

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF BIOLOGICAL SURVEY
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BIRD BANDING NOTES.

No. 3.

September 8, 1922.

Notice Regarding Bands.

Since the June 15 issue of "Bird Banding Notes" the shortage of bands has been a most serious detriment to our work. It has been a source of continual regret that we have been unable to comply with the many requests received, some of which were based upon plans ready for execution.

Our collaborators may be assured that the Biological Survey is doing everything possible to expedite this matter and our contract manufacturer is now perfecting a machine that he believes will have, when finished, a capacity adequate to supply all our needs. Production should start at a very early date and just as soon as a supply has been received we will endeavor to fill all the orders that have been received during the past few weeks.

While on the subject of bands, we wish to caution our collaborators to take care of their supply, for these bands represent a cash investment and on our records operators are charged with the numbers issued to them, until reported as used. Losses should therefore be guarded against as much possible, but if they occur should be reported at once.

Collaborators are also urged to forward their schedules promptly. In most cases their receipt will be acknowledged by a card form that has been adopted to facilitate our bird banding correspondence. With this card additional schedules and penalty envelopes for future records will be sent to the operator.

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.

Growth of Bird Banding.

The following figures are indicative of the growth of the work and will probably be of interest to bird banding collaborators. The period represented is from July 1, 1921 to June 30, 1922, the fiscal year of the Federal Government.

Total number of collaborators (permittees).....	490
Collaborators who have received bands.....	321
Total number of bands issued.....	30,499
Total number of birds handled (includes repeats).....	13,799
Total new birds banded (since Jan. 1, 1922, only).....	5,940
Total returns (not counting repeats).....	149

Traps.

Anyone wishing to accomplish a piece of work that is particularly desirable should devote his attention to inventing a trap that can be successfully used for the capture of warblers and other species that habitually frequent the tops of trees.

The Biological Survey is making an effort to secure and test out the various sparrow traps that are on the market. As this information is secured it will be made available to collaborators through this medium, with comments intended to increase the effectiveness of the traps.

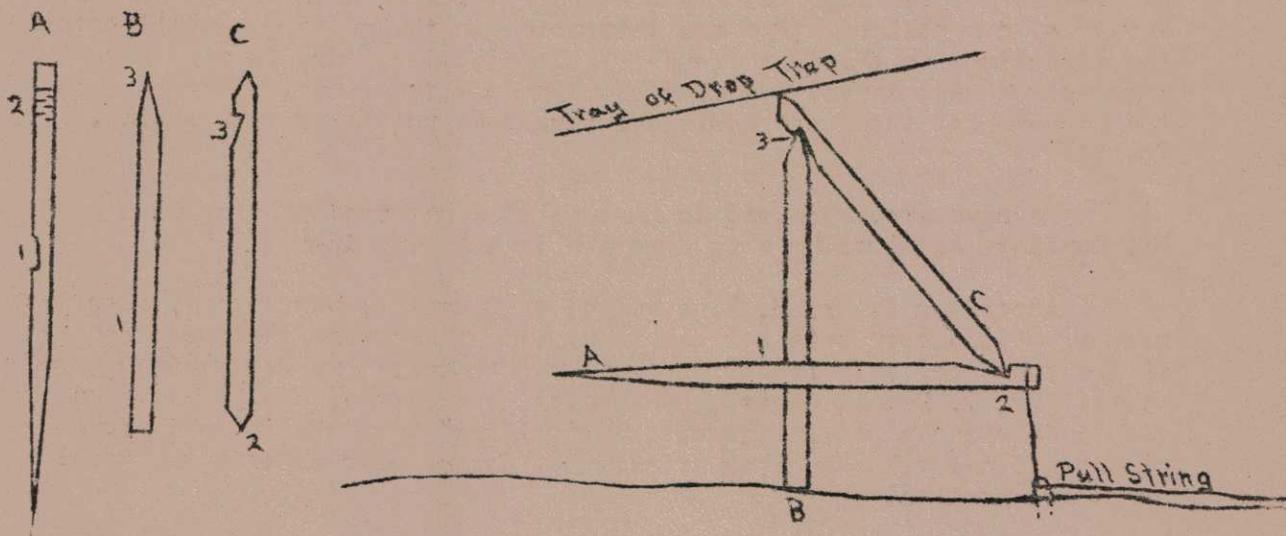
Probably most stations are using some form of the "Government" sparrow trap, which continues to be one of the best types for general work, but we have had many complaints that one of the traps placed on the market especially for banding use is not satisfactory. A sample of this trap has been procured and we find two serious defects.

First, there are no wires attached to the funnel outlets for reducing the opening and for preventing the egress of birds that have entered. These wires are important. They may be omitted from the second funnel, but they must be attached to the first. Each collaborator may correct this defect himself, however, in a few minutes. We corrected our sample readily. Six wires, each about 6 inches long will be needed; ordinary baling wire will answer. These are laced back and forth through the meshes of the funnel (two on the top and two on each side) so that 2 or 3 inches of the wire will project into the chamber. These should if possible, be soldered in place, but if they are woven carefully into the funnel they will probably hold without soldering. See "Instructions for Bird Banding," page 5.

Second, paint the trap olive green. All traps made of hardware cloth or wire netting should be painted and it will be a distinct advantage if everyone will use about the same color. Dark green is best.

Several operators have reported adding the "house trap" to their stations. Indications are that this is a good trap and it must be apparent that no one type of trap is suitable for all birds. The Government sparrow trap is excellent for many ground-feeding species, but, if a large variety of birds are to be captured, traps of different types must be tried. During the fiscal year 1922 (ending June 30) the station of Mr. Wm. I. Lyon, at Waukegan, Illinois, handled nearly 3,000 birds, secured through the operation of 20 to 30 traps, and Mr. Lyon is continually experimenting with new models.

Dr. Lewis Rumford, of Wilmington, Delaware, has advised us that he is employing the well-known "figure four" with his "drop traps," thereby making them automatic. In order to make results certain, however, he uses a "pull string" as well, as this enables him to operate the trap when the bird is slow to perch on the trigger stick. For the benefit of those who may not be familiar with this device, we are reproducing a sketch of the three parts, showing also their appearance when set. Soft pine or cedar will make the best sticks which should not be more than one-half inch square. The figures indicate where the different notches and points are engaged when the trap is set. The tray or box is supported at the top of piece "C." Trigger piece "A" forms an inviting perch which a bird is almost sure to accept, but upon attempting to do so, this stick will be dislodged, causing sticks "B" and "C" to fall and thus dropping the trap over the bird. Bait may also be secured to the trigger stick.



Doctor Rumford states that he makes his drop traps from a single piece of netting, cutting and bending it to form the tray or box, while Mr. Lyon uses netting of smaller mesh for the sides, folding the two pieces together into smooth seams.

Baits.

As previously stated, there is need of more experimental work with baits, if we are to be successful in banding a larger variety of birds. A recent letter from Mr. Verdi Burtch, of Branchport, New York, informs us that he has found his most effective bait to be weed seeds obtained at the local grain elevator, where they are removed as waste from wheat and other grains. This offers an excellent suggestion, and should be of particular value during the winter season. Mr. Burtch states that he has fed these seeds to pheasants, snowflakes, red-winged blackbirds, tree sparrows, and horned larks; a flock of 80 of the last named having been noted at his station on one occasion. Weed seed is natural food, so by using it birds are supplied with what many of them seek for themselves.

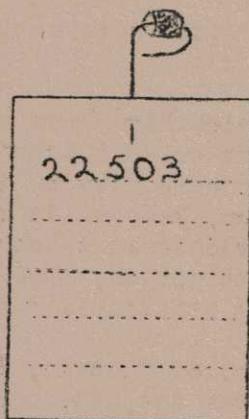
Mr. R. A. Cumming, of South Vancouver, British Columbia, reports another bait that we believe will be particularly useful. He states that meal worms fastened to the bottom of the trap are probably the best all-round bait for insectivorous birds. These worms may usually be secured from dealers in cage birds, and will live and move for days when secured to a small piece of wood on the floor of the trap. Moreover, meal worms may be easily raised and it is thus possible to maintain a continuous supply of bait of this character. The Biological Survey will be glad to furnish instructions for the raising of this insect and if enough of our collaborators are interested in the matter, we will print the directions in the next issue of this circular. Mr. Cumming says that maggots and wasp larvae may also be used in this manner. This may solve the problem for those operators who have been unable to trap robins. Try it.

We have also received an account of a new type of trap from Mr. Cumming, which we hope to describe in the next issue.

According to Mr. B. S. Bowdish, of Demarest, New Jersey, cherries make a satisfactory bait for catbirds, and we are sure that the fondness of the robin for this fruit might be used to trap them for banding purposes. Mr. T. Donald Carter, of Boonton, New Jersey, has provided us with a description of an interesting "folding" trap that should prove of exceptional value on long trips. Mr. Carter also reports that meal worms are good bait.

Banding Methods.

Mr. Sterling P. Jones, of Webster Groves, Missouri, has advised us of a rather unique manner of handling the small bands while visiting the trap. Small tickets (such as are frequently used in department stores) with a single pin attached, are used. A ticket is used for each band, which is held by bending the pin. The number of the band is indicated on the ticket and there is abundant room for the other data. These tickets may be easily and rapidly manufactured from pasteboard and copper wire and might be used several times if care is taken in erasing the record after it has been transferred to the schedule. This scheme may have advantages for all, but should appeal particularly to those who have had trouble in reading the numbers of the small bands as the bands might be fastened on the cards during leisure time with the aid of a reading glass. A sketch (full size) is here reproduced.



Results from the Summer's Work.

The summer season has yielded the results that were anticipated, namely, the banding of large numbers of fledglings.

In looking over the schedules that have been received, we find that our collaborators have been successful in banding representatives of many families. Robins, bluebirds, grackles, and swallows of two or three species have been general favorites; but phcebes, crested fly-catchers, song, field, and chipping sparrows, meadowlarks, red-winged blackbirds, screech owls, least, common, and roseate terns, flickers, downy woodpeckers, and several kinds of warblers have also been banded in numbers. Two colonies of night herons in Massachusetts received

attention, one from Messrs. L. B. Fletcher, James Mackaye, and C. D. Floyd; and the other from Dr. Chas. W. Townsend. Mr. Henry E. Childs, of Providence, Rhode Island, banded a large number of Leach petrels, and Mr. Herbert L. Stoddard of Milwaukee, Wisconsin, visited Bonaventure Island, Quebec, and banded over 200 gannets.

As stated in correspondence to collaborators, we consider the banding of fledglings a matter of importance, provided methods are developed for the recapture of the birds when adult. With the better enforcement every year of Federal and State laws for the protection of birds the probability of securing return information from birds that have been killed (except game birds in season) is very slight. It is therefore obvious that we must depend entirely upon the operation of trapping stations for this information. This will also explain why collaborators are continually urged to establish stations.

Unusual Captures.

The capture of animals other than the birds desired for banding, will probably be the cause of some interesting experiences and, in certain cases, annoyance.

Squirrels, rats, and mice have been rather frequently caught. Squirrels are found to be particularly troublesome, and one operator writes that he has had to dispatch five of them. Others may be obliged to resort to the same practice, keeping in mind, of course, the State laws that may protect or provide open seasons on squirrels. In case local laws prohibit their destruction, they might be liberated as far as possible from the trapping station, and they will probably not return.

Mr. Percival B. Coffin, of Chicago, Illinois, reports that during the first two days his trap was set, the captures were one skunk, one red squirrel, and one healthy rat. The squirrel and the rat might be readily removed, but Mr. Coffin's letter is silent as to the method employed in removing the skunk and as to the results. Mr. Verdi Burtch has had a similar experience in double measure, two half-grown skunks entering his trap one morning, and Mr. Johnson Neff, of Marionville, Missouri, reports trapping a tortoise and a yellow-billed cuckoo at the same time.

But the most unusual capture yet recorded from a bird banding station comes from Dr. Wm. C. Herman, of Cincinnati, Ohio. Dr. Herman states that upon returning home one evening he was surprised to find a number of men, women, and children about his trap. The cause of the gathering was soon apparent, for a most interesting specimen had been captured, a vervet monkey, that had escaped from the near-by Zoo. The doctor states that he did not band this capture.

Returns.

Under this heading, operators should give particular attention to the records secured by Mr. L. R. Talbot, while operating Mr. Baldwin's station at Thomasville, Georgia. (See The Auk for July, 1922.) The results from that region may be taken as an indication of what information will be secured if a large number of similar stations are consistently operated year after year.

Miss Kathleen M. Hempel, of Elkader, Iowa, has recently recaptured two of the birds that she banded in 1921. Blue jay No. 18295, banded June 8, 1921, was retrapped June 12, 1922; while catbird No. 55003 (A.B.B.A. series), banded June 12, 1921, was retrapped June 18, 1922. Neither of these birds repeated in 1921, and it is rather remarkable that in both cases the elapsed time should be so nearly the same.

Mr. E. J. Middleton, of Jeffersonville, Pa., reports capturing on May 10, 1922, purple grackle No. 8601 which was banded by him on July 29, 1921.

The destructiveness of the house cat to our song and insectivorous birds is being further demonstrated through the bird-banding work. In this instance the case is against the well-fed house cat that proclaims its guilt by bringing its victims to the home where presumably a sufficient quantity of proper food is supplied. The following extract from a letter received by the Biological Survey is typical of such cases: "Our mother cat caught a little house wren for her little kitten just like any mother cat would, but she was severely punished for this act. On this wren we found an aluminum marker with the following inscription, 'Biol. Surv. 21042.'" House wren No. 21042 was banded as a fledgling by Mr. Wm. I. Lyon, at Waukegan, Ill., June 23, 1921. It was captured by the cat in Chicago, June 9, 1922.

Returns of this nature will probably be numerous, but a more unusual case is found in catbird No. 53823 (A.B.B.A. series). On June 4, 1922, Dr. R. D. Bock, of Corning, Ohio, banded two catbird fledglings. Five days later he made another visit in order to learn as near as possible when the youngsters left the nest. As the adults were making a great commotion he presumed that the young birds were just ready to fly, but instead he found a large blacksnake clinging to the limbs of the bush. Fearing the worst, he killed it, and finding the nest empty the snake was opened and one of the banks (No. 53823) was recovered. The other nestling could not be found and it may have escaped from the nest at the approach of the reptile.

Plans.

As the work progresses, it is becoming more and more evident that better results will be secured if certain species are given particular attention. This should result in the banding of larger numbers of these birds, and therefore in a larger number of returns.

Grackles, robins, song sparrows, white-throated sparrows, chipping sparrows, juncos, house wrens, shorebirds, doves, herons, and water-fowl should be banded at every opportunity. Some of these birds have economic problems that await solution, and their life history and migrational problems connected with them all.

We must also urge collaborators to be particular to report all repeats. These data are of much significance and should not be neglected. The following history of a song sparrow banded at Cohasset, Massachusetts, by Mr. L. B. Fletcher will show the importance of these records.

No. 11006, Song Sparrow.	Banded May 28, 1921,	8:15 P. M.
Repeats 1921.	May 31,	12:00 Noon.
"	June 5,	7:00 P. M.
"	June 6,	11:00 A. M.
"	June 7,	4:00 P. M.
"	June 16,	4:00 P. M.
Return, 1922.	May 13,	3:00 P. M.
Repeats, 1922.	May 16,	11:30 A. M.
"	May 16,	4:00 P. M.
"	July 5,	5:00 P. M.
"	July 13,	8:00 A. M.
"	July 22,	2:00 P. M.
"	July 26,	11:00 A. M.
"	July 29,	8:00 A. M.
"	Aug. 10,	3:00 P. M.

What became of No. 11006 after June 16, 1921, and where did he go on May 16, 1922, after he had returned three days previously? What was he doing in the period from May 16 to July 5? At present these questions are puzzling, but with persistent work, such problems will ultimately be solved.