

aged 5.4 nesting attempts; in 1939 378 pairs averaged 5.1 attempts and in 1940 93 pairs averaged 4.6 attempts, an over-all average of 5.2 attempts for the 772 pairs. Let us accept McClure's figure of 46.6% success of 8,018 Mourning Dove eggs in three states. In five attempts 10 eggs will be laid; 46.6% of these equals 4.66 young fledged per pair. So each pair of Mourning Doves can well raise the necessary number of young, even though they lose half their eggs. They do so by keeping everlastingly at it, many of them well into September, a few into October.

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Whither Bird-Banding — An Editorial

There comes a time in the life of almost all organizations and of almost all codified procedures when some new line of thought or action is needed to prevent the organization or the procedure from becoming sterile, and such new lines often grow out of external developments. We may take examples of this from taxonomy, the Linnaean, essentially artificial, classification of plants and animals gave way somewhat gradually in the first quarter of the nineteenth century to supposedly natural classifications based on comparative anatomy but still involved the fixity of species. The publication of Darwin's work on the origin of species in 1859 gave an impetus to taxonomic procedures which assumed that species were not fixed and led to our, now almost too great, devotion to varieties and subspecies. Only some fifteen years ago it became evident that taxonomy was again in danger of sterility. The points of view expressed in "The New Systematics" are only beginning to be put into actual operation and yet we now hear commonly of superspecies, clines, and Rassenkreise (perhaps not all who use these terms know quite what they mean).

Bird-banding as a technique also appears in danger of becoming institutionalized, sterile, and, in a word, bureaucratic. It seems to me that the time is past when any of us can sit back and wait for the returns to roll in. Most of us band small birds and the returns just don't roll in. Even if they did the time is, I think, long past when, in any field of ornithology, unless the case is very specialized, we can to any profit publish raw data. It needs to be analyzed and reduced. This does not mean that all banders must become competent mathematicians, but rather that they recognize in one way or another that the data that they have are of value but that they must be treated by modern methods. I am here concerned with two things which have been broached already by others—(1) the quantity of information which is in any bander's files and is unused, and (2) cooperative utilization of information where no one bander can hope to acquire enough on a given species to yield results of value. There have been, fortunately, a good many examples over the years of utilization of banding data which does not involve returns although it often involves repeats: Groskin's work on goldfinches and their color changes, the recent work by Parks on evening grosbeaks. In both of these cases, for very good reasons, the authors utilized only their own data which were, in the first place, adequately large, and in the second place, taken by methods which they could assure themselves were uniform. No two people would make precisely the same estimate of colors. On the other side, as instances of cooperation we have Fischer and Gill's work on the whitethroats published in *The Auk*, July 1946.

Mr. Bergstrom has but recently pleaded with banders to look over their files and put a little time towards summarizing the data that they have. Perhaps few banders realize the possible amount of information which is in their files. This can be studied in some detail mathematically. I would, however, from spot checks of my own files for chickadee, catbird, thrasher, and towhee, suggest that the situation may be about as follows: that the return rate based on individual, not on total returns, runs from less than 2% to a maximum of about 17% of the birds that could show returns. That, on the other hand, if we take the rate of trapping information, that is the number of birds that repeat, from the same few species it varies with me from 24 to 67%, several-fold larger. If we now look at the cards themselves and count up the number of items of information per bird, we find a still greater total of information. Here I include everything except the mere fact of banding, that is, I include that the bird was retrapped, that, either

at the time of the banding or later, I made observations on the color, the molt, the age, or the sex. The percentages are so large as to be uncomfortable. The information at hand runs from 4 to 10 items per banded bird. I make no claim to have been exhaustive in my study of the birds that have gone through my hands. I, for one, take no account of weights and not too much account of plumage color, being more interested in the color of soft parts. It is also to be recognized that birds like warblers will yield very much less information per bird, in general, than will chickadees or towhees, or similar more readily trapped birds. But, even in such cases, the total amount of information is not unimpressive.

How, then, are we to pull together this information? Mr. Bender, the Secretary of the Eastern Association, has suggested that we set up a widely representative advisory committee whose functions shall not be compulsory but permissive, and it shall have two main purposes: (1) to assist in bringing together banders who have handled the same species so that their data can be pooled, looking toward accounts of particular species, and (2) to assist banders in the analysis of their information, not necessarily by actually doing the statistical work, but by bringing them into contact with persons competent to do such work and who will do it on a basis of mutual understanding of the problems the bander faces and the problems the statistician faces. I would urge that both Mr. Bergstrom's and Mr. Bender's proposals have great merit, that they can certainly do no harm and are almost equally certain to, in the end, result in an immense amount of good for bird-banding and for ornithology in general.—Charles H. Blake.

NOTES AND NEWS

Great Britain recently banded its millionth bird since the start of its program in 1909, according to Dr. A. Landsborough Thomson, chairman of the Ringing Committee of the British Trust for Ornithology (as quoted in *The New York Times* from *The London News Chronicle*).

The Massachusetts Audubon Society (155 Newbury St., Boston 16, Mass.) has made a further addition to the sizes and colors of aluminum color bands which it has for sale as a service to banders, and a revised circular of these bands and some banding traps is enclosed with this issue.

Errata: Dr. C. G. B. ten Kate has drawn the attention of the editors to two errors in Review No. 9, *Bird-Banding*, 22(3): 129 (July, 1951). The Mallard noted was banded with a *Moscow band* at *Ilmen Lake* in NW Russia and was shot on the *southeast coast of the Ijsselmeer*. The second Pintail noted was banded with a *Moscow band* in *Astrakhan* on 10 August.

BACK NUMBERS — WANTED — FOR SALE. Do you need back numbers to complete your file? Will you donate back numbers to maintain our stock? Have you back numbers for sale? As a service to subscribers to assist them in completing their sets of *Bulletin of the Northeastern Bird-Banding Association* (1925-1929) and of *Bird-Banding* (1930 to date), and in order to ensure that back numbers no longer desired by their owners reach appreciative hands, Mr. Richard M. Hinchman, Secretary-Treasurer of the Northeastern Bird-Banding Association, has volunteered to act as a clearing house for back numbers. To this end, it is proposed to list from time to time back numbers which are wanted to complete sets and also those which are available for sale. Some subscribers do not keep back issues; some have back files which they do not use; and some may have duplicate copies. Do not destroy them. All donations of any back issues will be gratefully received. Send them to Mr. Hinchman at 75 Fairbanks Road, Milton 86, Massachusetts. In cases where back numbers must be sold rather than donated, do *not* send them to Mr. Hinchman but send him a list of what you have to offer (with prices). If you are trying to complete a set or acquire any particular issues, let Mr. Hinchman know your needs so that he can try to assist you. The following numbers are urgently needed to complete sets. Let us know if you have them available.