If the bird was an adult when banded in September I believe it would have been a summer resident at Mohonk. This is further borne out by the fact that in 1938 I saw a Junco at a window feeding shelf as late as May 22, carrying a size 1A band on its right leg and a size 1 band on its left. This year this Junco has repeated May 10th. Both of the May dates are beyond the usual migration time of Juncos.—DANIEL SMILEY, JR., Mohonk Lake, N. Y.

A House Trap as Part of a Song Sparrow's Territory. On April 29, 1937, I banded a Song Sparrow, 37-100025, which I have since come to regard as a male. At that time my trapping station was rather unsatisfactory, and I failed to record the bird again for almost two years.

In early 1939 I designed and built an elaborate house trap and eliminated all my former traps. My catch quadrupled itself within a very short period. On March 10 I retrapped 37-100025, while during the early spring I banded 15 new Song Sparrows.

It soon became apparent that 37-100025 was forming an alliance with 37-100224, banded on March 15. These two entered the trap together several times a day.

On March 22 a late snowstorm covered Swarthmore, and birds of several species literally swarmed into the house trap. In the confusion of panic-stricken Juncos Cardinals, Titmice, and Song Sparrows, 37-100224 broke one of its legs (tarso-metatarsus) close to the foot. It repeated next day, but since then it has not visited my station, presumably having died.

37-100025 continued to frequent the house trap, staying in it almost continually. Within two months of its "return" on March 10, I released it more than a hundred times.

On April 22 I banded a Song Sparrow, 37-100235. Shortly after this it began to enter the trap regularly with 37-100025. At the same time my catch of new sparrows, as well as repeats from other banded ones, began to fall off. 37-100025 was by this time so thoroughly at home in the trap that he frequently sang from a perch in it.

It was obvious to me that he considered the trap as a part of his territory and was excluding Song Sparrows other than his mate from it.

By the middle of May he had learned the ins and outs of the various funnels, so that he could enter and leave the trap at will. Henceforth he disregarded the two gathering cages so that I ceased recording his visits unless I rushed up and surprised him into entering one.

His mate, however, was not as astute, and I continued to catch her on many occasions.

On March 4 I had banded a Song Sparrow, 37-100215. This bird repeated on March 13, 15 and 22, and again on April 21, but after the above pair had established the trap as part of their territory, 37-100215 ceased visiting it.

On May 22 I was startled to find three Song Sparrows in one of the gathering cages. One bird was dead, 37-100215. The other two were alive, 37-100025 and 37-100235.

The dead sparrow had obviously been killed. The skin of the entire fore-part of the dorsum of the head was missing. Post-mortem examination disclosed numerous punctate subdural hemorrhages situated bilaterally in the frontal, otic and occipital regions. The skull was not visibly indented. The jugular veins and cardiac atria were engorged. Several mallophaga in the plumage presented the only other abnormality. (One mallophaga was removed by me on April 21.) General nutrition and development were good. The testes were hypertrophied to full breeding capacity. The gizzard contained small grains of sand and a moderate quantity of finely triturated farinaceous material. There were no parasites in the intestine. The lungs, liver, spleen, pancreas and kidneys were grossly normal.

There was nothing, in short, to indicate that the specimen was other than a normal male trespassing on foreign ground.

It seems quite apparent that the intrusion of this unfortunate bird into the territory of a mated pair was the stimulus for violent defensive measures. The male of the pair, even though "trap-wise," entered the gathering cage to do battle. I cannot imagine whether the female assisted him or not; she was on hand as a witness at least. But the intruder, unable to escape, paid the extreme penalty for his folly.—C. BROOKE WORTH, Edward Martin Biological Laboratory, Swarthmore College, Swarthmore, Pa.

RECENT LITERATURE

Reviews by Margaret M. Nice

MIGRATION AND BANDING

1. Bird-Migration over the Northwestern Part of the Indian Ocean, the Red Sea, and the Mediterranean. R. E. Moreau. 1938. *Proc. Zool. Soc. London, Ser. A*, 108 : 1–26. In this well documented paper the author concludes "that migration between Africa and Eurasia takes place through a great quadrant, one arm of which runs up the Atlantic coast, the other across the Indian Ocean about lat. 10° N.; and that the movement is of an essentially broad-front nature throughout." There are great opportunities for adding to the comparatively meager records "of the sea-crossings of Palæarctic birds moving to and from Africa."

2. Migration in the Mediterranean. D. A. Bannerman. R. E. Moreau. 1939. *Bull. Brit. Orn. Club*, 59 : 124–129. The first ornithologist reported that on April 22, 1939, birds were passing north from dawn to dusk at "the widest spot at which to cross the Mediterranean." The second said that on April 3, 1939 with a northeast wind great numbers of birds were seen, "embarked upon about the longest S.-N. crossing to be found in the Mediterranean."

3. Population Studies of the European Starling in America. L. E. Hicks. 1939. I Xme Congrès Orn. Int., Rouen: 457–474. From 1920 to 1937 81,000 *Sturnus v. vulgaris* were banded in America, 34,000 of these in Ohio. Of these last the very high percentage of 31.6 was retaken. Returns, 1–7 years after banding, amounted to 14%; repeats, 1–3 months after banding, 14.9%; recoveries, 0.2% up to 32 kilometers, 1.2% up to 320 kilometers, 1.3% from 320 to 1290 kilometers. Fourteen maps are given, most of them showing the northeast-southwest trend of migration. An admirable study.

4. Results of Researches on the Migration of the Starling in Italy. (Risultati delle Ricerche sulla Migrazione dello Storno in Italia *Sturnus vulgaris* (L.)) A. Toschi. 1938. *Richerche di Zoologia appl. alla caccia*, 12 : 1–58. Starlings in the neighborhood of Pisa were found through ringing to be stationary. The majority of those nesting in the valley of the Po are stationary, but one was retaken in Tunisia. "The greater part of the starlings which traverse Italy passes the winter in North Africa and especially in Tunisia and Algeria." An interesting map is given showing recoveries of birds banded on Lake Garda and Ancona; those from the former locality occur almost consistently east of those from the latter. Ringed Starlings migrating through Italy come from Germany, Switzerland, Poland, Yugoslavia, Hungary and Russia.

5. Banding Results with the Goshawk. (Beringungs-Ergebnisse beim Habicht (*Accipiter gentilis*).) Otto Lüders. 1938. *Deutscher Falkenorden*, No. 4 : 38–48. Goshawks are rather sedentary in Germany. Sixty-three per cent of the recoveries of birds banded in the nest came within the first year, leaving one-third of the young to reach adulthood. Eighty per cent of the mortality of ringed birds was due to man, mostly shooting. The greatest age attained by a ringed bird was 10 years.

Banding was an indispensable technique in Nos. 6–12, 34, 35, 41, 47 and 52.