does not relate it to the hoopoes, the fregiline section of the crows, nor to the bee-eaters or the paradise birds. In the 'Catalogue of the Birds in the British Museum' (vol. 13, 1890), *Fregilupus* is listed as one of 41 genera of the subfamily Sturninae. Rothschild ('Extinct Birds,' 1907) lists eighteen known specimens of *Fregilupus varius*.

A direct comparison was made between a preserved specimen of *Fregilupus varius* in the Museum of Comparative Zoology and *Sturnus vulgaris*. The dissection of the former was done so that the specimen is still intact, a separation of the muscles being sufficient to determine their gross morphology. Unfortunately, both legs had been cut off at the knees and both fore limbs at the elbows in making it into a study skin, hence a comparison of only the thigh, femoral, shoulder, and humeral muscles was possible. The muscles of this specimen after having been in alcohol for one hundred years have been considerably shrunken and consequently a comparison of muscle size between *Fregilupus* and *Sturnus* was impossible. The only warranted comparison was of the gross morphology of the muscles.

A study of the muscles in this specimen of *Fregilupus varius* revealed an almost