UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF BIOLOGICAL SURVEY
Washington, D. C.

BIRD BANDING NOTES.

No. 4. January 20, 1923.

IMPORTANT ANNOUNCEMENT.

In order that the banding files may be at all times up to date and that the clerical labor involved in this work may be reduced, the Biological Survey will hereafter issue with each order of bands the cards for new records of banded birds. The cards will be numbered to correspond with the bands and (in the case of stations that are very active) the name of the operator and his station will also be filled in by rubber stamp. Schedules will henceforth be used only for repeats and returns. This procedure should be followed by each operator for all future shipments of bands that he receives. A circular describing the full details will be sent out in a short time.

More than four months have elapsed since Bird Banding Notes No. 3 was issued, during which time there have been many developments important for the further advancement of this interesting work.

STATIONS.

The Biological Survey has received descriptions of some very interesting stations. These data are always of value in helping us to understand the work of the operator and to advise him when difficulties arise.

Richard B. Harding, of Brookline, Mass., has established one station at Cohasset, Mass., and is now working on another at Brookline. Members of the New England Bird Banding Association are particularly fortunate because of their ability to establish stations so close together that they could be well connected. It is to be hoped that bird migration in the Connecticut Valley will also be more thoroughly known after a few years of intensive banding by this organization. For work of this character, stations must be more or less permanent.

NOTE: - "Bird Banding Notes" is not a publication in any sense of the word, being issued merely for the information of our collaborators, not for general distribution. However, anyone using in a published paper any of the information contained in this circular will be expected to give full credit to the person named and to the Biological Survey.

The relative abundance or scarcity of natural food will probably always be an important factor in bird banding work, for in the last analysis we are playing upon the appetite of the birds in offering foods that experience has shown to be favorites. But with an abundant supply of natural food, or, strange to say, when it is excessively scarce, the difficulties of trapping are likely to be increased. Examples of both of these situations have been brought to our attention.

Mrs. Ethel M. Towns, of Milwaukee, Wis., has been spending the winter in Virginia, near the mouth of the Potomac River, and recently called at the Washington office while on her way back to Milwaukee. She reports all efforts to start a station at her Virginia farm were failures, due to the great abundance of natural food which prevented any appreciable concentration of birds.

A great scarcity of food, on the other hand, would be likely to cause the great mass of the birds to leave the region entirely, which is apparently the condition at Glenolden, Pa., where John A. Gillespie is operating. He reports that even such species as the white-throated sparrow left his neighborhood. Here again is an argument for permanent stations, for when a small group of birds come to know that food is always available at a certain place, they will be the means of drawing others, and will also afford splendid opportunities for studies on their life histories.

Again we repeat, Do not band English sparrows. This bird is a distinct menace to the success of trapping operations for native birds, and no station will be very successful so long as a flock of these pests is permitted to remain in the vicinity. At some future time some study of this species may be undertaken by the banding method, but at present our advice is to destroy them whenever troublesome.

The matter of cats need not be considered, for every operator is likely to take proper action after his station has been raided a few times by one of these animals.

The question of the amount of harm done by trapping and banding is being brought up continually, and while it is our belief that the actual deaths of birds due either to the trap or the band are very few, we nevertheless intend to collect all possible evidence. To this end we should appreciate having every operator make it a point to include in his report any accidents that have happened at his station. Report the nature of the accident, its cause (if known), and the result. Bruising of the skin at the base of the mandibles by birds in the trap seems to be the most common injury, but this has been demonstrated to be of little consequence.

TRAPS.

As stated in Bird Banding Notes No. 3, the Biological Survey desires to assist its collaborators by advising them of the value for this work of the different types of commercial traps and also by testing the different types that are devised as the work progresses. Two models are now being constructed in the mechanical shops of the Department of Agriculture and it is

hoped that an opportunity will be presented to test them so that they can be described in the next issue of these notes.

Willis H. Ropes, of Danvers, Mass., reports that he is lining part of the trap chambers of his sparrow traps with fine meshed copper screen in order to prevent birds' bruising the skin at the base of the bill. And Miss Bertha L. Brown, of Bangor, Me., has advised that she is using netting of only one-fourth-inch mesh on her traps to eliminate this trouble.

A simple and easily constructed sparrow trap is described by John A. Gillespie, of Glenolden, Pa. The floor and back are made of wood, the former measuring 24 by 30 inches. A hinged door is constructed in the back. The top and sides are formed from a single piece of window screening, which is bent in at the front to form the funnel. Mr. Gillespie says: "This trap has its advantages (and disadvantages) and has yet to prove its worth, but I believe it has possibilities." The idea looks good to us and we only suggest adding a few wires to the mouth of the funnel so that the opening may be enlarged or reduced when set for birds of different sizes.

S. Prentiss Baldwin is continuing his experiments with woodpecker traps and has sent us a specimen of his latest model which we will endeavor to describe and illustrate in a future issue of "Bird Banding Notes."

BAITS.

The subject of baits is receiving increased attention from operators and some very interesting and practical results are being obtained. Rev. George Roberts, of Lake Forest, Ill., reports that he has found dried bread crumbs good bait for robins. He uses toast crusts put through a chopper and states that he never had robins on his food shelf until he added this to the seed diet.

Dr. R. D. Book, of Corning, Ohio, has submitted a most interesting account of some of the foods that he has given to native birds in captivity. If possible, we will reproduce his letter in the next issue of these notes.

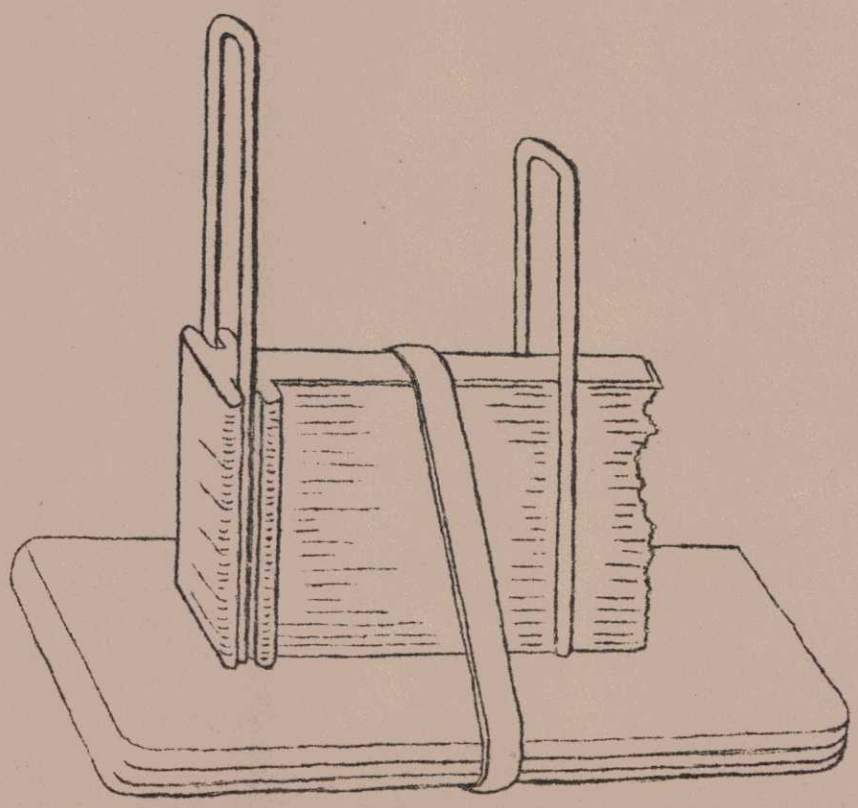
BANDS.

Probably the most important development of recent months is the obtaining of an adequate supply of bands. This has been secured through the interest and cooperation of Theodore A. Gey, of Norristown, Pa., and we are therefore now able to undertake extensive operations and to give close attention to any plans that may be formulated for special work. Those of our collaborators who have received any of the new bands have probably noticed that the material has a harder temper. This was considered advisable in order entirely to eliminate any chance of having birds with powerful beaks, such as some of the finches, grosbeaks, and blackbirds, crush the bands so tightly against the tarsus as to cause serious injury.. A little more care will be required in handling these bands. Small pointed pliers are an absolute necessity in closing them, but we believe that this will be more than offset by the almost positive guarantee against injury to the bird. A letter recently received from Wm. I. Lyon, of Waukegan, Ill., fully convinces us of this. He

says: "Yesterday (December 18) I trapped the first purple finch of the season and his powerful beak made me feel that the new bands should be kept as well tempered as possible; that it would be far better to endure a little inconvenience while placing the bands than to risk crippling birds." As Mr. Lyon placed over 1,400 bands during 1922 and handled over 5,000 birds, such comment from him bears much weight.

Those operators who occasionally or regularly use large numbers of the adjustable (X) bands will be interested in some experiments by Frederick C. Lincoln of the Biological Survey, while trapping and banding ducks in the Illinois River marshes. The problem of keeping these bands in their proper numerical order was solved by placing them in racks, made to hold one hundred each.

The accompanying sketch shows how these racks were made and used. The vertical inverted U-shaped holders were made of galvanized wire, with one standing about an inch higher than the other. The bands are held in place by the legs of one U that passes between the locking nibs and a stout elastic band which holds them tightly together while en route to and from the traps. When engaged in banding, the elastic is removed and by lifting one side of the top band it may be taken from the rack in a second's time. With a little practice these bands may be readily attached in about one minute, including the time required to record the data. During the month of November Mr. Lincoln banded about 1,100 mallards, black ducks, and pintails. For this work a pair of pliers with narrow jaws about an inch and a half in length was found preferable as it greatly increased the speed of the banding operation.



Method of Holding Bands.

Occasionally we find that some operator reports a band on two different birds. This, of course, means that it has been removed from one and placed on another bird, which often causes a considerable waste of time at the office where the banding file is kept. A band, once reported as having been used, should never be used again. If the carrier repeats and it is found necessary to change the band or if a "short return" is effected, the data should be reported but the band should either be preserved with the record at the station, or (better) destroyed.

BIRD BANDING ASSOCIATIONS.

At the meeting of the American Ornithologists' Union, in Chicago, Ill., during the latter part of October, a new cooperative organization was started which has adopted the name of the Inland Bird Banding Association. An organization meeting was held at the City Club on the evening of October 24, at which the following officers were elected: President, S. Prentiss Baldwin, Williamson Building, Cleveland, Ohio; vice-president, Leon J. Cole, University of Wisconsin, Madison, Wis.; secretary, Wm. I. Lyon, 760 North Sheridan Road, Waukegan, Ill.; treasurer, Herbert L. Stoddard, Public Museum, Milwaukee, Wis. Five counselors were also elected: M. J. Magee, Sault Ste. Marie, Mich.; Mrs. H. C. Miller, Racine, Wis.; P. B. Coffin, Chicago; Dr. F. C. Test, Chicago; and Dr. H. B. Ward, Urbana, Ill.

The new association plans to give particular attention to the important Mississippi Valley flyway, probably starting with a series of stations along both sides of Lake Michigan and gradually connecting up with other stations now operating to the south and in the Ohio Valley. Mr. Baldwin or Mr. Lyon will be glad to get in touch with any cooperators in this region who have not already become affiliated with the organization.

The annual meeting of the New England Bird Banding Association was held in Boston on January 17. Full details of the meeting are not yet available but will be included in our next number. This association has been exceptionally active during the past year in securing a large membership, and as the records now come in it is evident that it has enlisted the services of a large number of active workers, who have established stations and are preparing to give the work a great deal of attention.

Among the papers presented at the Boston meeting was the following interesting account of a new trap, by Mrs. Elizabeth A. Herrick.

In reproducing Mrs. Herrick's paper we wish to call the attention of our collaborators to the medium of distribution of such articles offered by Bird Banding Notes. Although not a publication in the accepted sense of the word, nevertheless short sketches illustrative of new methods or of interesting results may be here reproduced and sent to all other persons who are interested in the bird banding work. Also, it is preferable that this medium be used for these preliminary accounts and for incomplete records meant for mutual help of bird banding cooperators, rather than have them printed prematurely in the ornithological journals. Such contributions will be welcomed by the Biological Survey, and while we may not always be able to use all that are offered, we will do our best to bring interesting experiences and results to the attention of all cooperators.

BIRD BANDING WITH SMALL EQUIPMENT.

By Mrs. Elizabeth A. Herrick.

Early in 1922 I joined the New England Bird Banding Association, persuaded that the work would be worth while if I could report only one bird banded at the end of the season. I felt quite sure I never should be able to band a single bird. How was I to get the birds in the first place, and if such an unlikely thing did happen, how was I to attach the bands? It seemed utterly impossible, as I had no trap and knew I could not have one of the Government traps; but, on talking with my brother-in-law about the matter, he offered to make a trap in which he felt sure I could catch some birds.

The accompanying illustration shows the trap he made. It is simply a bird cage made of brass wire, 6-1/2 inches by 8 inches, by 10 inches high, not very much larger than the Government gathering cage.

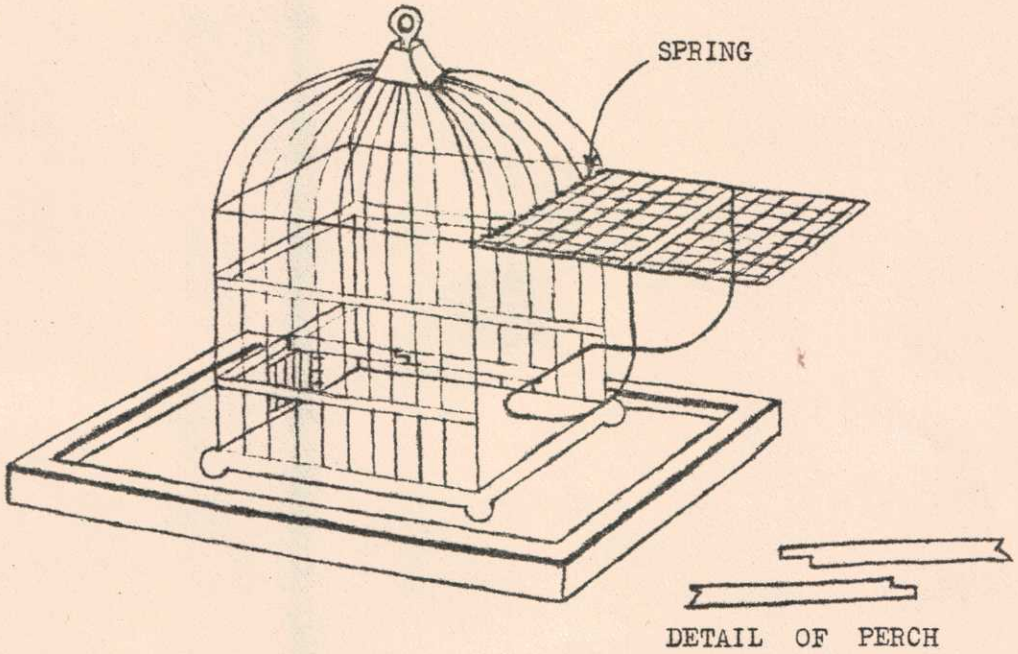


Diagram of Cage Trap.

The back of the cage was cut out and fitted with a wire door, as indicated, covered with green cloth netting and provided with a spring to make it self closing. Across the center is a wire loop extending into the cage when the door is closed. To set the trap, a perch, adjustable in the center (see insert) with notched end, is placed against the wire loop at one end of the cage and against the wire just above the small door at the opposite end. The slightest touch will break the perch and close the door. Many similar devices could be used to accomplish this result.

March 14, 1922, at 10 a.m. the trap was placed on a small platform, 12 by 24 inches, on the roof of the piazza, one story from the ground, just outside of a bedroom window, and baited with sunflower and hemp seed. I think I should say here that I have been feeding a great many birds on that same small platform for several years, so, of course, I felt sure that birds would come there, but I did not feel at all sure they would go into and spring the trap.

At 3:30 p.m. of the same day, I had occasion to go to the room with no thought of the trap in my mind. Imagine my surprise when upon glancing at it I found a male evening grosbeak imprisoned. That I was excited goes without saying, and I wondered if I could take him out of the trap and attach the band without injuring him. It seemed a most difficult thing to do, but I was determined to try, with the result that I found it much easier than I expected. The bird behaved very well and made me no trouble whatever, and he is now No. 16985.

The next day I banded two more and the following day three more and I kept on until I had banded 35 evening grosbeaks! One day No. 17979 repeated and I found that the bird had been able to pinch the band with its powerful beak, so I readjusted it. This was due to the bands being made of too thin aluminum, and I am glad to say the new ones coming to me now are being made of the needed thickness.

I had large numbers of these birds come to my trap every day and hour, and often counted 23 at the same time. On one occasion two were trapped at once and several times I had three in the trap. Sometimes the grosbeaks would go in and out of the trap without springing it and smaller birds used occasionally to do the same thing, so I attached a strong thread to the perch and brought it through the window into the room where I could spring the trap at will.

During the nesting season, instead of setting the trap, I attached a thread to the small door (see cut), which has a spring strong enough to close it when the thread is released from within the house, and I found that the birds would go in as readily as they did the other way. I have had birds so eager to enter that they would go around the other side if this door was closed trying to find an entrance, and more than once I have gently pulled the door open in front of them and they would calmly hop around and go in.

I banded one fox sparrow, and from April 15 to August 27 I banded 86 purple finches. I also banded song and chipping sparrows. Purple finch No. 26387 was banded April 19, 1922. While I had my hand around him in the trap, with fingers apart, ready to slip over his head, he deliberately picked up a sunflower seed and cracked and devoured it with my hand still around him.

No. 29644, a male purple finch, went into and sprung the trap May 17, 1922. I found him perched upon the wire loop, singing his heart out, regardless of the fact that he was a prisoner.

From March 14 to September 13 I banded 144 adult birds and had 118 repeats, not counting a number of grosbeaks that I took from the trap and didn't band - not such a bad record for a beginner and one small canary-cage trap!

####