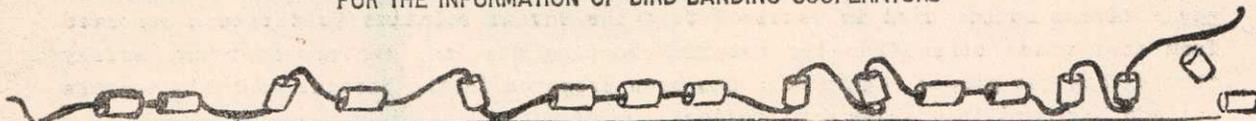


BIRD BANDING NOTES

ISSUED BY THE BUREAU OF BIOLOGICAL SURVEY, UNITED STATES DEPARTMENT OF AGRICULTURE
FOR THE INFORMATION OF BIRD-BANDING COOPERATORS



Vol. 2

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No. 6

"Watch for Series Designations on Your Bands"
(Series letters now include A, B, C, F, and H)

GENERAL INFORMATION FOR COOPERATORS

The attention of all bird-banding cooperators (particularly those who have begun work within the past year) is called to the fact that Bird Banding Notes serves not only as a medium for the exchange of interesting ideas, suggestions, and reports dealing with bird banding, but also as a means of giving general instructions from the Survey, and of reducing the great volume of correspondence incidental to this work. The information given in this first section should be read carefully by all operators of banding stations.

Growth of the Work.—In spite of the fact that during the past three or four years no publicity program has been conducted either by the Bureau or by the regional associations, the number of cooperators has steadily increased. New permits are issued on the average of at least one a day. This healthy growth is most gratifying to everyone interested in these investigations. It must be remembered, however, that to every new cooperator must be issued a stock of bands; and during these times when, because of the necessity for national economy, a reduction in governmental expenditures is imperative, great care must be exercised to prevent any of this material from remaining idle over a prolonged period. Unfortunately, there are on the list of cooperators the names of many persons who have taken no active part in the work for several years, but who still have bands charged to them. Such persons will save valuable time to the limited force in the Survey if, without further notice, they will return their Federal permits and such unused bands as they have in their possession. This request, of course, does not apply to those permit holders who expect to resume operation of their banding stations in the near future.

Annual Tabulation.—It is expected that the usual annual tabulation of the work accomplished at bird-banding stations will be prepared as soon as practicable after July 1. With this in mind, it should be remembered that only those records that are received at the Survey before closing time on June 30, will be included in the totals. Schedules containing records of species that are not now present in the vicinity of the banding station may be sent in to be included in the tabulation.

NOTE:—"Bird Banding Notes" is not for general distribution, but anyone using in a published paper any of the information contained in it will be expected to give credit to the person named and to the Bureau.

Returns.—Some station operators do not seem to understand yet how return records should be reported. Do not under any circumstances list return records on schedules. To do so may cause needless duplication in case the records have already been sent in on the proper card (Bi-137). Also, station operators should not make out return cards for those records that are reported to them from the Biological Survey. When a notice card is received from the Bureau relative to a return reported from some place other than the original banding station, the operator may safely assume that the proper return card has been prepared in the Bureau. For him to make out another card is useless duplication.

Only one return date should be listed on a return card. Separate cards should be used each time a bird is recorded as a return. In other words, every return record should be represented in the return files by a card. If more than one return date is shown on a card, it causes confusion when the card is punched, as the operator of the punching machine will not know whether the first or last date should be punched.

Order Cards.—Station operators are again reminded that order cards sent in for bands or other supplies not only should be signed but also should carry the address to which the supplies are to be sent. Many bird-banding cooperators conduct operations in summer at places other than their regular stations, and unless the address is definitely specified on the order card, the supplies will be sent to the usual address.

Banding of Gulls and Terns.—All cooperators who plan to do extensive banding of gulls, terns, or any other birds that breed in colonies, are requested to advise the Survey as soon as possible of their plans, and of the probable supply of bands that will be needed. This information is desired so that arrangements may be made for purchasing the necessary material.

Diseased Birds.—Dr. J. E. Shillinger, in charge of Disease Investigations for the Biological Survey, would be glad to receive for examination any diseased birds that may be taken at banding stations. These may be forwarded to the Bureau, preserved either in alcohol or in a 2 per cent solution of formalin. Little definite information concerning the diseases of birds is available, so any assistance rendered by bird-banding cooperators will be appreciated.

Banding Birds at Night.—In the last number of Bird Banding Notes (page 64) reference was made to the efforts of Paul A. Stewart, of Leetonia, Ohio, to capture brooding or incubating birds at night, through the use of a flash light. This method has sometimes been employed with considerable success, but it seems desirable to give a word of caution as to how such work should be done. A dark night is preferable. When a bright light is held steadily upon a bird in the nest, it frequently will permit the operator to approach so closely that it may readily be taken in the hand. After the bird has been banded, it should be replaced in the nest and the light held on it steadily. The operator should then cautiously and slowly remove his hand, and while still holding the light steadily on the birds' eyes he may step back quietly a few paces and extinguish the light. When the banding is done in this way, most birds will remain quietly on their nests. Operations of this kind, however, should be discontinued immediately if it is found that the birds are so highly nervous that they will not permit the approach of the operator nor remain in the nest after banding.

In this connection it is well to state that as a general rule work with birds at their nests is best carried on after the eggs have hatched. It is imperative, however, that any work done with nesting birds be so conducted that the operations will not cause justifiable criticism.

Attention to Traps.—Station operators are also cautioned to exercise great care in attending to their traps. Occasionally we hear of a station operator who leaves his traps set all day while he is at work. This practice is absolutely wrong and must be discontinued. It seems hardly necessary to bring this matter to the attention of bird-banding cooperators, and we are confident that very few persons have been guilty of this procedure. An operator expecting to leave his station for more than an hour or two should see that the traps are fastened open or left in such a manner that there will be no danger of birds being caught in them.

Eastern Meeting.—The Eastern Bird Banding Association recently held its annual meeting, at which time the following officers were elected for 1932:

President, John T. Nichols, New York City.

Vice-President, John A. Gillespie, Glenolden, Pa.

Secretary, T. Donald Carter, New York City.

Treasurer, Warren F. Eaton, Upper Montclair, N. J.

Councillors

Dr. Arthur A. Allen, Ithaca, N.Y.

Mrs. Alfred T. Beal, Elmhurst, N.Y.

Beecher S. Bowdish, Demarest, N.J.

Verdi Burtch, Branchport, N.Y.

Howard H. Cleves, Staten Island, N.Y.

Dr. Ralph E. De Lury, Ottawa, Ontario

R. H. Howland, Upper Montclair, N.J.

Raymond J. Middleton, Norristown, Pa.

Le Roy Wilcox, Speonk, N.Y.

During the secretary's absence from the country, the treasurer, Warren F. Eaton, is acting for him. An effort is being made to strengthen the work of this association, and the Survey urges all cooperators residing in the territory (which includes all the Atlantic Seaboard States from Florida north to and including New York, and the Province of Ontario) to get in touch with Mr. Eaton. His address is 63 Normal Ave., Upper Montclair, N. J.

Posters.—Dr. H. S. Bartholomew, of Lansing, Mich., has adopted a tag measuring about 3 by 6 inches, which he attaches to his traps and which is probably just as efficient as the posters furnished by the Survey. The tag reads: "U. S. Biological Survey, Department of Agriculture, Washington, D. C. Please do not disturb. Licensed by the Michigan Conservation Department. Birds are caught in this trap for scientific study and are released immediately without injury." The tag is signed "Dr. H. S. Bartholomew, Cooperator No. 4216."

PHOTOGRAPHS

A large number of interesting and useful photographs have been received by the Bureau during the past four months. Among them are the following:

H. H. Hipple, of Delaware, Ohio: A picture of himself holding a blue jay, while standing beside one of his banding traps.

E. C. Weeks, of Sanbornton, N. H.: Two, showing a collection of bird houses made from gourds.

Daniel Smiley, jr., of Mohonk Lake, N. Y.: Two, showing his chimney swift trap and a gathering cage filled with swifts awaiting banding.

Herbert Buckalew, of Milford, Del.: Two pictures of a banded bittern.

Prof. O. A. Stevens, of Fargo, N. Dak.: An excellent photograph of Doctor Breckle's six-cell, single-drip water trap. This trap was described and figured in the last issue of Bird Banding Notes (page 67).

Miss Dorothy A. Baldwin, of Hardwick, Mass.: A series of ten, showing views on the grounds of her trapping station, with some of her traps.

Carl Richardson, of Prospect, Oreg.: Three views taken at or near his new banding station.

Frank W. Robl, of Ellinwood, Kans.: One, of Hutchins's goose No. 105728, which recently died after being in Mr. Robl's possession under permit for many years. Mr. Robl also included four other views showing the waterfowl on his station and details of the banding work.

E. C. Hoffman, of Lakewood, Ohio: One, of his banding station, showing a battery of four drop traps and a sparrow trap.

Rev. G. C. Bierens, of Fairmount, N. Dak.: A view of his banding station on which it is noticed he has a sign reading: "U. S. Biological Survey Bird Banding Station No. 3815."

Edward S. Thomas, of Columbus, Ohio: Two small photographic copies of maps that he prepared to show the distribution from Columbus of banded starlings.

Almon O. English, of Norfolk, Va.: Two, one showing a large drop trap, and the other a red-headed woodpecker hanging to Mr. English's ringer, after being banded and released.

W. F. Kubichek, of Cedar Rapids, Iowa: A series of nine showing the breeding western grebes, double-crested cormorants, ring-billed gulls, and common terns of Waubay Lake, S. Dak.

Dr. Theo. G. Ahrens, of Berlin, Germany: One, with a diagram showing the apparatus used to capture birds for banding at the German Ornithological Society's banding station on the Island of Heligoland.

C. E. Holcombe, of Zion, Ill.: Three photographs of Bohemian waxwings recently banded by him.

Alston Clapp, sr., of Houston, Tex.: A series of nine taken in connection with his banding expedition to Farwell Island near Port O'Connor, Tex., during which a large number of herons and other birds were banded. One of the pictures shows Mr. Clapp and cooperator J. W. Stiles, and is captioned "Ready for a sally into the cactus and yucca to apply Uncle Sam's avian jewelry."

Frank J. Vejtasa, of Fairdale, N. Dak.: Two additional pictures of snowy owls banded by him last season. One of them shows Mr. and Mrs. Vejtasa holding three of these beautiful white birds, and the other shows two owls resting on the running board of a car.

Mrs. Cordelia J. Duke, of Dalhart, Tex.: A series of four photographs of waterfowl taken last winter on her ranch.

Stanley F. Stein, of Shakopee, Minn.: Six views of his traps and substations. It is noted that at one of his trap sites he maintains an automatic food hopper so that birds may feed regularly even when the trap is not set.

George D. Eustis, of Chilmark, Mass.: Two photographs of a nest believed to have been made by a chestnut-sided warbler.

Lyndon L. Hargrave, of Flagstaff, Ariz.: A series of six, including several of the Merriam's turkeys recently banded and released by him. It is noted that one of these turkeys is making desperate, but unsuccessful, efforts to enter a Government sparrow trap.

Mrs. Effie A. Anthony, of Bar Harbor, Me.: Two additional photographs of the dovekie that was banded by her on January 7, 1932.

Mrs. Kenneth B. Wetherbee, of Worcester, Mass.: Two, one showing Mrs. Wetherbee and her daughter watching a bob-white being banded, the other a picture of her daughter holding a saw-whet owl.

WORK AT BANDING STATIONS

R. J. Middleton, of Norristown, Pa., recently transmitted a report of his operations for the past season. Mr. Middleton's station is one of those that have always yielded results of unusual interest, and the present report proves to be no exception. A total of 1,379 birds, representing 58 species were banded, and 57 returns were obtained. Among the birds banded were 19 species of warblers (aggregating 155 individuals), 3 species of thrushes (60 individuals), 161 robins, 87 catbirds, and 30 winter wrens. Several of the return records represent birds that have come back for three consecutive seasons.

E. C. Weeks, of Sanbornton, N. H., has developed an interesting type of bird house by using gourd shells for the nest chambers. These are roofed over so that an air space above the nest chamber is provided for keeping the interior reasonably cool. Mr. Weeks states that three were made and put up last year, and were readily taken by tree swallows, all of which raised successful broods.

Wm. E. Smith, of South Chatham, Mass., in a recent communication reported that he had retired from business, and was in a position to take up some particular phase of ornithological study. In reply the Survey suggested that he get in touch with the Austin Ornithological Research Station at North Eastham, Mass. As Mr. Smith's station is not far distant from North Eastham, it is believed that by cooperating with the Austin station it will be possible to carry on some investigations of unusual interest.

A. K. Smiley, jr., and his brother, Daniel Smiley, have transmitted another of their interesting reports from Mohonk Lake, N. Y. It is noted that during 1931, 1,268 birds of 42 different kinds were banded at this station. Mr. Smiley says that the increased number of species banded may be attributed chiefly to the more constant use and improvement of water-drip traps. The increase in number of birds taken shows principally in the warbler family, of which 11 different kinds were banded. April seems to be the month when the largest number of birds are found at this station, as in April, 1931, 230 birds were banded. October came second with 147, and August third, with 113. The Smiley brothers are making a special study of plumage and weight of birds.

Joseph Mailliard, of San Francisco, Calif., who has been making a careful study of the plumages of the golden-crowned sparrow, published the results of his investigations in the Condor, vol. 34, pp. 66-70, March, 1932.

Mrs. Marie V. Beals, of Elmhurst, N. Y., has submitted a most interesting report of her activities during the past year. A total of 1,694 birds were banded, including 250 hermit thrushes, 25 golden-crowned kinglets, and 19 species of warblers. It will be gratifying to all bird-banding cooperators to note the increasing number of warblers that are being taken at those banding stations so favorably situated as to attract these birds.

Lyndon L. Hargrave, of Flagstaff, Ariz., in a report received by the Bureau early in March, gives details of the activities of his station during 1931. The station is known as the "Museum of Northern Arizona Bird Banding Station," and we are glad to note that Mr. Hargrave is obtaining valuable cooperation from the Department of Industrial Arts at the Arizona State Teachers College. The head of the department, Prof. F. C. Osborne, and his assistant, Mr. Christenson, are both much interested in the work and have rendered able assistance in the construction of suitable traps. As a result of the first year's work, 636 birds, representing 33 species and subspecies, were banded. A total of 31 returns were obtained, while 274 birds repeated 1,052 times. Mr. Hargrave is making a special study of the movements of the red-backed junco.

Russell S. Davis, of Clayton, Ill., is carrying on studies in an effort to find some means of determining sex in the tree sparrow. From information already obtained it seems that he may be successful in this attempt. He is also conducting experiments to determine the food requirements of different species of birds. This work includes the weighing of the birds at different times during the day.

E. L. Sumner, of Berkeley, Calif., has forwarded a summary of his bird-banding activities for the calendar year 1931, during which period he banded 33 species and subspecies, numbering 1,634 individuals. His traps were in operation 252 days in Berkeley, and 20 days in other locations.

C. E. Holcombe, of Zion, Ill., has been fortunate in having a fairly large flock of Bohemian waxwings around his station. After considerable experimenting he succeeded in devising a method of capturing them, and several were banded. Anyone who is acquainted with these beautiful birds will appreciate Mr. Holcombe's pleasure in working with them.

Lewis O. Shelley, of East Westmoreland, N. H., has sent in a record of his banding operations for the last six months of 1931. He reports the banding of 230 birds, representing 19 species. The October, 1931, number of "Bird Banding" con-

tains an interesting paper by Mr. Shelley on unusual plumages of the slate-colored junco, in which he especially mentions the white wing-bars that are occasionally noted. He is at present making a special study of song sparrows, a subject in which many station operators have been interested, and it would seem that eventually much important information should be brought together.

Alston Clapp, sr., of Houston, Tex., has transmitted an interesting report of the expedition he organized and led to Farwell, Tex., where 262 birds of 9 species were banded. Among these were 150 reddish egrets. The camp that the members of the expedition established on Farwell Island was christened Camp Redington, in honor of the Chief of the Biological Survey. Mr. Clapp reports that a colony of roseate spoonbills was found on the island, but that it was too early to band any young.

Mrs. Grace S. Hall, of Los Angeles, Calif., recently sent in the report of her station for 1931. The total number of birds banded was 711, of which 632 were captured from a window-sill trap. This, it is thought, is very nearly a record.

Byron W. McPheters, of Bar Harbor, Me., recently forwarded a series of schedules representing a large number of birds banded by him, among which we note many Leach's petrels.

Prof. Wm. Rowan, of Edmonton, Alberta, has been conducting some experiments on the dynamics of bird migration. Originally he used the junco as the experimental bird, but during the last year or two he has found that the crow is more satisfactory. Professor Rowan is the author of The Riddle of Bird Migration, which was issued recently. It is of unusual interest to bird-banding cooperators.

Glenn Berner, of Jamestown, N. Dak., has submitted a banding report that we believe will be of interest to many other station operators. In addition to banding large numbers of many of the more common species, he has been successful in taking a great many Harris's sparrows, evening grosbeaks, crossbills, and Bohemian waxwings. (See item under bait.) His report contains the record for 582 individuals, representing 31 species.

BANDS

In response to requests from many cooperators, the Survey about a year ago took up with the band manufacturers the matter of making the No. 1 bands somewhat smaller in order that they might fit better such birds as kinglets, gnatcatchers, bushtits, and warblers. Accordingly the No. 1 bands that have been made during the present fiscal year have been slightly smaller than those issued during previous years. Although these have proved entirely satisfactory for the smaller birds, there now seems to be too much difference between this size and Size 1-A. Because of this, it is planned that in drawing up the contract for bands during the next fiscal year (beginning July 1, 1932), the present Size 1 band will be retained, but will in future be designated Size 0, and the old No. 1 band will be re-stored. This will in effect mean that there will be three sizes of small bands, namely, Sizes 0, 1, and 1-A.

If a band is found that is in any way defective either in shape or through having part of the number or legend obliterated, it should be destroyed. No report of such bands is necessary unless they occur with too much frequency, in which event the Bureau should be notified so that it can pass on the information to the band manufacturer.

Frederick E. Ludwig, of Lansing, Mich., has called attention to a grackle that was banded at some other station and recaptured at his. In banding the bird an attempt had been made to lap the band with the result that one end had been forced against the bird's tarsus in such a way as to cause serious injury. Although at one time it was recommended that if a band was a little large, the ends might be lapped, this is now believed to be bad practice, particularly on those birds that have powerful bills. The correct procedure is to select a band of the proper size and close it so that a perfect ring is made. The band should not be so loose that it might slip down over the toes when they are closed, but also it should not be so tight that it will pinch or chafe the bird's leg.

Mrs. Marie V. Beals, of Elmhurst, N. Y., has informed the Bureau that she finds the No. 2 band is better for fox sparrows than Size 1-A. The reason for this is that the No 2 bands are made of hard aluminum and so resist the efforts to crush them by these strong-billed birds. If a No. 2 band should be too large, a small portion may easily be removed from one end with a pair of stout-bladed scissors, and the band then reduced to a size approximating that of Size 1-A.

Dr. Harold H. Hayes, of Hubbard Woods, Ill., sent in for examination a pair of pliers that he has developed for closing bands when attaching them to birds. The tool is similar in many respects to the Kennard banding pliers described in the Manual except that the jaws are ground down thinner and the tip is slightly curved. Also the hole in which the band fits is more elliptical than round in shape, a feature that permits the tool to be used in closing any of the smaller bands. Doctor Hayes also has developed a tool with which, with practically no danger to the bird, he is able to remove bands that have been badly worn or otherwise damaged.

Colored Bands.—Colored celluloid bands are not intended for general use and should be employed only when the operator is making a special study of some particular species and desires to band a certain number of individuals that he believes can be kept under visual observation. Because of the limited number of colors available, it is obviously possible to band only a small number of birds of a single species. Ordinarily only two or three birds of a species can be banded with the same color. As the Survey does not desire to stock these colored bands in large quantities, station operators are requested not to send in large orders for them, and not to order them at all unless they have a definite project in mind that will warrant their use. The smallest size of celluloid band has been of the simple butt-end type, similar to the aluminum band. It has been found that some birds with strong bills are able to remove these, and the matter has accordingly been referred to the manufacturer in the hope that he may be able to develop a spiral or lapped band similar to the larger sizes. The proper method of application is to open one end slightly and clip it on the bird's tarsus, then rewrap the band on the leg so that the end on the outside at the start is on the inside at the finish.

As a substitute for celluloid bands, the manufacturers have advised the Survey that they are in a position to furnish colored aluminum bands. The colors would be only moderately permanent, but probably sufficiently so for the purpose. The Bureau would be glad to hear from operators who have had experience in using colored bands.

TRAPS

H. H. Hipple, of Delaware, Ohio, sent in a picture of a homemade trap constructed from a few scraps of lumber and some wire netting, at a cost of only a few cents for the wire netting. It is operated by a pull string. Through its use Mr. Hipple has taken 12 or 13 species, including cardinals, bronzed grackles, tufted titmice, chickadees, doves, hairy woodpeckers, song sparrows, juncos, robins, blue jays, white-breasted nuthatches, and Carolina wrens.

F. W. Rapp, of Vicksburg, Mich., forwarded a sketch of a simple trap that he has found most effective. It was made from an old wooden tub 16 inches in diameter and 8 inches deep. The wooden cover was discarded, and in its place one was made from wire netting fastened to the rim of the tub with a nail which acts as a hinge. In other words, when the tub is lying on its side, the cover or door is pulled across in much the manner of a camera shutter. Mr. Rapp believes that a wooden candy pail would be excellent for this purpose. Frequently these cheaply made traps are surprisingly effective, and they show what can be done with a relatively small outlay of capital.

John E. Sibley, of Whittemore, Mich., has submitted a sketch of an improved trigger release that he has developed for the false-bottom trap. The bottom and door are similar to the trap shown in Figure 22 in the Manual, but instead of having the trigger wire extend to the top of the door and then bend at right angles to engage with the front edge of the false bottom, Mr. Sibley's scheme is to extend this wire so that when the door is open, that is, in a horizontal position, the wire will lie along the top of the trap chamber, reaching a point over the center of the trap. (See Fig. 24 in the Manual.) From the middle of the false bottom a piece of wire is attached as a trigger catch. This projects vertically so that it extends through a narrow slit cut in the top of the trap chamber. It is here bent into a short right-angled hook so that it will engage with the trigger wire extending across the top of the trap from the door. The great advantage of a trigger of this type is that the bird must be upon the back half of the false bottom before the trap can be sprung, and thus the danger of injury to it through the closing of the door is minimized.

Byron W. McPheters, of Bar Harbor, Me., reports that he has had success in operating a trap that is in effect a flat-drop trap suspended by a cord so that all four sides are above the ground. The trap is hung in such a way that when it is sprung the operator releases the cord, instead of pulling it as is done with the trap supported by a stick with pull string attached. A trap of this type should have guides to prevent it from swaying in the wind. Mr. McPheters informs us that he has repeatedly taken with this trap birds that have refused to enter his Government sparrow trap.

Charles O. Handley, of Richmond, Va., who originated the celluloid-window chimney-swift trap has sent in some interesting comments relative to the item included in the last number of Bird Banding Notes (page 66). In a letter addressed to E. Earl Bell, of Water Valley, Miss., a copy of which he forwarded to us, he says that when the exit pipe is enlarged, swifts, will fly back into the chimney, and that

he believes if the trap is properly constructed, it would not be possible for the birds to enter the pipe fast enough to clog it. He suggests that the funnel of the trap used by Mr. Bell may have been too large. Mr. Handley believes that a funnel squared so as to be one foot wide on the front is about the right size. Birds will come to this fast enough to permit a continuous flow out of the chimney. As Mr. Handley has himself trapped and banded more than 14,000 chimney swifts, his experience in this field gives much weight to his suggestions.

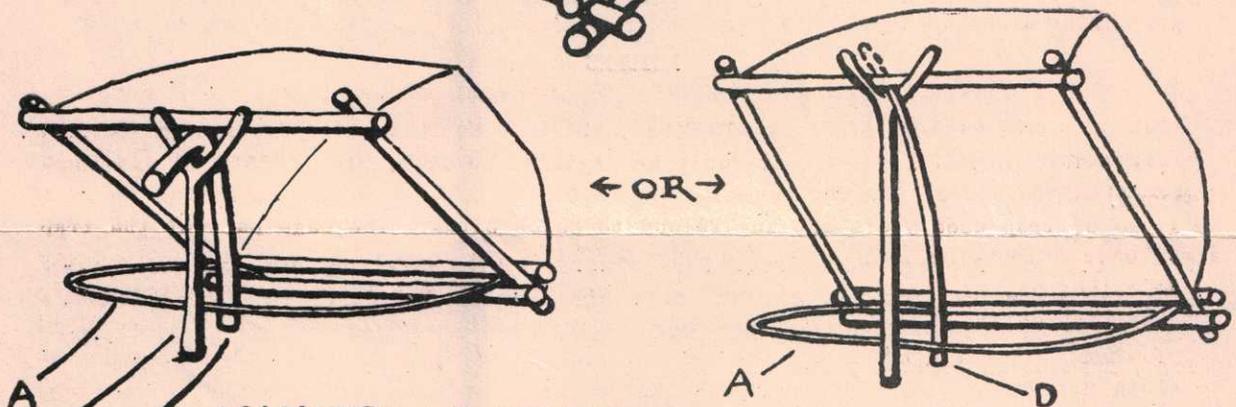
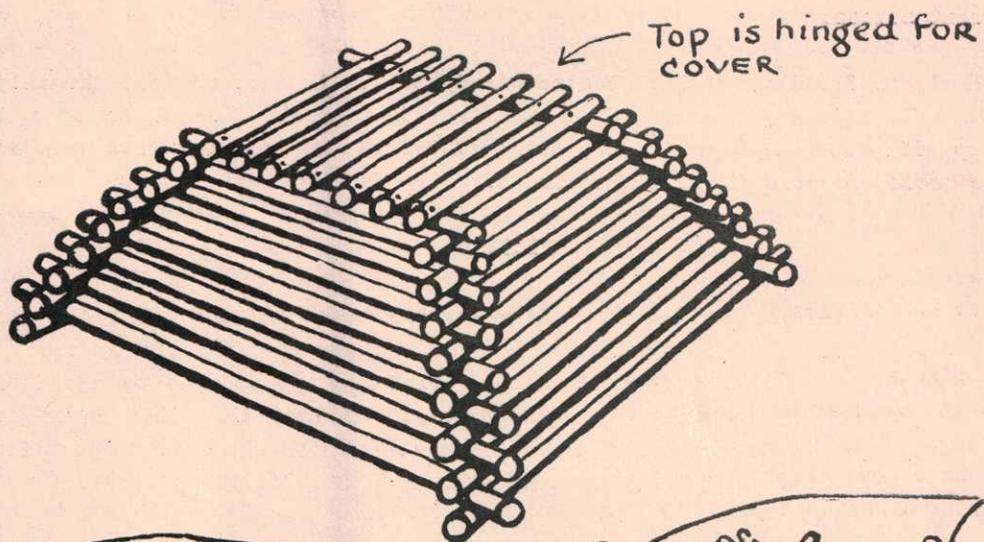
A. F. Ganier, of Nashville, Tenn., suggests that operators of bird-banding stations might find a real use for the material known as "Cel-O-Glass." He believes that a sheet of this placed over such traps as the Government sparrow trap would keep the bait dry during rain storms. Cel-O-Glass is a tough, flexible, partly transparent substance, reinforced by a 14-mesh galvanized steel wire. This can probably be obtained from some of the leading mail-order houses.

Stanley F. Stein, of Shakopee, Minn., is using the Brenckle trap described in the last number of Bird Banding Notes and a somewhat similar one that he designates as a "Star" trap, as it is shaped like a four-pointed star. Mr. Stein also described a most ingenious electrical woodpecker trap that automatically resets itself after a captured bird has entered the gathering cage attached to the trap.

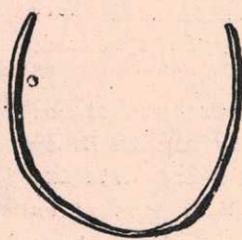
Carl A. A. Pedersen, of Montvale, N. J., sent in the drawings and description of a simple drop trap (herein illustrated) that he calls "The Burlington," in compliment to Harry J. Burlington, president of the New Jersey Board of Fish and Game Commissioners, who showed him how to make it. Mr. Pedersen says that it is a style of trap used years ago in Ireland to catch birds. The cage part of the trap is made of elderberry sticks laid together like the logs in a log cabin. They may be either nailed together with fine brads, or tied. These traps are capable of very sensitive setting, and have the added advantage that birds do not seem to be afraid of them. The trigger device can, of course, be applied on the ordinary hardware-cloth drop trap. For ground-feeding birds traps of this type are very effective, and as the cost of construction is practically nil, a large battery of them might be employed at one banding station.

BAIT

C. E. Holcombe, of Zion, Ill., reports that when the Bohemian waxwings were at his station, they fed quite extensively on high bush cranberries, which he used successfully for bait. Glenn Berner, of Jamestown, N. Dak., advises that when waxwings were at his station he found them to be feeding on Russian olives, and cotton-easter, asparagus, viburnum, rose, and red-haw berries. A pan of warm water placed under the Russian olive trees soon brought the birds to the ground for a drink, the water being replenished as soon as it started to freeze over. After the birds had become accustomed to going to the water supply, a drop trap was placed over it and the birds were easily caught. Occasionally Mr. Berner found it desirable to leave a gathering cage, containing a captive waxwing or two for decoys, near the trap. He found that this practice was permissible, since these birds were very quiet and did little fluttering or fighting.



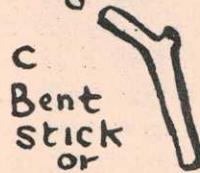
MANNER OF SETTING.
 BIRD STEPS ON "A" WHICH SLIPS OFF "C" OR "D"
 AND TRAP FALLS



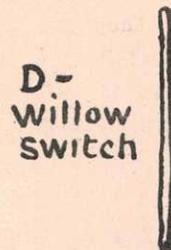
A - Bent willow switch
 hooks in between the
 two back rungs



B -
 Forked
 stick



C
 Bent
 stick
 or
 Half Fork



D -
 Willow
 switch

Mr. Berner found that evening grosbeaks also fed on rose berries and Russian olives. He reports that the bird bath in combination with a drop trap is one of the most effective sets that he has used, and that he expects to employ it to a greater extent next season.

Lewis O. Shelley, of East Westmoreland, N. H., informs us that the only way he could take chipping sparrows last fall was by strewing the floor of a large flat trap with wire grass containing the seed heads. He believes that this method might be useful for trapping field sparrows.

RECORDS

Pertinent information of this character has been included under the section "GENERAL INFORMATION FOR COOPERATORS." It should be read carefully by every station operator, as it is most important that bird-banding records be standardized as much as possible. The volume of work required to keep the files in an orderly and fairly up-to-date condition depends largely on the complete cooperation of station operators in transmitting their records according to the prescribed method.

RETURNS

James V. Porter, of Glenwood, Minn., obtained an interesting return for robin No. A255935. This was the first robin he captured in 1931, and in 1932 it was the second.

Dr. Wm. Pepper, of Melrose Park, Philadelphia, Pa., reports the third return for mourning dove No. 439178. This bird was banded April 2, 1927, and was recaptured on May 6, 1929; July 20, 1930; and February 20, 1932. This bird, therefore, must be at least 6 years old.

Mrs. Lulu M. Lincoln, of Takoma Park, Md., recently reported two purple-finch returns of unusual interest. One, No. B58463, was banded February 6, 1930, and recaptured April 4, 1932; the other, No. C55265, banded March 20, 1930, also was recaptured on April 4, 1932. Both these birds came back to the exact spot where they were banded, that is, a back-porch feeding shelf where a trap is operated.

James Moffitt, of the California Fish and Game Commission, San Francisco, Calif., has had three return records from the Canada geese banded by him in Honey Lake Valley, Calif., during 1931. Two of these birds, Nos. A714020 and A714022, banded on June 23 and 24, were shot from the same flock at a point about five miles southwest of Wendel, Calif., on or about November 22, 1931. The place where these birds were taken is only three miles distant from the point where they were liberated in June. Another, No. A714036, also banded on June 24, was retaken on or about December 10, at a point about six miles southwest of Wendel. This is within a mile of the place where the bird had been liberated. These records suggest the possibility that the Canada geese breeding in California do not migrate at all.

John W. Piggott, of Bridgetown, Nova Scotia, has transmitted an interesting return record for barn swallow No. B29204. Although this swallow was not banded until 1928, Mr. Piggott says that he is positive it was at his station in 1927, as it nested that year in exactly the same place as it did in 1928, 1930, and 1931. In 1928 and 1929 this bird had the same mate, which in itself is of unusual interest when it is remembered that barn swallows migrate as far south as Patagonia. It will be recalled that four of the five or six authentic nesting records of the bluebird in Nova Scotia are from Mr. Piggott's sanctuary, which is known as Bird Haven Farm.

Among the other returns received during the past few months the following are particularly noteworthy:

Brown pelican No. A714376 has had an unusual history. This bird was caught by hand at St. Petersburg, Fla., on January 17, 1932, by Forest M. Stott. During February and March it was recaptured and reported no fewer than five times as follows: At St. Petersburg, February 23; at Sarasota, March 1; again at St. Petersburg, March 9, at Indian Rock, March 14, and at Cedar Key, March 28. The bird was evidently very tame and permitted persons to capture it and examine the band. The last person who reported it removed the band, otherwise additional records might have been received.

Great blue heron No. 320371 banded July 18, 1931, at Hat Island, Green Bay, Wis., by Wm. I. Lyon, was recovered on February 9, 1932, at Point Cormenal, Cuba.

Little blue heron No. A516856 banded June 9, 1931, in Charleston County, S. C., by E. Milby Burton, was recovered in the same locality in the stomach of an alligator killed on October 8, 1931.

Louisiana heron No. A. B. B. A. 36191, banded May 2, 1921, at Avery Island, La., by E. A. McIlhenny, was caught in a steel trap set for muskrats at Point au Feu, 30 miles south of Morgan City, La., on January 10, 1931.

Marsh hawk No. A697063 banded as a fledgling on July 13, 1931, at Argusville, N. Dak., by Gale W. Munson, was recovered about January 16, 1932, at Guantanamo, Cuba.

Long-billed curlew No. A502303 banded in July, 1931, at Antioch, Nebr., by F. J. Keller, was found dead on February 8, 1932, at Palacios, Tex.

Screech owl No. 209926, banded on December 22, 1924, at Grand Junction, Colo., by Miss Ada B. Copeland, was found dead in the same vicinity on August 9, 1931.

Harris's sparrow No. B128865 banded on October 7, 1931, at Jamestown, N. Dak., by Glenn Berner, was retaken about February 26, 1932, at Hasse, Tex.

Snow bunting No. C98323, banded on February 17, 1931, at McMillan, Mich., by O. M. Bryens, was killed by a native at Igdlorpait, Julianehaab District, Greenland, on March 30, 1931.

Mountain song sparrow No. 327458 banded on January 19, 1925, at Fruita, Colo., by Anna Benson, was retrapped at Fruita, on December 31, 1931.

Indigo buntings Nos. A70403, F30284, F30332, F30345, F30346, and F30358, banded during April, 1931, at Uaxactun, Peten, Guatemala, by Dr. Josselyn Van Tyne, were all retrapped and released at the identical spot, during the period April 6 to 9. The recaptures were made by A. Ledyard Smith who reported them to Doctor Van Tyne.