

## GENERAL NOTES

**A New Problem for Bird-Banders.**—The bird-bander is quite naturally interested in the value of his labors. The immediate results of his work are obvious; among other things he is contributing to our knowledge of the variations which exist within a species, the length of life of individuals, and of the conditions of mating. From the standpoint of general biology the work of the bird-bander is important since it adds a vast amount of detailed information on one of the major and most specialized of the vertebrate classes. In addition, bird-banding data can add to the material useful in the study of the history of races of animals as a whole. The conditions which bring about change or differentiation of a species are of utmost interest to the student of scientific natural history. It is logical to assume that if differentiation is to occur, deviates must first arise, they must mate with similar deviates, and they must transmit the deviation to their descendants. We have very little information concerning one of these steps. *Does mating occur with similar deviates?* that is, do like tend to mate with like? is there a tendency toward selective assortment at the time of mating? An impartial analysis of this factor can only be made by an exact mathematical analysis of a large body of observations.

The writer is at present engaged in this problem and is confronted with the difficulty of obtaining a large number of suitable measurements on birds. The cooperation of bird-banders would make possible the early completion of this research.

The data required must consist of uniform measurements of mated pairs. It is of the utmost importance that the observer be certain that the two birds involved are really mates. If possible, weight measurements are of value. The use of scale No. 651 made by the Central Scientific Company, 79 Amherst Street, Cambridge, Massachusetts, has been found particularly valuable. The information of cooperating members should include the date of measurement, locality, sex, and a list of the various characters studied.—C. M. POMERAT, Department of Biology, Clark University, Worcester, Massachusetts.

**Starling-Banding in Central Ohio during the Winter of 1932-33.**—

A total of 15,402 Starlings have been banded in the Columbus region from 1927 to April 1, 1933, by the cooperative efforts of various members of the Wheaton Club. More than six thousand (6215) of these were banded during the winter of 1932-33 as follows: Dec., 1584; Jan., 702; Feb., 1895; and Mar., 2034. George Wolfram and C. Conklin banded 1460 of these during six bandings in cupolas of barns near Canal Winchester. The remainder, or 4755, were banded by the writer, assisted by two students, William Ireland and Walter Fassig, during eighteen bandings in or near Columbus. Most of these birds were captured at night in five towers at the Ohio State Hospital.

A tremendous amount of data has been obtained on migration of the Starling, general habits, winter behavior, food habits, and general physiology. Conclusions reached as a result of the early banding work of 1927 to 1930, (as compiled by Edward S. Thomas), have been further verified. Various phases of the work will be reported upon as completed.

During twelve bandings throughout the winter at the State Hospital, 5402 birds were captured, 4229 new bands were placed, 808 birds repeated (some 7 or 8 times), and 206 returns from previous bandings were obtained. The percentage of repeats ranged from 5 to 38 (average 14.9) and the percentage of returns ranged from 1.2 to 8.9 (average 3.8).