to be at its height and bare areas were visible on chin and throat.

As stated above, the wintering Tree Sparrows evidently left the night of April 17th. During the two days preceding, the groups (for there were two, one consisting of seven individuals, the other early in the winter of four but later reduced to two, each of which when leaving the station for the roost was seen to keep separate) spent most of the day in the trap area, but after the 17th, none of the species was seen until the 21st, when one individual appeared. On April 29th one Tree Sparrow was seen about the station and was finally caught. It proved to be No. 495901. Examination showed moulting to be practically completed. This individual repeated again on May 2nd, for the last time, and no more Tree Sparrows were Was this individual a migrant, and if so had it begun its northward movement after moulting had commenced? If a winter resident, why had the process been so long delayed? We do not venture the opinion that No. 495901 was the sole representative of the species in the vicinity during the period of April 18th to May 2d, but daily search failed to reveal others.

Moulting is believed to be completed before migration begins. The fact that the wintering groups had completed the moult before disappearance, and also the fact that several individuals banded during April and presumed to be birds of passage revealed no evidence of moulting, seem to harmonize with this theory. We cannot find any category for No. 495901.

The most interesting features of bird-banding are the problems which are constantly arising and which challenge time and thought for their solution.

Wells River, Vermont, August 10, 1927.

IS THERE A NORTHERN RACE OF THE ROBIN?

BY M. J. MAGEE

On October 2, 1924, I sent the Biological Survey the follow-

ing note on Robins:—

"Most of our adult summer Robins leave [northern Michigan] during the latter part of August. Up to the time they leave they do not show any conspicuous white eye-markings. The Robins that come down from the North later are usually in small flocks and the great majority of the adult birds show a

very conspicuous, wide, and almost completely white eye-ring. I would be obliged if you would let me know if most fall Robins further south show this conspicuous white eye-ring. See Robin card No. 269821." Under date of October 10, 1924,

I received the following reply:—

"With reference to your inquiry regarding the white-eyering that you have observed on some fall Robins, we are unable to give you very definite information. As a species, this bird is subject to a great deal of variation, which so far has not been determined to be due to either age or sex, although of course the male birds are usually more highly colored and they average somewhat larger. In an extensive series of these birds, almost every intermediate stage can be detected and it will be noted that some birds have practically no eye-ring at all, while others have the complete and conspicuous marking to which you refer. If it were true that this eye-ring were a feature of the northern birds, it would be a sufficient characteristic to warrant their separation as a subspecies. Questions of this kind will, we hope, be definitely settled through the continued application of the bird-banding method."

Mr. E. H. Forbush wrote me under date of May 24, 1927: "I have always thought that probably there was a Northern Robin, but whether such a fact can be established I do not

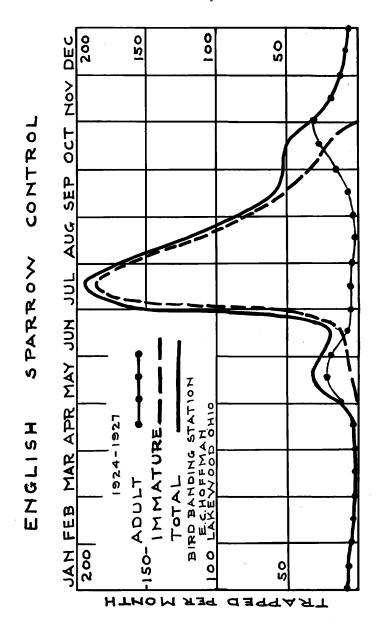
know."

When Mr. W. J. Breckenridge, of the Zoological Museum, University of Minnesota, Minneapolis, Minnesota, was here a couple of years ago, I called his attention to these late fall white-eye-ringed Robins, and under date of October 3, 1926, he referred to the matter as follows: "I also have noted the arrival recently of the white-eye-ringed Robins." On September 22, 1927, this type of Robin again appeared at my station, the first one of the season.

With these fall Robins, the white eye-ring is very conspicuous, being chalk-white. The birds are also heavy and large.

The note on card No. 269821, above referred to, is: "White above and below eye very distinct. At a little distance it appears to be a very wide and conspicuous white eye-ring." In many birds the line above is broken directly above the eye, but a line extends in front and back of eye, and a partial white line below.

These late fall Robins to me seem to have quite a distinct cast of color from our summer birds. I would say that they were grayer above, and most of them have quite a distinct olive cast to the back and rump.



Regarding eye-rings in my nesting Robins, the following five descriptions of this character in adult nesting birds, taken from my record cards, are offered, the dates denoting the time of year the observations were made:

June	15	Adult	Line above and below eye not very heavy and of
			gray color, not white.
June	29	Adult	Dull gray eye-ring, not very heavy.
\mathbf{June}	29	Adult	Dull gray eye-ring, fairly heavy.
July	1	Adult	Almost no eve-ring and that dull gray.
\mathbf{July}	5	Adult	Not much eye-ring and that dull grayish-white.

I do not find any young Robins with a really white eye-ring. We get some with whitish eye-ring (whitish gray to dull gray), usually more or less tinged with reddish buff. However, the great majority have more or less of an eye-ring of reddish buff, which is as near as I can come to naming the color of the light markings on head and breast of the young. Dr. Dwight, in his paper on "The Sequence of Plumages and Moults" under Robin, Page 313, states in describing the juvenal plumage, "Obscure superciliary line ochraceous buff, orbital ring paler."

Ridgway, in "Birds of North and Middle America," Part IV, p. 98, after describing the white mark on the posterior half of the upper eyelid of the Robin and the "blunt crescent" on the lower eyelid, remarks, in describing the young, "Heads as in adults, but *** the white orbital markings less sharply defined sometimes buffy."

Saulte Ste. Marie, Michigan, September 22, 1927.

ENGLISH SPARROW CONTROL

BY E. C. HOFFMAN

The accompanying chart represents the average movement of adult and young English Sparrows for twelve months into territory adjacent to my trapping and banding station which is maintained sparrowless, as far as this species is concerned, by continuous trapping. The Sparrows are trapped early each morning or as soon as possible thereafter depending on weather conditions. The chart shows results of three years of trapping, including 182 adult male, 187 adult female, and 1189 immature birds. Screech Owls and Sparrow Hawks assist in reducing the numbers of House Sparrows, while Crows from the County Park at Rocky River, two miles west, take many nestlings in the spring.