

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF BIOLOGICAL SURVEY
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B I R D B A N D I N G N O T E S

No. 14.

April 15, 1925.

GENERAL INFORMATION TO COOPERATORS

During the several months that have elapsed since the last issue of these notes there have been a number of happenings of importance to the successful prosecution of the bird banding work. This number should therefore be read carefully by all cooperators. To those stations always interested in new types of traps we recommend special attention to the two shown and described in this issue. These have been tested and it is believed that they will be most helpful.

Reports.--At the beginning of the year many well-prepared reports were received, some being replete with interesting experiences, and it is regretted that space forbids noting as many of them as is desired. It must be re-emphasized, however, that repeats and returns should not be sent in on cards, except for data noted before the original record of banding is forwarded. See Miscellaneous Circular No. 18, pages 24 and 25. The necessity of forwarding original records promptly must also be emphasized again. Failure to do so is sufficient cause for the revocation of the banding permit. It is believed, however, that when cooperators are taking pleasure in the bird banding work, extreme measures are to be avoided if possible.

Photographs.--Among several excellent photographs received within the last two or three months were two from Raymond C. Aldrich, of Westfield, Mass., showing the banding of a brood of young sharp-shinned hawks by A. A. Cross and himself; three from Willet Randall, of North River, N. Y., showing a flock of redpolls at one of his traps; three from E. C. Hoffman, of Lakewood, Ohio, showing his station by the shore of Lake Erie; one from H. P. Ijams, of Knoxville, Tenn., showing a brood of young sparrow hawks with their bands; four from I. J. Perkins, of Oconomowoc, Wis., showing some young red-tailed hawks that he banded, one of which has already yielded return information; and one from John A. Gillespie, showing common tern No. 212268 banded by

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him at Anglesea, N. J., on August 3, 1923, and killed at the mouth of the Chumpan River, Campeche, Mexico, during January, 1924. This last photograph was forwarded to Mr. Gillespie from Mexico. Good prints on glossy paper are desired of the Chardonneret and three-leaf clover traps, preferably showing captured birds.

Visitors to the Washington office.--Among recent visitors to the Biological Survey have been the following bird banding cooperators:

Richard B. Harding, of Cohasset, Mass., was in Washington on December 9, and discussed various types of traps. Mrs. A. F. Satterthwaite, of Webster Groves, Mo., called on December 9, and spent much time in examining records in the bird banding files. On December 10, Mrs. E. F. Chilcott, of Woodward, Okla., and Mrs. Asaph Hall, of the Naval Observatory, Washington, D. C., met at the bureau offices. Mrs. Hall is a new cooperator who has recently started her station. Herbert W. Brandt, of Cleveland, Ohio, was in Washington from January 8 to 11; on January 9 Mr. and Mrs. Frank W. Commons, of Crystal Bay, Minn., called at the office; and on March 5, S. Prentiss Baldwin, of Cleveland, Ohio, stopped for a few hours while en route to Thomasville, Ga. We are glad to announce that Mr. Baldwin, who has been ill for several months, is greatly improved and we believe he will soon be again in perfect health.

STATIONS

J. Van Tyne, of Ann Arbor, Mich., reports that during the past year he has had opportunity to inspect the trapping stations of J. E. Law, at Altadena, Calif.; F. H. Kennard, at Newton, Mass.; and of R. B. Harding, L. B. Fletcher, and C. L. Whittle, at Cohasset, Mass. As a result he has many new ideas to try out. During the coming summer he expects to be in Panama, but arrangements are being made to have his station maintained in full operation. Sub-station "E", with a sliding door trap, has recently been installed.

Ernest D. Clabaugh, of Berkeley, Calif., in a report of the activities at his station for the period April 1 to December 31, 1924, states that fox sparrows were particularly numerous during the fall season and proved interesting subjects for study, as indicated by the long series of repeat records. Nuttall sparrows also were common, presenting opportunity for interesting studies of their plumage.

M. J. Magee, of Sault Ste. Marie, Mich., has forwarded the record of his station for the last six months of 1924, supplemented by an interesting summary for the entire year, the whole being replete with interesting and valuable observations. A total of 1,374 birds were banded, and 101 returns noted. Repeats totaled 1,051, and the entire number of birds handled was 2,526. 187 English sparrows and 4 cats were destroyed.

Dr. A. R. Shearer, of Mont Belvieu, Tex., reports that among other birds he has banded a large number of red-winged blackbirds. These birds present a serious economic problem in certain districts and therefore should be banded at every opportunity so that information may be obtained that will assist in their control. Dr. Shearer is continuing his observations on diseases or deformities of birds which come to his attention.

A recent report from Burr B. Butler, of Whitten, Iowa, states that his station enjoyed a highly successful year, as 110 birds were banded, with 17 repeats and 1 return, all resulting from a common drop trap, operated by a pull-string in his back yard in the business section of the city.

R. E. Horsey, operating at Rochester, N. Y., reports for his station for the period June 13 to December 31, 1924, that four sub-stations have been in service and in addition to banding a large number of new birds, with many repeats, several returns have been obtained, one of which, robin No. 259177, was the cause of some desirable publicity through the local press, of which Mr. Horsey took full advantage.

Frank L. Bishof, of Rockport, Mo., supplements a recent report of activities at his station with comments regarding the habits of the different species of birds that he has studied. Bird banding stations are particularly suited to note data of this kind, and studies made may be important if properly followed up. Mr. Bishof obtained one bird in a most unusual manner. On December 31, he noticed a few bluebirds in his yard drinking water from a hole in the ice in a steel tank. One bird got its feet wet and upon alighting on the steel rim immediately froze fast. All Mr. Bishof had to do was hold the bird while with his breath he thawed its feet loose. As it was uninjured it was banded and released.

Dr. L. A. Test, of Lafayette, Ind., in a letter last fall, states that while he is not trying to specialize on grackles, he seems to be able to capture a great many. Grackles are a species likely to yield interesting returns and it is hoped that cooperators will band them at every opportunity.

Harold Michener, of Pasadena, Calif., started his station during October with five traps in operation. Three of these are of the trip-doorstep type (described in this issue) and the other two are clover-leaf traps (see Bird Banding Notes No. 13). His first report was accompanied by a series of photographs.

David L. Mackaye, of Tulare, Calif., is using traps that are operated by a false floor and has already captured several birds.

Mr. and Mrs. Frank W. Commons, of Crystal Bay, Minn., have forwarded a beautifully prepared report of their activities during the past season. The totals are as follows: Handled, 3,919; new birds banded, 1,837; repeats, 2,082; returns, 41. In two years this station has climbed to second place in the number of birds banded, being exceeded only by Mr. Lyon's station, at Waukegan, Ill.

E. C. Hoffman, of Lakewood, Ohio, has established his station in a locality which appears to offer opportunities for experimental work of a character badly needed. His station is about 20 feet from the edge of a cliff on the south shore of Lake Erie. He has already banded a large number of birds, among them several blue jays, and he is planning to give special attention to gulls.

Geo. I. Hopkins, of Manchester, N. H., reports capturing several chipping sparrows on which wood ticks were found. The study of such external parasites and their hosts should receive more attention from station operators.

P. Kuntz, of Winnipeg, Man., sends in an interesting account of the way in which he captured orioles last season. A male bird was used as a decoy or "call bird," and the trap baited with oranges, bananas, meal worms, and water. One bird that repeated several times was found to have a nest within a short distance of the traps. In all, 34 orioles were banded at his station.

Roy H. Smith, of Kent, Ohio, reports a most notable experience with nuthatch No. 87953, which he picked up in the street. It was unable to fly or climb and he retained it for five days, noting a steady improvement in its condition. It was released May 26, 1924, and to prove that it was all right returned to the trap on November 7; Mr. Smith has had a second recovery of this bird during the present year.

Johnson A. Neff, now of Corvallis, Oreg., and formerly of Marionville, Mo., has sent in interesting reports from both stations, the latter now being operated by his mother, Mrs. Ira Neff. The Missouri station has yielded several returns from birds banded in previous seasons, and from the series of substations that are being established at Mr. Neff's new station in Oregon, it is believed that there, too, he will be successful. Five traps are already in use, three being sparrow traps.

Miss Cora M. Teot, of New Haven, Conn., is now operating a station that at one time was a substation of Mrs. F. D. Hubbard's. She has forwarded a map with photographs of substations at which we believe she will obtain results of much interest.

Horace D. McCann, of Paoli, Pa., reports for the period March 8 to November 1, 1924, seven substations in operation, equipped with Government sparrow traps, drop traps, Chardonneret traps, and the "Gillespie round-house" trap. Naturally, he has captured a large number of birds, with several returns.

E. A. Doolittle, of Painesville, Ohio, is a new cooperator, with a recently established station. He is using a sparrow trap and a drop trap.

Wright M. Pierce, of Claremont, Calif., in a report dated last October makes some interesting statements regarding the success of his station. He says that during the latter part of August and the first half of September, with his traps working about 75 per cent of the time, he banded over 400 birds, mostly Sierra juncos and western chipping sparrows. He used five 2-compartment and five single compartment traps placed in a circle and about 20 feet apart.

In looking over the recent activities of trapping stations there are many worthy of mention, but which can not be included for lack of space. It is noted that Mrs. Marie Dales, of Sioux City, Iowa, banded several Harris sparrows during the fall migration; Willie La Brie, of Kamouraska, Que., banded several yellow warblers; Bert S. Gregg, of Belding, Mich., has been banding blue jays and also several yellow-throated vireos; Ed. Duval, while working at Cap Tourmente, Que., banded a greater snow goose; N. W. Kerr, of Brandon, Man., banded and released 32 mallards and black ducks that had been raised in captivity; H. H. Greene, of Stanford University, Calif., banded a large number of golden-crowned and Gambel sparrows and also several California quail and California murrelets; H. W. Johnson, of Pasadena, Calif., has had excellent results with house finches, Gambel and fox sparrows, California jays, and wren-tits; F. N. Bassett, of Alameda, Calif., captured a large number of Nuttall sparrows and Oregon juncos; and John C. Fortiner, of Brawley, Calif., banded a few cactus wrens and two ground doves. Geo. F. Haglund, of Ashburn, Mo., made a trap from an ordinary wire desk basket and started a station, capturing several birds immediately.

BANDS

Reports are solicited from any cooperators who have tested the method of bringing out the numbers on the smaller bands which are described in Bird Banding Notes No. 13. The suggestion there made is most practicable, and opinions are desired from different stations.

BAIT

Willet Randall, of North River, N. Y., reports that he has found salt to be good bait for redpolls and crossbills, a large number of which were frequenting his station during the latter part of December.

Mrs. Marie Dales, of Sioux City, Iowa, reports that dogwood berries make excellent bait for bluebirds, and also for robins and flickers. She states that when she fed these berries the flickers would pass up other kinds of food.

Mrs. Rachel E. Gaughey, of Antrim, N. H., reports success in capturing blue jays in the Government sparrow trap, baited with scratch feed such as is fed to poultry. She found that they were partial to sunflower seed and corn, but also took suet and doughnuts.

Dr. A. R. Shearer, of Mont Belvieu, Tex., finds sunflower seeds to be best for cardinals, and that blackbirds and grackles also are fond of them.

Burr B. Butler, of Whitten, Iowa, writes that he has used bread crumbs, chick feed, hemp seed, dried apples that have been passed through a food chopper, cracked black walnuts, suet, and water for bait. He thinks chick feed is the best all-around bait, but also states that a pan of water is a great attraction.

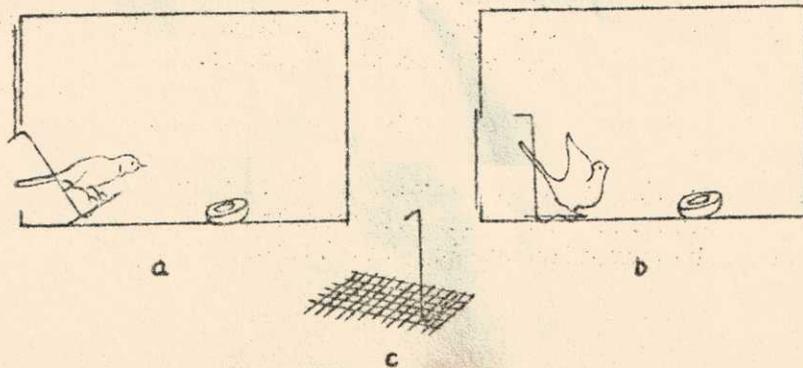
Geo. I. Hopkins, of Manchester, N. H., reports that he has successfully used blueberries for bait for bluebirds, catbirds, and robins.

Roy H. Smith, of Kent, Ohio, has found that small seedless raisins are the best bait for robins, and that they respond to this bait when everything else fails.

Don R. Felton, of Muncie, Ind., reports using sunflower seeds for jays; corn for cardinals; rape, hemp, and canary seed for juncos and other small seed eaters; and meat for owls. He is capturing screech owls in his traps.

TRAPS

Avoid injuries to birds by placing a strip of screen or fine netting around the lower portion of the sides of all cage traps. Such favorable reports concerning the trip-doorstep trap described by J. Eugene Law in *The Condor*, vol. 25, September-October, 1923, p. 178, have been received that we are producing herewith the drawings and general specifications:



The trap box may be made of ordinary 1/2- or 3/8-inch mesh hardware cloth, or a small bird cage with a sliding door may be used. The operating device, according to Mr. Law, consists of a piece of hardware cloth 2-1/2 x 5 inches in size, into one end of which is threaded a piece of stiff wire bent as indicated in the sketch. This engages with the door and holds it open when the trap is set. A bird entering the cage to reach the bait naturally hops first on the raised edge of this false floor or trigger platform, which collapses under its weight and automatically releases the door, which drops of its own weight.

Traps like this and the false bottom trap (See Bird Banding Notes No. 6) are essentially one-bird traps, and it is therefore advisable to operate a "fleet" of them at different sub-stations. J. Van Tyne, of Ann Arbor, Mich., says that these traps are the best he has ever seen and that they can be made from thirty cents' worth of netting. He believes it advisable to paint them.

Large-scale trapping of the many species of Warblers is a very important phase of the work and one that has already occupied the attention of a few stations. Richard B. Harding, of Cohasset, Mass., has developed a trap that promises much success. His paper on the subject is reproduced herewith, including the drawings and specifications of his Cohasset Warbler Trap. We recommend that as many cooperators as possible add this equipment to their stations in time for the spring migration.

WARBLER TRAPS

By Richard B. Harding

Warblers and other insectivorous birds may be successfully trapped by combining the drip bath as used by Howland and some form of top opening trap as used by Mrs. Hubbard, of Connecticut.

Two traps are recommended, the Cohasset Warbler Trap as used by the writer and his wife, and the Chardonneret trap already described in Bird Banding Notes (No. 10).

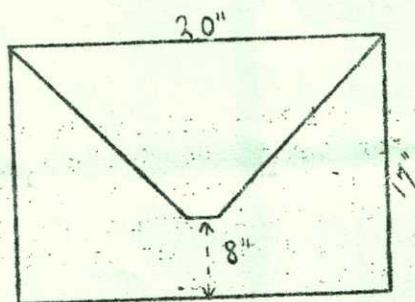
The drip bath consists of a bird bath, above which is suspended a clean 5-gallon kerosene can (filled with water) from a tripod of bean poles. The bottom of the can should be from 3-1/2 to 4 feet from the ground. The faucet is opened slightly, allowing the water to drip at the rate of about 40 drops per minute. The agitated water gives the appearance of a small spring or brooklet, and this deception is increased if small stones or crushed rocks are so placed as to completely cover the bottom of the bath.

The Cohasset Warbler Trap is either circular or square with a funnel top, the hole or entrance in the funnel being some 5 or 6 inches above the bath. Two taking doors are needed, one on the ground and one near the top, as the trap is rather high (17 inches). This trap will take more than one bird at a time but offers slightly more resistance to birds entering (by making them descend the sloping funnel) than the Chardonneret Trap, which birds readily enter but in which only one may be taken at a time. This trap might well be built in two or three sections. It employs a top-opening door to which is attached a strip of wood which engages a sensitive perch, the slightest disturbance of which releases the door, permitting it to close. Warblers may be depended upon to descend by this perch rather than to drop directly to the ground.

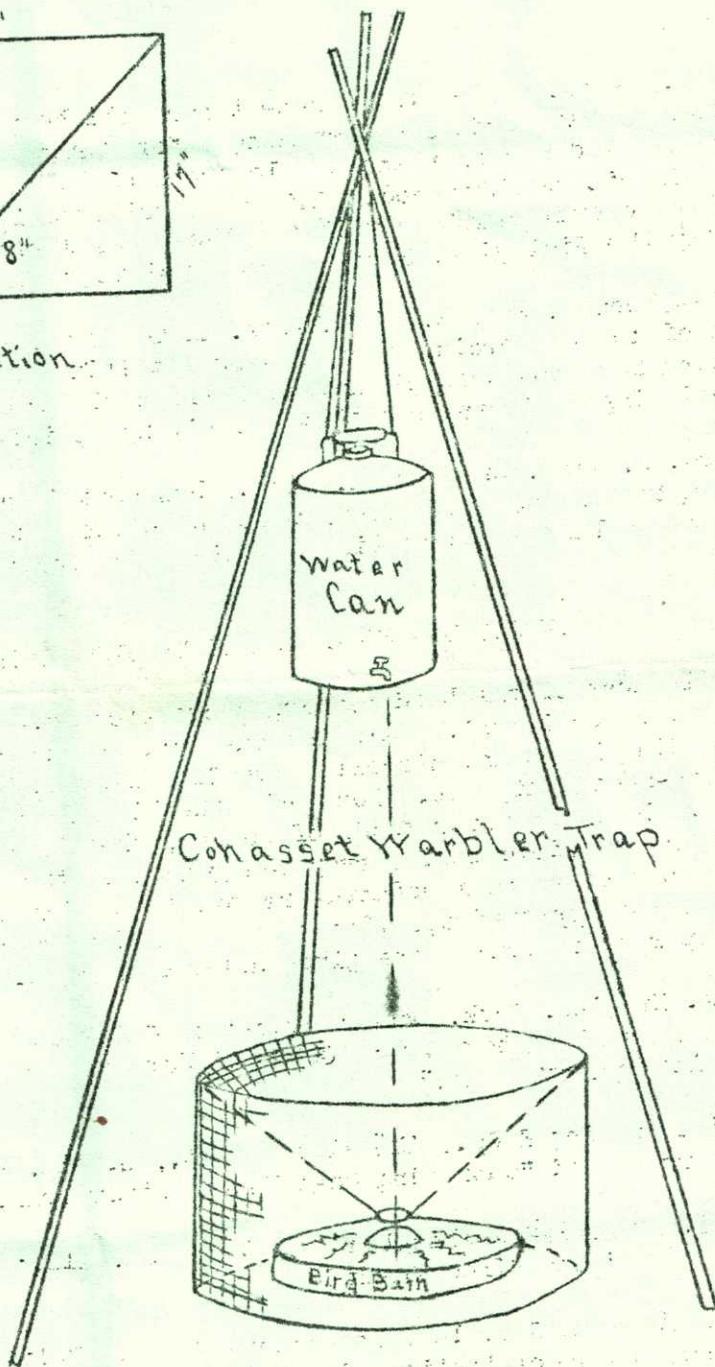
To operate the Cohasset trap, set up the drip bath in a small opening in some thicket that warblers are known to frequent, and place a stone in the center of the bath, large enough for the birds to alight upon when they descend from the opening in the funnel, and 1/2-inch higher than the water level of the bath. The bath is flushed with water and the drip regulated so that the drops fall midway between the stone and the edge of the bath. Place the trap over the bath so that the dripping water falls through the opening in the funnel. The Chardonneret trap is used in the same manner only the stone in the center of the bath may be omitted. * * *

Ralph E. Taylor, of Indianapolis, Ind., is using a trap patterned like the Chardonneret Trap (See Bird Banding Notes No. 10). He reports that it has given excellent service, capturing blue jays and others. For birds that feed entirely on the ground, he turns the trap on one end.

In response to the request in Bird Banding Notes No. 13, of Harry S. Hathaway, for information relative to methods of trapping adult bluebirds, John C. Jacobs, a successful operator at San Antonio, Tex., reports that when these birds are feeding in the fields in spring and fall they may be readily captured with a form of drop trap operated by a figure-4, such as was described on page 10 of Miscellaneous Circular No. 18. His method of operation is as follows: A number of perches, about the length of broomsticks, are set in the ground about 100 feet apart. These are for the birds to use while they examine the trap and bait. The traps are set eight or ten feet from each perch. The usual form of drop trap would undoubtedly be satisfactory, but Mr. Jacobs recommends the slot trap, which is made of light strips of wood instead of wire netting. The trigger on the figure-4 should be quite long and to this the bait is attached. Grub worms, angleworms, or meal worms should be used. These may be fastened to the trigger with pins, but a better way is to tie them to the trigger with a piece of thread long enough to allow the worm to be on the ground.



Cross Section



Cohasset Warbler Trap

Mr. Jacobs states that these traps will be particularly effective in spring, as bluebirds are then hungry for worms. He thinks that a good trapper with a dozen of these simple traps could capture every robin and bluebird in his neighborhood. This is considered important and it is hoped that several stations will try the traps during the coming season and supply the Biological Survey with complete reports.

Kathleen M. Hempel, of Elkader, Iowa, has achieved some success with one of the commercial traps having a tilting chamber. Some other cooperators have not been pleased with traps of this type and it is therefore gratifying to learn that they are giving satisfaction at some stations.

Geo. S. Wing, of Jackson, Mich., has sent in drawings and specifications of a trap he has developed, which he calls "The Midget." We will endeavor to include a description of this in an early issue.

MANUFACTURERS OF EQUIPMENT FOR BANDERS

While most of the bird banding cooperators probably make their own traps and other equipment, following suggestions and specifications given in Bird Banding Notes and Miscellaneous Circular No. 18, some may prefer to use ready-made equipment. For such, the list of dealers given below is supplied, it being understood, of course, that listing their names does not mean that the Biological Survey can guarantee the quality of their products. Most of these manufacturers would probably furnish traps made according to any approved specifications, but the types that they are chiefly prepared to furnish are given after each name.

A. W. Higgins, Rock, Mass.; "Auto-trip Chickadee Trap"; "Tuodor Trap"; "Nebba" nesting box trap; "Cohasset Warbler Trap"; and "Higgins Self Adjusting Sparrow Trap."

Daniel Cushing & Co., 116 Fletcher St., Lowell, Mass.; "Collapsible Pull String Trap" and "Gathering Cage False Bottom Trap."

Wm. I. Lyon, 124 Washington St., Waukegan, Ill.; "Lyon's Improved Sparrow Type Trap" and "Tree Trunk Trap."

E. J. Ederer & Co., 16 East Lombard Street, Baltimore, Md.; net traps according to specifications desired.

All of the above manufacturers will be glad to send descriptive circulars, giving illustrations, prices, and other information.

The Library Bureau, which has branch offices in many large cities, can no doubt supply cards, including cases, of any type desired for use in maintaining station files of banded birds. Leslie Crane, of Rutland, Vermont., one of our cooperators, has also devised cards for the purpose which he is prepared to furnish on request.

SPECIAL INVESTIGATIONS

The success that last season attended the campaigns for the banding of herons, gulls, and terns was such that it is hoped that the work can be continued during the coming season on a still larger scale.

T. E. McMullen, of Camden, N. J., has signified his intention to devote some time to the colonies of gulls and terns off the coast of southern New Jersey.

REGIONAL ASSOCIATIONS

Since our last issue, all cooperative bird banding associations have held annual meetings. The first to be held was that of the Eastern Bird Banding Association, the members convening at the Faculty Club of the University of Pittsburgh on the evening of November 13, following a session of the American Ornithologists' Union, in convention at the Carnegie Museum. The Biological Survey was represented by F. C. Lincoln. An excellent dinner was served, followed by informal addresses by members and guests. These were continued until such a late hour that it was impossible to hold an election. It was, however, the consensus of opinion of those present that the present incumbents should hold office until their successors had been duly elected. These are as follows:

President: Dr. Arthur A. Allen, Cornell University, Ithaca, N. Y.

Vice-president: Frank L. Burns, Berwyn, Pa.

Executive secretary: Rudyerd Boulton, American Museum of Natural History, New York, N. Y.

Corresponding secretary: Mrs. J. E. B. Webster, 16 Davis Place, East Orange, N. J.

Treasurer: Maunsell S. Crosby, Rhinebeck, N. Y.

Councilors: B. S. Bowdish, H. H. Cleaves, J. A. Gillespie, R. E. Horsey, R. H. Howland, R. J. Middleton, Dr. J. T. Nichols, Dr. Lewis Rumford, and Dr. Witmer Stone.

Under date of October, 1924, this Association issued Number 1 of its "Bulletin," a neatly prepared pamphlet of 3 pages, evidently prepared for the press by Dr. Nichols. It is hoped that this will be the forerunner of other bulletins.

The annual meeting of the Inland Bird Banding Association was held at Nashville, Tenn., November 28-30, 1924, in conjunction with that of the Wilson Ornithological Club. The result of the election of officers was as follows:

President: Wm. I. Lyon, Waukegan, Ill.

Vice-president: Dr. Leon J. Cole, University of Wisconsin,
Madison, Wis.

Vice-president: Percival B. Coffin, Chicago, Ill.

Secretary: Samuel E. Perkins, III, Indianapolis, Ind.

Treasurer: Herbert A. Stoddard, Milwaukee, Wis. (Mr. Stoddard is at present in charge of the quail investigations of the Biological Survey and his address is Beachton, Grady County, Ga.)

Field secretary: T. E. Musselman, Quincy, Ill.

Council: S. Prentiss Baldwin (Past president), chairman; M. J. Magee, Mrs. H. C. Miller, A. F. Ganier, R. C. Gilliam, Dr. H. B. Ward, O. M. Schantz, Prof. J. W. Stack, and Dr. T. C. Stephens.

The third annual meeting of the Northeastern Bird Banding Association was held on January 16, 1925, in the lecture hall of the Boston Society of Natural History, Boston, Mass. Following the business session four interesting and instructive papers were presented. This organization has also started publication of a Bulletin, No. 1, bearing the date of January, 1925. It was prepared under the editorship of Mr. Whittle and it is planned to issue four numbers each year. The election resulted in the choice of the following officers for the ensuing year:

President: Dr. A. O. Gross, Bowdoin College, Brunswick, Me.

1st vice-president: C. L. Whittle, Boston, Mass.

2d vice-president: H. S. Shaw, Jr., Newton Center, Mass.

Secretary: L. B. Fletcher, Boston, Mass.

Recording secretary: Mrs. Alice B. Harrington, Boston, Mass.

Treasurer: C. B. Floyd, Boston, Mass.

Councilors: F. H. Allen, R. B. Harding, F. H. Kennard, Ralph Lawson, F. A. Saunders, W. P. Smith, and Dr. Wm. M. Tyler.

The Western Bird Banding Association has recently been organized for the purpose of coordinating the work of bird banding cooperators on the Pacific Coast and in the Rocky Mountain region. This association replaces the Banding Chapter of the Cooper Ornithological Club although it will continue to maintain a close contact with the parent organization. The officers are as follows:

President: J. Eugene Law, Altadena, Calif.

Vice-president: Wright M. Pierce, Claremont, Calif.

Secretary: Mrs. Myrtle S. Edwards, Altadena, Calif.

Business Manager: Harold Michener, Pasadena, Calif.

Councilors: Clarence A. Barnes, Mrs. F. T. Bicknell, Miss Jessica A. Potter, John McB. Robertson, Dr. Clifford H. Wood.

RETURNS

The manuscript for the bulletin containing the returns received by the Biological Survey during the period July 1, 1923, to June 30, 1924, has been completed and it is hoped will soon be in press.

Among many interesting returns received within the past few months mention may be made of the following:

Common tern 270162, banded July 13, 1924, in Huron County, Mich., by W. E. Hastings; killed on October 19, 1924, at Carmen, Campeche, Mexico.

Caspian tern 224034, banded July 26, 1923, near St. James, Mich., by F. C. Lincoln; found dead about October 14, 1924, in Guysborough County, N. S.

Four black guillemots, 210101, 210104, 210117, and 210124, banded during July, 1923, at Grand Manan, N. B., by Ernest Joy; found by him sitting on eggs in the same nests during the early part of June, 1924.

Double-crested cormorant 232115, banded at Last Mountain Lake, Sask., July 1, 1923, by R. Lloyd; killed in Assumption Parish, La., November 4, 1924.

Mallard 205608, banded at Cuivre Island, Mo., March 4, 1923, by L. V. Walton; shot near Athens, N. Y., November 10, 1924.

Mallard 205957, banded at Cuivre Island by Mr. Walton, February 20, 1924; killed near Poetz, Colo., October 27, 1924.

Mallard 232113, banded at Davidson, Sask., by R. Lloyd, July 31, 1924; shot at Cantril, Iowa, November 3, 1924.

Black duck 101835, banded at Cayuga Lake, New York, by Dr. A. A. Allen, January 25, 1923; killed on the Waccamaw River 12 miles from Georgetown, S. C., December 5, 1924.

Black duck 203467, banded at Portage des Sioux, Mo., by John Broeker, February 8, 1923; killed on the Severn River, Hudson Bay, Ontario, June 24, 1924.

Pintail 203103, banded at Lulu Island, B. C., by J. G. Cunningham, March 16, 1924; killed about October 23, 1924, near Cordova, Alaska.

Green-winged teal 22286 (A.B.B.A.), banded at Cayuga Lake, N. Y., by Dr. A. A. Allen, March 18, 1918; killed at Caddo Lake, Harrison County, Tex., November 7, 1924.

Lesser scaup 31501, banded at the Santee Club, S. C., by L. A. Beckman, March 5, 1924; killed near Springfield, Mo., November 1, 1924.

Black-crowned night heron 311439, banded at Barnstable, Mass., by Leavitt C. Parsons, June 15, 1924; shot at Key West, Fla., November 17, 1924.

Marsh hawk 301756, banded at Port Perry, Ont., by E. W. Calvert, June 20, 1924; captured at Boonville, N. C., October 16, 1924.

Belted kingfisher 308336, banded at Noblesville, Ind., by Dr. Earl Brooks, June 21, 1924; killed on the Naches River Bottoms, Tex., November 19, 1924.

Crow 23021 (A.B.B.A.), banded at New Brunswick, N. J., by B. S. Bowdish, June 22, 1917; found dead at East Paterson, N. J., October 21, 1924.

Cowbird 71601, banded at Cohasset, Mass., by R. B. and K. C. Harding, May 3, 1924; killed at Salem, N. J., October, 1924.

Purple grackle 316349, banded at Paoli, Chester County, Pa., July 2, 1924, by Horace D. McCann; killed at Charles City, Va., December 4, 1924.

Bronzed grackle 214498, banded at Ohio, Ill., by Robert L. Jackson, May 12, 1924; caught in a barn at Eva, La., December 10, 1924.