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

BIRD BANDING NOTES

No. 8. September 24, 1923.

GENERAL INFORMATION TO COOPERATORS.

The date the fiscal year of the Federal Government ends is June 30, at which time records are closed and material assembled for annual reports. Bird banding cooperators will be interested in a few figures that illustrate the growth of the project during the fiscal year 1922-23: Total number of cooperators - including 63 in Canada - 851; ring bands made and issued, about 79,000; new birds banded and recorded, 25,068.

In response to the notice in Bird Banding Notes No. 7, several cooperators who had not reported for several months have advised the Bureau of their plans for further participation in the work. We are glad to hear from them and hope that they will be able to carry out their intention. The Biological Survey has no desire to call in bands when there is a probability of their being used, but as this material is expensive it is obvious that we ought not to have a large number of bands remaining idle when there are other operators who would be glad to use them.

When forwarding requests for bands, be sure to sign your name. Post office employees occasionally fail to cancel penalty post cards and envelopes, so if the communication is unsigned, the Bureau has no clew to its origin. Several unsigned order cards have already been received.

Regarding the use of bands.— Do not use Biological Survey bands on domestic poultry. They are intended only for wild, native birds. If a banded bird dies or is killed at the original station a few days after banding, destroy the band, and report the matter to the Bureau. Never under any circumstances use a band a second time. To do so might endanger the paramount feature of accuracy in the bird banding files.

NOTE: - "Bird Banding Notes" is not a publication in any sense of the word, being issued merely for the information of our cooperators, 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.

Regarding record cards.--The locality to be entered on the line "Where banded" should be the geographic locality; that is, the nearest post office. A more detailed location, such as "trap C" or "Clear Creek, 2 miles west," may be entered on the two lines under "Remarks." It has recently been necessary to go over a large number of cards and add the geographic locality that had been omitted by operators.

Be sure your identification of a bird is correct and then give its full name. "Blackbird," "grackle," or "wren" is insufficient. It is not necessary to make subspecific determinations, but the species should be indicated, as "red-winged blackbird," "bronzed grackle," or "house wren." Also, be sure to indicate whether the bird is an adult or a fledgling. This is an important item in the determination of the longevity of birds.

Don't send in repeats on separate cards. If a new bird repeats before the card is sent to the Bureau, the additional data should be recorded in the section under "Record of recovery." Repeats secured after a card has been forwarded should be preserved at the station, compiled semiannually, and forwarded to the Biological Survey. See Bird Banding Notes No. 7 for sample form of reports. Interesting items intended for this circular may be sent in at any time.

Photographs.--The Biological Survey is making an effort to build up a collection of photographs pertaining to the bird banding work. These are desired for use as illustrations and for lantern slides. Good, clear prints on glossy paper are accordingly desired. Any interesting pictures, such as banded birds (particularly of returned birds), trapping stations, or related subjects will be valuable and help make the collection useful. The cooperator will be given full credit if one of his photographs is used.

Separates of Dr. Harry C. Oberholser's paper, "Bird Banding as an Aid to the Study of Migration," and T. E. Musselman's paper, "Bird Banding at Thomasville, Georgia, 1923," both from the July number of The Auk, have recently been sent to all cooperators. This was possible through the interest and generosity of S. Prentiss Baldwin.

A revision of U. S. Department of Agriculture Circular No. 170, "Instructions for Bird Banding," has been prepared, and will be printed and distributed as soon as possible. A bulletin is also planned by the Biological Survey that will contain all returns secured up to June 30, 1923. These data will probably be issued in tabular form, with such discussion as the material will permit, and a large amount of information will be thus available for those contemplating special studies.

STATIONS.

The summer season has witnessed several special bird banding expeditions, while almost every regular station has been able to maintain a good standard. One expedition, the personnel of which included L. B. Fletcher, E. H. Forbush, Prof. A. O. Gross, and seven others,

went to the large colony of black-crowned night herons at Barnstable, Mass. Dividing into two parties, they thoroughly worked the colony, banding 300 youngsters in eight hours. Not satisfied with this, Mr. Fletcher went to Canton, Mass., and added a number of black ducks to his list of banded birds.

F. C. Lincoln, of the Biological Survey, made a special trip to St. James, Mich., where, in cooperation with W. S. McCrea, of Chicago, Ill., he visited all of the colonies of herring gulls and Caspian terns in the vicinity, and banded over 650 young birds. Shortly after, Mr. McCrea made a second trip to one of the islands and banded 100 young common terns. He was assisted by his brother, S. Harkness McCrea, who has recently established a trapping station at Darien, Conn.

Another new cooperator who is showing much enthusiasm is Walter E. Hastings, of South Lyon, Mich. Early in August, Mr. Hastings visited a colony of common terns in Saginaw Bay, Mich., and banded 500 young in a single day.

A colony of night herons at Ipswich, Mass., was visited by S. G. Emilio, who banded the young; another colony, at Whaleboat Island, Harpswell, Me., was visited by Aaron Marden.

Herman Battersby, of Oak Lake, Man., has been successful in banding ducks of three or four varieties, as well as coots, shorebirds, Franklin gulls, sharp-tailed grouse, and prairie chickens. Two Richardson owls were also decorated with the numbered markers.

Paul E. Page, of Eagle Gorge, Wash., has recently been at Lac Ste. Anne, Alta., where he banded several ducks. As they were breeding birds we shall anticipate returns with much interest.

Prof. Dayton Stoner made a record of 282 birds banded during June and July, while working at the Lakeside Laboratory, Milford, Iowa. These included a large number of bank swallows captured by means of a long-handled net.

Philip Foran, of Ottawa, Ont., was also successful in marking bank swallows, visiting the same colonies that last year received his attention.

J. Van Tyne, of Ann Arbor, Mich., banded a young upland plover, adding another species of shorebird to the list of birds banded. Someone should try to capture and band a large number of yellowlegs. This species migrates to South America and individuals are frequently killed there, so that returns of much interest might be obtained.

J. A. Gillespie, of Glenolden, Pa., reports that of 13 catbirds that he has banded, 9 have repeated at least once.

Roland C. Ross, operating at Pasadena, Calif., has banded a large number of house finches. It should be possible to conduct plumage studies with this species similar to those being carried on by M. J. Magee with purple finches. Mr. Magee has banded 908 purple finches this year and reports 29 returns at his station at Sault Ste. Marie, Mich.

Mrs. Eleonora S. Morgan, of Northeast Harbor, Me., has also banded a large number of these birds, which have, in fact, been general favorites at stations in the eastern United States.

Mrs. Jean E. Carth, of Wellesley, Mass., captured several rose-breasted grosbeaks with her canary cage trap. One male acquired the "trap habit," as he repeated several times.

E. O. Grant, of Patten, Me., has found that many birds will drink from a spoon while held in the hand. He states that one frequent visitor, a chipping sparrow, has come to expect his drink of water after being taken from the trap.

Prof. J. M. Robinson, of the Alabama Polytechnic Institute, Auburn, Ala., reports a total of 547 birds banded during the season of this station. Chipping sparrows lead with 541, followed by cowbirds, 169, and pine siskins, 110. Representatives of 15 other species were marked.

Among other interesting semiannual reports that have been received is one from Miss Marion A. Boggs, of Waynesville, N. C. A few years ago song sparrows were unknown in her vicinity but they have now become common, and many have been trapped and banded at her station, which is at an altitude of 2,800 feet. Farther on in this issue reference is made to the bait used.

Willis H. Ropes, of Danvers, Mass., has had the interesting experience of banding in one season three broods of bluebird fledglings from eggs laid by one female. The first brood was banded May 18, the second late in June, and the third early in August. The identity of the parent was determined by using the trap door attachment.

A letter from L. McI. Terrill, of St. Lambert, Que., calls attention to the danger of disturbing the vegetation around nests and of otherwise leaving the site in such condition as to make it a bait for predatory animals. Mr. Terrill's warning is a good one and cooperators should bear it in mind, particularly when working with young birds that are not actually on the grounds of a station where they may be accorded protection from cats, weasels, and other enemies of birds.

TRAPS

The development of traps of new types continues to occupy the attention of many cooperators, and drawings and descriptions of several have been received that appear to be particularly successful. In order to bring all this information to the attention of cooperators it may be possible to issue in the near future a "Special Trap Number" of this

COMBINED COLLAPSIBLE "DROP" AND AUTOMATIC TRAP.

PLATE I

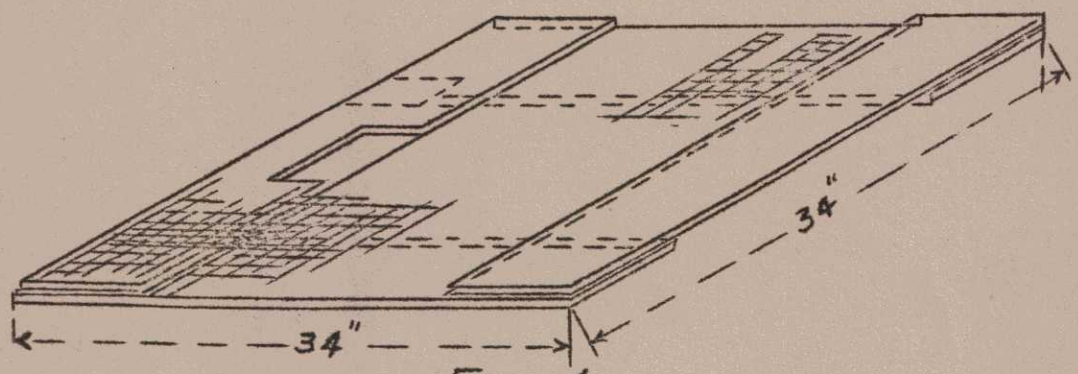


FIG. 1

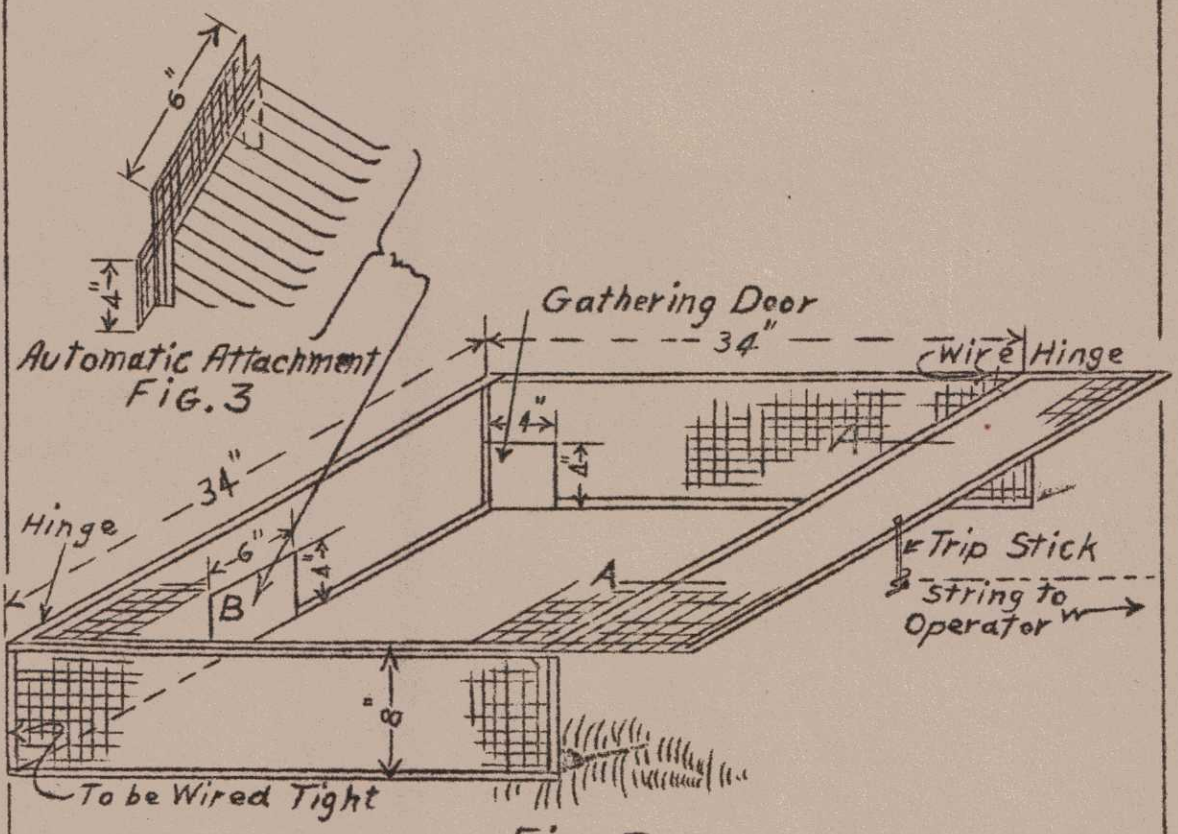


FIG. 2.

circular. It is highly desirable that cooperators test as many of these traps as possible. In describing traps in Bird Banding Notes, the Biological Survey does not undertake to endorse the general utility of the devices, but gives the descriptions with the hope that a large number of cooperators will add such traps to their station equipment, and, after conducting tests, report on their effectiveness.

In this issue we are reproducing the drawings and descriptions of two traps that have been developed by the officers of the New England Bird Banding Association. Both have already been tested and, because of their simple construction at exceptionally low cost, are strongly recommended by the New England organization.

COLLAPSIBLE "DROP" AND AUTOMATIC TRAP.

Plate I, Figure 1, shows the trap collapsed ready for shipment; Figure 2, the same set up for trapping birds; and Figure 3, an accessory part that makes the trap automatic when desired. The trap illustrated is 34 by 34 by 8 inches, but it can be made any size, a convenient one for being carried about in a suitcase being 16 by 12 by 7 1/2 inches. These traps are made of No. 3 woven galvanized cellar-window wire. The large sizes should have the edges reinforced. To make one, bend a piece of galvanized No. 10 iron wire 150 inches long into a square frame 34 inches on a side, and wire the overlapping ends firmly together with No. 22 copper wire. Similarly, make four rectangular frames of the same wire, each 34 by 8 inches, requiring 96 inches of wire. Cut a square piece of No. 3 cellar window wire 36 by 36 inches (this wire is sold 36 inches wide), with any projecting wires cut away. With a straight-edge board 1 inch thick bend up one inch at each side at right angles for a hem. Place the 34-inch wire frame inside and with the hands force the upturned edge over the frame, smoothing the hem down by drawing a blunt tool like the outside edges of the closed wire cutters along the wire frame. This makes the top of the trap. The sides, each 34 by 10 inches, are made in the same manner, a hole 4 inches square being cut out for the gathering door and another opening 6 by 4 inches for the automatic attachment (see Plate 1, Figures 2 and 3). These openings may be conveniently closed, when desired, by a thin piece of board and a 6-inch stick. When set up, wire each of the horizontal abutting edges loosely in three places with No. 22 copper wire and the two vertical edges opposite the drop door tightly together (see Plate 1, Figure 2, which also shows a 7-inch trip-stick with string running to operator). This stick should stand on a little piece of thin wood. Rubber bands for keeping the door closed are seen at A, Figure 2.

A similar, less expensive, but still serviceable trap, 32 by 32 by 8 inches, made of pieces of wire mesh of the same sizes, may be made without the wire frame reinforcements by doubling one inch of the edge back into a 1-inch hem and then turning back this hem a second time, pressing both together. For traps of half this size and smaller, one hem will furnish the necessary reinforcement.

Plate I, Figure 3, shows the automatic attachment which fits the opening B, Figure 2, as indicated. When used as an automatic trap all sides are wired down. Traps, of course, may be made with or without

this automatic device. When a trap possessing it is in use as a "drop" trap, the wires of the accessory should be bent close to the ground or the device removed and the hole closed by wiring on a small piece of No. 3 wire or a part of a shingle. Similar automatic attachments placed on three of the four sides increase the ease with which birds find their way into the trap. The wires used are of copper (No. 16, B. & B.)which, when bent slightly, spring back into position. This springiness permits the height of the space below the wires to be unusually small, the birds bending up the wires as they enter the trap. Photographic tests show this trap to possess nearly daylight illumination and birds enter it very readily. Used as a "drop" trap it appears to offer the maximum of safety for the birds, a blow struck accidentally by the hinged door being insufficient to cause injury.

Negotiations are under way by the New England Bird Banding Association to engage a manufacturer to make and supply direct to bird-banders standard sizes of these traps, the gathering cages, and the automatic attachments. It should be pointed out, however, that the traps can be easily made at home or by a local tinsmith.

COLLAPSIBLE GATHERING CAGE, "DROP," AND AUTOMATIC TRAP.

Plate II (Parts 1-4) shows the trap collapsed, parts 2, 3, and 4 being placed in a row on part 1 when shipped.

Part 1 is made of No. 3 galvanized, cellar-window wire mesh, and should be made of strands intersecting at right angles. The remaining parts are of wood. To put the trap together, lay part 1 out flat on a table or bench with hinged portion (E) at the top but opened out. Place the edge of a narrow board first on line a-b and then on line c-d, bending the wire mesh upward 90 degrees. Turn cage over and place bottom (Pt.4) in position, tacking the edges along the sides with double-pointed tacks. Slide in the door (Pt. 3), and if the cage is to be used for a gathering cage, the wire door (E) should also be tacked to the bottom or held down by wiring the abutting edges with No. 22 copper wire.

If the cage is to be used as a drop trap, the wire door is left free, the trap being set with the usual stick to hold up door (see Pl. 1, Fig. 2), and the locking bail, which anyone can easily make, should be added (see Plate II, Fig. 5 (F)). To use the cage as an automatic trap (see Pl. II, Fig. 5), place false bottom (Pl. II, Pt. 2) in position by springing out the wire sides slightly. Next add the perch, which should be slightly higher than the false bottom when set, say 1/2 inch, but not high enough to permit a bird to enter the trap beneath it.

The trip-stick should be made of white pine, notched at its upper end and rounded and polished somewhat at its lower end, and about 1/8 inch thick. This rests on the perch and engages the thin, flexible lip (G) on the front end of the false bottom. The sensitiveness of the trap is regulated largely by the position of the trip-stick against the lip, and, in particular, by the angle made by the lip and the false bottom, this angle being adjustable. A little practice will enable anyone to make a very sensitive contact between the trip-stick and the lip so that even our smallest birds, resting on or dropping to the false bottom, will

COLLAPSIBLE GATHERING CAGE, CONVERTIBLE INTO A "DROP" OR AN AUTOMATIC TRAP FOR TAKING INDIVIDUAL BIRDS.

PLATE II

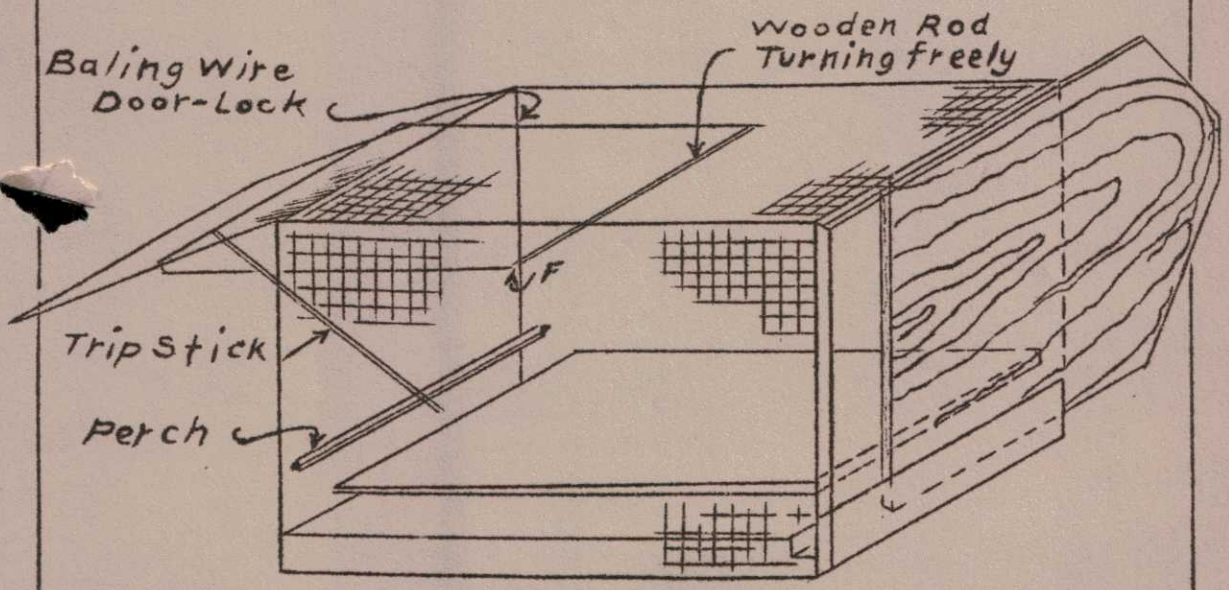
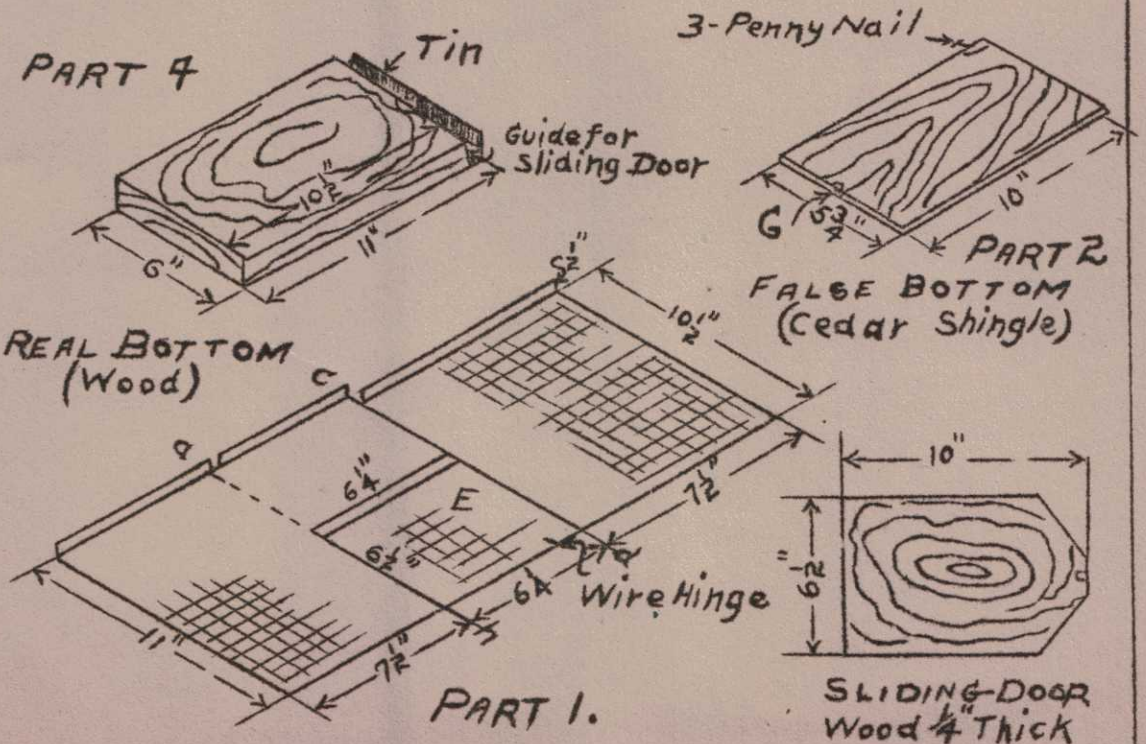
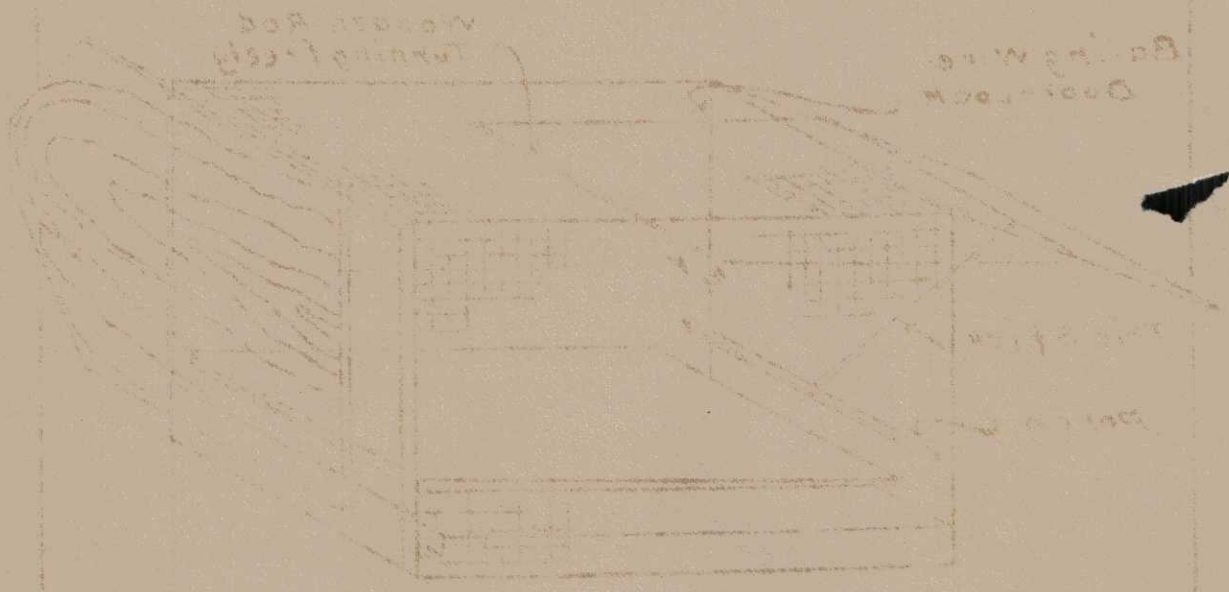


FIG. 5





spring the trap, the trip-stick sliding gently inside, and the wire bail dropping and securely locking the door. The bird can best be handled through the sliding door in all cases.

BAIT.

Continued experiments with water have fully demonstrated its value for summer trapping. R. H. Howland, of Upper Montclair, N. J., has given much attention to this bait and reports that he is satisfied that "it will prove to be the best or one of the best midsummer baits. It has been a contributing factor in the catching of song sparrows as well as robins and other species."

R. E. Horsey, of Rochester, N. Y., has also used water with success. He has placed a drop trap where a garden hose will spray on it and has caught robins as they got under the "shower bath" thus provided. He reports that one young robin that he caught squealed loudly on being handled, whereupon about 25 other robins and 2 catbirds that were scattered around the lawn joined in the protest. Mr. Horsey says he felt almost guilty and released the youngster as soon as possible.

Mrs. Elizabeth L. Burbank, of Sandwich, Mass., reports that ground pumpkin seed and hayseed make good bait during cool weather.

Rev. Geo. Roberts, of Lake Forest, Ill., states that any uneaten strawberry shortcake from his table is eagerly taken by robins and catbirds. He is using also sunflower, hemp, and millet seed, bread crumbs (chiefly toast crusts put through a meat chopper), and ground raw peanuts.

Miss Marion A. Boggs, of Waynesville, N. C., reports that black walnuts cracked and laid about the traps will attract birds even in midsummer, being taken by sparrows, catbirds, thrashers, and wrens. From her experience it appears that chickadees and titmice will not take this bait at this season. A brood of song sparrows was fed with a variety of food taken by the parents from the traps. This included corn, wheat, and rye bread, bread and milk, cottage cheese, sausage, hominy, and walnuts. Thrashers took almost all of these baits and even added canned salmon to their diet.

BANDS.

Removing bands from live birds.—Bands should never be removed unless absolutely necessary. To take one of the smaller bands from a bird's foot without injuring the bird is a very delicate operation, and should not be attempted without the services of an assistant who will hold the bird. If for any reason it becomes necessary to remove a band the following method may be used successfully. The bird is held by the assistant, the operator holding the banded leg. A pair of diagonal wire cutters or blunt pointed scissors are then opened and placed so that their tips are opposite each other at the junction point of the two ends of the band. By closing the tool slowly and carefully, the points will be forced between the ends of the band, usually opening it enough to permit the tips of the pointed pliers to be inserted. These are then opened slowly and the process completed.

RETURNS.

Returns are now being received so rapidly that only a few can be included in this circular. As previously announced, however, the Bureau is planning a bulletin that will include all returns secured up to June 30, 1923, and it may be possible to issue such a report annually.

Rev. Geo. E. Allen, of Plainsfield, Mass., reports an interesting return from a female bluebird banded by him on May 31, 1922, in which year it raised two broods in different nest boxes. On April 2, 1923, it returned and took possession of the box where the second 1922 brood was raised.

Rev. Geo. Roberts, of Lake Forest, Ill., had a return from a rose-breasted grosbeak banded by him on May 25, 1919. The bird was recaptured May 2, 1920, and returned again on May 4, 1923, repeating on May 12.

Fr. Damian Smith, of Manchester, N. H., reports that a song sparrow banded on April 30, 1922, repeated regularly until May 11, 1922, when it disappeared. It appeared again on April 16, 1923, and again started to repeat.

R. E. Horsey, of Rochester, N. Y., has had a similar experience, a song sparrow banded on May 27, 1922, repeating until August 21. A return was obtained on April 9, 1923, and it was still repeating on June 10, the date of his report.

Mrs. Elsie Perkins and Mrs. Elizabeth A. Herrick, both of Topsfield, Mass., have each recaptured several of the birds banded at the other's stations. Those retaken were goldfinches, purple finches, and tree sparrows.

Mrs. R. C. Flannigan, of Norway, Mich., banded an immature chipping sparrow July 7, 1922, that returned on May 19, 1923.

B. S. Bowdish, of Demarest, N. J., has a return from a brown thrasher banded July 22, 1922, and recovered just one year later, on July 22, 1923.

A black duck banded January 19, 1923, at Ithaca, N. Y., by Dr. A. A. Allen, was killed near Parry Sound, Georgian Bay, Ont., on April 28, 1923.

Wm. I. Lyon, of Waukegan, Ill., spent May of 1922 at Melbourne, Fla., where he banded a blue jay that had lost almost all of the upper portion of its bill. How the bird manages to get its living is a mystery but there is no question regarding its ability to do so, for, while on a second trip to the same point this year, Mr. Lyon recaptured it.

Harold K. Decker banded an adult screech owl with A. B. B. A. band No. 35682, at Staten Island, N. Y., on October 27, 1915. Two years and one month later (Nov. 26, 1917) he recaptured the bird within a quarter of a mile of the original place of banding. On July 11, 1923, it was found

dead near Port Richmond, Staten Island, almost an eight-year record for this bird, which apparently stayed close to the place where it was hatched.

Geo. E. Allen, of Plainfield, Mass., on July 18, 1923, had a return of a Savannah sparrow banded by him on July 10, 1922.

Harry A. McGraw banded a northern loon at Altoona, Pa., on April 30, 1923. On May 27, 1923, it was found dead at Balmy Beach, Simcoe County, Ont.

A reddish egret, banded by R. D. Camp, of Brownsville, Tex., at Green Island, Cameron County, Tex., on July 15, 1923, was found dead by a fisherman in the vicinity of Galveston, Tex., about August 10, 1923.

Among many duck returns, mention may be made of two mallards, banded at Portage des Sioux by John Broecker, and recovered in central Canada. One, banded January 31, 1923, was captured by a trapper on May 1, 1923, on the Peace River between Forts Vermilion and Chipewyan; while the other, marked on March 4, 1923, was recovered by an Indian on May 10, 1923, on Reindeer River, in northern Saskatchewan.

Another mallard, banded at the Cuivre Island, Mo., station by L. V. Walton, on March 2, 1923, was captured in May by an Indian, near Duck Lake, Saskatchewan.

INTERESTING NOTES AND INVESTIGATIONS.

The blue jay is known to be sedentary in parts of its range, but there is evidence of migratory movements in others. In order to add to the knowledge of this matter, the Bureau early last spring addressed a circular letter to those cooperators living in the northern part of the blue jay's range, urging them to concentrate their activities on this species as much as possible. Although the total number of banded blue jays is not so large as could be desired, it would appear that there are enough to throw some light on the movements of the species. All cooperators in the Eastern States and Canada are accordingly urged to make every effort to trap these birds during the fall and winter seasons.

Even if jays are found in your neighborhood throughout the year, try to band as many as possible, for there may be an infiltration from other regions. Also, the banding of additional jays will further the investigation in another year.

Upon receipt of the Bureau's letter regarding blue jays, Dan Patton, of Midnapore, Alta., wrote that this species did not occur in his vicinity and suggested that some effort be made to band crows. This is an excellent proposal, particularly since there is now in progress an active campaign, directed by farmers and sportsmen, to reduce the numbers of these birds. Crow hunters may be depended upon to return the bands, so that it should be a distinct contribution to the progress of the work if some cooperator will devise the means of capturing these birds in large numbers. Crows may be baited with corn or other food or attracted by a mounted hawk or owl. To start with we should suggest experiments with the net trap described by Mr. Lincoln in The Auk, vol. 39, pp. 325-327, July, 1922.

BIRD BANDING ASSOCIATIONS.

The organization of the new association mentioned in Bird Banding Notes No. 7 has been perfected through the able efforts of S. Prentiss Baldwin, President of the Inland Bird Banding Association, working in concert with the officials of the Biological Survey. This organization will probably be known as the Eastern Bird Banding Association, and has the following cooperators for its first officers: President, Dr. Arthur A. Allen, Cornell University, Ithaca, N. Y.; vice-president, Frank L. Burns, Berwyn, Pa.; secretary, Mrs. J. E. B. Webster, New York City; treasurer, Maunsell S. Crosby, Rhinebeck, N. Y.; councillors: B. S. Bowdish, Demarest, N. J.; Rudyerd Boulton, Pittsburg, Pa.; H. H. Cleaves, Clarksburg, W. Va.; John A. Gillespie, Glenolden, Pa.; R. E. Horsey, Rochester, N. Y.; R. H. Howland, Upper Montclair, N. J.; R. J. Middleton, Jeffersonville, Pa.; Dr. John T. Nichols, New York City; Dr. Lewis Rumford, Wilmington, Del.; and Dr. Witmer Stone, Philadelphia, Pa. It is understood that the list of officers will also include an executive secretary, a post that will probably be filled by either Mr. Howland or Mr. Bowdish.

J. Eugene Law, in developing the work on the Pacific coast has requested and received authority to extend his activities through the Rocky Mountain region. This vast territory has many ornithological problems of unusual interest, and it is hoped that enough operators may be secured to cover it thoroughly.

The next meeting of the American Ornithologists' Union, to be held October 9, 10, and 11, will be at Cambridge, Mass., and it is expected that the New England Bird Banding Association will be present in force.

As this number is ready for mimeographing, we are in receipt of the separates of the Bird Banding Department of the June issue of the Wilson Bulletin. This department, the official organ of the Inland Bird Banding Association, is prepared by Wm. I. Lyon, of Waukegan, Ill., and we believe all cooperators will agree that he has obtained some items of exceptional interest. Through the generosity of Mr. Baldwin, we are able to send one of these separates to each cooperator on the list at the present time.