

BIRD BANDING DEPARTMENT

Under the Direction of Wm. I. Lyon, Waukegan, Ill.

BIRD BANDING ACTIVITIES AT THE FORTY-FIRST STATED MEETING OF THE AMERICAN ORNITHOLOGISTS' UNION AT CAMBRIDGE, MASS.

On Tuesday afternoon, October 9th, T. E. Musselman gave his experience at Mr. S. Prentiss Baldwin's trapping station at Thomasville, Ga., showing many slides of the interesting phases that develop in handling large quantities of birds in a short time. The large number of returns of the Chipping Sparrows seems to prove Thomasville, Ga., to be their main winter quarters. Observations showed that they were subjected to a peculiar foot disease and a special investigation was started to discover the cause and possible way of elimination.

The constant returns, from year to year, of a little group of White-throated Sparrows, that occupy the same patch of shrubbery each year, and are seldom trapped elsewhere, seems to prove how close they remain in their winter quarters. Many slides showed that, by quiet methods, birds would remain in the hands to have their photos taken. One, that brought applause from the audience, was a Mourning Dove sitting on a little girl's shoulder. Cardinals showed their ability to fight, in a number of slides.

There was a conference in Mr. Baldwin's parlors at the Hotel Lenox, in Boston, on Tuesday evening. Those present were W. C. Henderson, Assistant Chief, Dr. H. C. Oberholser and F. C. Lincoln of the Biological Survey, Hoyes Lloyd, Supervisor, and P. A. Taverner of the Wild Life Protection Department of Canada, and L. B. Fletcher, Secretary, Charles L. Whittle, Councilor, and Charles B. Floyd, Treasurer of the New England Bird Banding Association, Rudyerd Boulton, Secretary of the Eastern Bird Banding Association, S. Prentiss Baldwin, President, and Wm. I. Lyon, Secretary of the Inland Bird Banding Association.

The main purpose of the conference was the discussion of the territory which should be included in each regional association; maps of Canada and the United States were gone over, and carefully marked, and an agreement reached as to the territory to be included; and an outline map will soon be published by the survey showing these lines. After this subject was determined the methods of obtaining members and general promotion of Bird Banding furnished much interesting and pleasant discussion during the evening.

Wednesday morning, October 10th, was the Bird Banding session. "Notes on a Scranton Starling Roost" by R. N. Davis, Scranton, Pa., illustrated, came first and ran overtime.

"Trapping Devices for Bird Banding," illustrated by lantern slides, by Henry E. Childs, East Providence, R. I. Mr. Childs had a paper Tuesday afternoon on the "Effect of Cultivation upon Changing Bird Population," which covered the same grounds where he carried on his trapping and banding and was assisted by Boy Scouts and High School Biology classes. The first trap shown was a clever tree trap, using a

mouse trap for trigger spring, and it produced good results. A large drop trap also produced good results; a nest trap was used and, in some cases, a nestling bird was used as a call bird or decoy.

"Some Bird Banding Experiences" by B. S. Bowdish, Demarest, N. J. The paper showed that he was a veteran Bird Bander, with a total of bands placed at 1700. A number of returns were secured with Song Sparrows; also Tree Sparrows. Two Purple Finches banded at the Bowdish Station were taken by another bander at Fairfield, Conn. A clever scheme explained how to use a live bird in a glass jar to decoy a troublesome Sparrow Hawk. One hundred forty-four Purple Finches were handled and the first color in young birds was observed in head and neck. Also stated that Mrs. Whittle has observed first color in rump. Mr. Bowdish moved about one mile away and one Purple Finch repeated at his new station.

"Midsummer Song Sparrows, A Statistical Study of Banding Data" by John T. Nichols and Rudyerd Boulton, New York, gave results of trapping and banding in charts of percentage and comparison.

"The Migration of the Mallard (as shown by banding data)," illustrated by lantern slides, by Frederick C. Lincoln, Washington, D. C. Mr. Lincoln's work in banding ducks in the marshes, along the Illinois River, showed that, with the proper equipment and location, ducks are as easily banded as small birds, having banded 190 ducks in one day, and having taken 100 ducks in one trap as a record for one catch. He showed a large net trap which, if properly worked during a season, would give one chance for half a million ducks. He stated that there had been about 4,000 Mallards banded up to the present time.

"Experiences in Bird Banding," illustrated by lantern slides, by Wm. I. Lyon, Waukegan, Ill. A tree trap was shown that had trapped Yellow-bellied Sapsuckers, Downy and Hairy Woodpeckers, Black and White Warblers, and a recent success in trapping over 100 Brown Creepers. A partial albino Grackle, with grayish white on tail feathers, was captured and experimented with.

Sparrow records were as follows: Two immature Harris Sparrows were trapped, a few White-crowned Sparrows were trapped each spring and fall. Total taken, 80. Over 1,000 White-throated Sparrows have been banded and not a single return. No returns known on migration routes. White-throated Sparrows often injure their beaks; a whitish spot appears on the upper mandible near the tip of the beak. In about a week the injured spot seems to contract and leave a dent in the beak; in a few days the tip raises up, and in another day or two it falls off. This year some that have lost their beak tips are being confined to see if the beak will regenerate again to its natural size.

Tree Sparrows show that they return to winter home; out of 46 trapped first year, 8 returned last year and 150 more were banded. Song Sparrows are good returners and have been taken in some proportions. Three have returned the second time; 67 Lincoln Sparrows have been trapped, but no returns to date.

Fox Sparrows are not plentiful, but 45 have been banded. One stayed at the station all winter and was trapped 165 times. Cut apples

proved to be the alluring bait for Cedar Waxwings; 200 were banded and one was taken ten days later by Mrs. H. C. Miller at Racine, Wis.

Time and discussion was cut.

"Scientific Results from Bird Banding," illustrated by lantern slides, by S. Prentiss Baldwin. It was announced at the start that Mr. Baldwin would have to cut his time in half so he could only hurry through a few of his many wonderful experiences. Mr. Baldwin offered an opportunity to some one to go to Thomasville, Ga., the coming season to operate his station; and stated that there would be an extensive trapping and study of the Mourning Dove situation in that district. There is also to be a very extensive study of the Quail, to be carried on in the nearby district, that will be continuously conducted by an experienced ornithologist, with helpers, that will extend over a three-year period. Mr. Baldwin's House Wren study has been more than doubled and will take four or five years more to complete. It was very disappointing to have such a fine paper cut in half and no time allowed for discussion.

The Annual Dinner of The American Ornithologists' Union was held at the Colonial Club, Cambridge, Mass., at 8 P. M. Wednesday evening, where the usual good fellowship prevailed. Dr. C. W. Townsend, President of the New England Bird Banding Association, was the main speaker of the evening. With lantern slides he showed a famous old book that had just been discovered and the slides, of the illustrations in the book, showed many gentlemen in ancient costume, but the faces seemed to be very familiar, and explanation of their occupations were very interesting to all present. One conspicuous among them appeared to be the Father of Bird Banding, who was apparently in the act of coaxing a Lady Wren to give her correct age.

At each plate was an Auk shaped menu card and a copy of that rare journal, "The Auklet," a semi-occasional Journal of Ornithological Disputanda. The growing popularity of Bird Banding was demonstrated by their receiving two pages of attention in the Journal as follows:

BIRD BANDING DEPARTMENT

Conducted by W. I. Tyger

We regret to announce that we have been unable to accept the generous offer of Messrs. Fetcha and Whistle to purchase the entire issue of the Auklet for bird-banding notes. The following, however, are gratuitously inserted:

Willay Markeighty writes: "A successful trap for Hummingbirds can be made from a ladies' hair-net applied to the far end of a forked twig. It works best with the use of a good bait, particularly mint julep and sugar." Since the banding of Hummingbirds is likely to increase through this important discovery, members intending to trap Hummingbirds should make early application to the U. S. Biol. Survey, as a federal permit is required for the possession of bait.

Simultaneously with announcement of the great increase of divorce in Chicago, comes word from our valued correspondent, S. Pendthrift Borldwejn, that the House Wrens of Ohio are substituting aluminum bands for hus-bands, with the resulting decrease in infant morality. The correlation of the two phenomena is believed to be due either to sun-spots or to fly-specks, though additional data are needed this coming year.

It is expected that Rabbi Flescher will inaugurate a movement to unite the N. E. B. B. A. and the Y. M. C. A. in a cheer-up campaign.

At the recent city election in Philadelphia, Dr. Whitston tried the experiment of banding all voters, with the result that 50% repeats were discovered.

WORK OF THE JUNIOR BRANCH OF THE NEW ENGLAND BIRD-BANDING
ASSOCIATION

The work of this branch has now begun in earnest and we are able to report that within the month little Harry Overholt has banded an Old Crow and plucked Four Roses from the banks of the Sunny Brook at the Old Taylor place on the outskirts of Melville.

Tom Gin has been similarly employed on the Bull Bats of Green River, once a noble stream, but now nearly dried up, though we suspect the great attraction for Tom in that vicinity is one of the Vermouth girls.

The meeting of the A. O. U. will be given over so largely to the work of the Bird-Banders that it will be unnecessary here to go into details. We add, however, a list of the latest recruits to the Junior Branch:

Della K. Tessin	F. Roth	Aline Kidd	Ella Gant
Ida Know	Etta Lott	A. Mary Flapper	Mag Nesia
Gladys Gone	Meta Ford	Addie Noyd	Polly Wog
Perry Winkle	Millie Tant	Odette Offutt	Carry C. Noyle
Freda Gain	Millie Terry	F. Irma Ment	Tom Gin
Ethel Alca Hall	Amelia Rate	Andy Lucia	

At the end of the Chapter there is a picture of a little bare-legged birdie in a frame. His title seems to have been omitted; we think it should be, "Yes, He Wears no Band."

Friday, October 12, was given over to the field trips. The Bird Banding trips started from the South Station at 8 A. M., where we found Mr. Whittle and Mr. Floyd waiting for us. We took the train to Cohasset and hiked to the club house to watch the migration of the Scoters and other water birds. Unfortunately there was a fog and we could see very few of the ducks. There was a continual shooting by the gunners in the boats, but we did not see any ducks fall. We spent the morning about this place and observed a number of smaller birds in the brush just back of the point. Each one had his own lunch, and hot coffee was served for us at noon, then we started for the Bird Banding stations, with a hike down through the very attractive piece of woods, but on account of the great number in our party there were not many birds seen. All of the country seemed to be wonderfully covered for attracting birds.

We met the busses at the end of our hike, which took us to Mr. Richard B. Harding's place, where they had quite a number of traps in operation; the grounds were wonderful and offered many opportunities for trapping birds; plenty of trees and underbrush for cover and food, the land extending out to the ocean waters, where there are chances for the shore birds.

From there we went to Mr. Conover Fitch's place, who was just starting in with the Bird Banding work, but the grounds offered many inducements to the birds, so it was just natural that he should have a Bird Banding station in such a place.

Mr. Whittle's was the third stop and he showed us some new forms of drop traps; also one window trap where they had trapped over 500

Purple Finches. He used plenty of water dishes to attract birds with and it was a very ideal place.

Our last stop was at Mr. Lawrence B. Fletcher's place. We were greeted at the entrance by a large covered winter feeding station, with a number of evergreens temporarily set in the ground for the birds to use as lighting perches and for attraction. On the other side of the house, which faces down towards the small lake, they had a number of drop traps which operated with strings from the porch. With the water and the brush and the open land Mr. Fletcher has chances to trap all kinds of birds in his very ideal place.

A number of people took advantage of the trip and had a very enjoyable time. We caught our train back to the South Station and just crossed the street to the Hotel Essex for the dinner under the auspices of the New England Bird Banding Association. There was a very good attendance and Alfred O. Gross of Brunswick, Maine, acted as toastmaster. There was a message of welcome from the President, Dr. Charles W. Townsend, and Dr. Witmer Stone told us how he joined the American Bird Banding Association in 1909, and encouraged those who were just getting into the work today to greater activities. Mr. F. C. Lincoln of the Biological Survey told some of the life history study of birds that has been started by the investigations, and brought to the meeting the message of inspiration for more work. W. I. Lyon, Secretary of the Inland Bird Banding Association, told of the developments through the central part of the country. There followed some slides by Mr. Fletcher, showing methods of protection of birds, also one interesting set of slides of a three story window shelf where they had been successful in trapping over 200 birds during the summer season. With many good-byes after the adjournment of the meeting, we all started for home.

A CONVENTION WHOLLY DEVOTED TO BIRD BANDING

The Inland Bird Banding Association completes a two-day program of meetings and scientific papers at Indianapolis.

The Inland Bird Banding Association accepted the invitation of the Indiana Audubon Society, and the Nature Study Club of Indiana, to hold its annual meeting in Indianapolis on November Second and Third. The first activities—the formal business session—was held at the Hotel Lincoln beginning at 3 o'clock, November second. Soon after the members were assembled they were invited to adjourn to the roof of the building so there might be a group photograph taken of those present. On returning they were called to order, in the assembly room, by the President, Mr. S. Prentiss Baldwin, who welcomed all those present and then stated the purpose of the meeting and called for the reading of the minutes by W. I. Lyon, Secretary. They were read and approved. Mr. Herbert L. Stoddard, Treasurer, gave the account of the year's finances, which was accepted. The next order of business was the election, and on motion President Baldwin appointed a nominating committee consisting of Mr. O. M. Schantz, Mr. F. C. Lincoln and Mr. Percival Brooks Coffin. The committee retired and in a short time announced that they were ready to report. They recommended that

all present officers be elected for the ensuing year. As there was no opposition there was a motion made and carried that the Secretary be authorized to cast the vote of the Association. Plans for the coming year were discussed and many activities suggested before the meeting adjourned.

The first public meeting was held in Cropsey Hall, Central Library building, on November second at 8 p. m. The room was well filled when Mr. Alden H. Hadley, President of the Indiana Audubon Society, welcomed all present and stated the reason for the meeting, also giving us many interesting facts about the Indiana Audubon Society.

Mr. Richard Lieber, Director of Conservation of Bird Life in the State Parks in the State of Indiana, gave a very interesting talk, telling of the original forests that were situated in Indiana, and gave many incidents of the lives of the birds that have totally disappeared from the country. He also told of the future plans for Bird Conservation in the State Parks.

Next came Mr. S. Prentiss Baldwin, President of the Inland Bird Banding Association, with a talk illustrated by lantern slides. "The Methods of Trapping and Banding Wild Birds, and Interesting Stories Derived from these Methods." Mr. Baldwin's paper was even more interesting, than it has been in the past, for he had many new adventures to tell, and the whole evening before him, so he did not have to be hurried. Mr. Baldwin's talk was intended to interest the general public in the idea of Bird-Banding so they would attend the meeting on the next day. From his many intense years of study with the House Wrens he gave us many inside lights on their family relations, of their marriages, divorces, and infidelity; also showing a number of new developments that have come to light in the past year. His House Wren stories are always well received by the public because they are so new in the history of bird life. In telling about the White-throated Sparrows that come to a patch of shrubbery near the house, Mr. Baldwin stated that they had been there regularly since 1915. and he told of the Chimney Swift, that calls regularly at Gates Mill, and was banded there in 1916, reporting on thime this year.

Saturday, November third, at 9:30 a. m., the meeting opened at the Herron Art Institute. Mr. S. Prentiss Baldwin, President, gave a few words of welcome to the good sized audience and stated that all the meetings would be open to the public and invited every one interested in Bird Banding.

"A Naturalist in South America," by W. S. Blatchley was the opening subject. Mr. Blatchley gave a very interesting talk on his voyage and travels, stopping at Barbados Island, Rio De Janeiro, Montevideo, Buenos Aires, then across country over the mountains down into Chile, and up the coast to Bolivia and Peru, and home through the Panama Canal. During the entire trip he stopped at all the museums and bird collections that were available.

Mr. Herbert L. Stoddard, Treasurer of the Inland Bird Banding Association, read a paper entitled "The Shore Birds of Lake Michigan." Mr. Stoddard's paper was a scientific list with observations made during

the past twelve years in the territory from Michigan City, Indiana, to Sheboygan, Wisconsin; he has walked over this entire territory except where cities obstruct both man and birds, and he has collected many rare specimens for the different museums. At present he is forming some very interesting "Shore Bird Groups" for the Milwaukee Museum. He gave many interesting observations of birds that through the persistent shooting have become very rare, and of those that on account of their protective color are hard to observe. Mr. Stoddard and Mr. Jung of Milwaukee have succeeded in making traps that have taken Plovers and Sandpipers, and during the past season they have succeeded in placing over one hundred bands on these birds.

"Bird Banding Under the United States Biological Survey" by Mr. Frederick C. Lincoln, U. S. Biological Survey. Mr. Lincoln gave a very good account of the increase in Bird Banding and requested all present to lend their influence in getting more members for the Inland Bird Banding Association and operators to place bands in their districts. He explained the many chances that our vast district has for new and original work, and spoke of the appreciation by the Survey of the members who have contributed to the work in the past. Then, with the lantern slides to illustrate his own work in duck banding, Mr. Lincoln showed a number of pictures of duck traps, explaining the difficulties and the successes in trapping wild ducks and from his explanations it seems that ducks are trapped just as easily as the small birds, and if anything, in larger quantities. His record for one day's banding was one hundred ninety ducks and over one hundred having been taken from one trap in a single catch. He stated that over 4,000 Mallards have been banded at the present time, and showed many maps giving the location of the returns from these birds, which gave a very good idea of the routes they were following.

Adjourned for lunch.

Saturday, November Third — The Afternoon Session

Mr. Samuel E. Perkins, Presiding

"Methods and Results in Banding Wild Birds" by Wm. I. Lyon, Secretary of the Inland Bird Banding Association, illustrated by slides. The selection of a position for a bird trap is very important and it was pointed out that it was necessary, in many cases, to have the traps close to shrubbery that is adjacent to tall trees. A corner of a hedge or fence that is protected to the north and west is a desirable location, or at the foot of a hill where the hillside faces mainly to the east, so that the morning sun will make it a warm and comfortable feeding place. Constant cleaning of the trap and changing of the bait, and everlasting vigilance against pests brings success. Study of the location of the trees were shown to which most of the climbing birds will be attracted. The slides that produced the most interest were those of the new tree trap which has just proved its efficiency, in the past few months, in trapping Downy and Hairy Woodpeckers, Yellow-bellied Sapsuckers, White-breasted Nuthatches, Black and White Warblers, and over one hundred Brown Creepers. The interest of the audience was shown by their stopping the speaker a number of times and requesting slides

to be shown again, measurements to be given and more time allowed for some of those interested to make a sketch. The development of new traps is very important, especially for taking birds that have not been trapped in the past, and the audience was interested in the many new schemes that were shown.

Mr. Albert F. Gainer, of Nashville, Tennessee, gave a very interesting paper on "Identification of Birds without the Use of Glasses, Their Color, or Their Notes." Mr. Gainer has made a study of identifying birds by their actions, and through it is able to identify them at a long distance as accurately as many of the others who use glasses and the other general means. His paper was very interesting to those present.

Mr. T. E. Musselman of Quincy, Ill., was on the program to show lantern slides and tell some stories on Bird Banding at Thomasville, Georgia, while he was in charge of Mr. Baldwin's trapping station last winter. As Mr. Musselman was, at the last minute, unable to attend the meeting, he asked Mr. Baldwin to show the slides and tell something of his experience as Mr. Baldwin was there last winter with him. Of course Mr. Baldwin could not give many of the very interesting stories which came into Mr. Musselman's personal experience but the slides were very interesting.

Mr. Baldwin then gave some talk on "Bird Banding as used in the Intensive Study of One Species." His talk was very similar to what had been intended for the A. O. U. Convention with the addition of many interesting stories and details which he was unable to give at Cambridge on account of the lack of time. As Mr. Baldwin has lived with his wrens, so his records will live with us forever. His explanation of the detail in the careful study that he is giving these birds at present shows that his work must be continued four or five years more to get complete results which he hopes to have published at the completion of his efforts.

Some very interesting features of the work undertaken by the Inland Bird Banding Association during the past year were brought out at this session.

The Inland Bird Banding Association has been co-operating with the Cleveland Museum of Natural History and the Biological Survey for the placing of bands on the sea birds of the South Atlantic and Indian Ocean. It seems that an expedition has been organized by The Cleveland Museum of Natural History, with George Finley Simmons as Commander, for a two-year collecting trip in the South Atlantic on the Schooner "Blossom." The Inland Association took the matter up with Commander Simmons and their conference resulted in the Expedition taking 8,000 bands to use in the Bird Rookeries of the South Atlantic. While it may be that very few of these bands will ever be returned, it is evident that any return from these bands will be of very great interest.

The Inland Bird Banding Association has been active in coöperation with the U. S. Biological Survey in organizing the Quail Sportsmen in the vicinity of Thomasville to make a complete study of the life history of the quail. Funds have now been provided by the Quail Sports-

men and, under arrangements with the Biological Survey, an ornithologist and assistant will be employed, and stationed between Thomasville and Tallahassee, to make such a study for a period of three years or longer, if necessary. Bird Banding will be the basis of a considerable part of this work as the quail will be banded in coveys and then, as they are shot through succeeding years, record will be kept of where each bird is found in order to show whether quail migrate or scatter to any great extent.

In addition to the quail study, it is expected that Mr. Baldwin and probably one or two other ornithologists will be at the trapping station in Thomasville at least during February and March to carry on the work as it has been done during the past ten years and, in addition, it is hoped to organize upon an adjacent plantation an extensive experiment in the trapping and banding of mourning doves. Anyone who may be interested to know more about the Quail Study or who may wish to take part in or visit the work carried on at Thomasville, should write to S. Prentiss Baldwin, 817 Williamson Building, Cleveland, Ohio.

The Annual Dinner in the evening at the Hotel Lincoln was attended by the three organizations. Dr. Stanley Coulter was unable to attend so Mr. Percival Brooks Coffin, Councillor of the Inland Bird Banding Association, acted as presiding officer. The address of the evening was by Dr. Amos W. Butler, and informal talks by Mr. O. M. Schantz, Professor C. H. Eigenmann, Mrs. H. C. Miller, and others. There was a full attendance and everyone enjoyed the evening very much.

The members of the Inland Bird Banding Association were enthusiastic in their praise of the courtesy shown them and the able handling of the convention by their hosts, the Indiana Audubon Society, and the Nature Study Club of Indiana. They both seem very live organizations and under able management.

The following letter will be of interest at this time as Mr. Baldwin is now inviting applications from any who may wish to volunteer for the work and experience at Thomasville this winter.

Members of the Inland Bird Banding Association.

Annual Meeting, Indianapolis, November second, 1923.

Gentlemen:—

I am sorry that I cannot appear before you to give an account of the wonderful experiences which I encountered at Thomasville, Ga., during February and March of last year. However, Mr. Baldwin will tell many of the experiences and give a careful resume of the work accomplished there by us. I have asked him to show slides which will no doubt be interesting.

I wish to place before the Association a few of the possibilities of Thomasville as I saw them. The situation is admirable and the six or eight weeks which any man will spend there will be more of the nature of a vacation than a period of work. Birds are very numerous and the best of traps are all ready for the experimenter when he arrives. However, I think it would be wise for the association to supply Mr. Baldwin with two workers this year as they could better plan the

activities about the plantation. One can take charge of the bird banding proper, while the other can give his particular attention to the diseased condition of the feet of the chipping sparrows which are captured. In order to make the experiment more effective, I suggest that the man who has charge of the last feature have a notebook with numbered pages and that before starting the experiment that he have a stencil made showing the foot of a bird. Such a stencil can easily be made by pasting carbon paper under a picture of such a bird's foot, but I think that better would be a rubber stamp made from a good drawing. Whenever a bird is captured with a diseased condition of the feet or tarsus, the picture can be made at once and the development of the trouble from day to day can be traced on the drawing. I used this method in my work this past year and expect to place in Mr. Baldwin's hands a paper containing the results of my work along this line. Another feature which I should advise is the matter of transplanting chipping sparrows from the Wade plantation to Inwood. With one of the fall traps, it would be a very simple thing to capture from twenty-five to fifty of these birds at the Mill pond. It would be interesting to band these birds, then transport them to Inwood plantation, two miles away and turn them loose among the chipping sparrows in that neighborhood, keeping track of the number that would be subsequently caught, watching to see whether they would all gradually disappear, returning to the Wade plantation several miles away. In our experiments in former years, we have found that many of the birds return to Inwood from year to year. Not only do they return to this plantation but they are caught in subsequent years at the same or a neighboring trap to the one at which they were caught in former years. If these birds have that very fine sense of orientation, I am wondering whether it would be effective should such an experiment be tried and how long would it take for them to return to the Mill pond and what percent. would go and what percent. would remain.

There were some mourning doves at Inwood while at Mill pond there were from three to five hundred. I constructed a trap last year with the intention of catching these doves, but I feel that the trap can be improved upon. As it stands, it is only effective when someone is there to drop the two doors. The mourning doves will wander around such an inclosure or trap, eagerly hunting an entrance, and if several entrances such as are found in the government sparrow traps, should be made, I believe that mourning doves would be caught all day long. I see no reason why several hundred doves should not be captured and banded during the 1924 season. However, the trap should be placed early, in fact before the experimentors go to Thomasville so that the doves will by then begin to become acquainted with its appearance. I feel that this is particularly important, as no doubt the doves scatter over the entire eastern section of the United States and many interesting records would be the result. These are suggestions which open themselves to the experiment should several men spend their time at Thomasville.

When the men for this work have been selected, I hope they will

feel free to write me for any personal suggestions that I have, yet you will find that the material which Mr. Baldwin has gathered together for your instructions will be sufficient to cover your every desire. I am sorry that my work prevents my being with you, however, I wish you a very successful meeting and I hope that next year I may have the pleasure of meeting you all in person.

Quincy, Ill., November 1, 1923.

T. E. MUSSELMAN.

BIBLIOGRAPHY OF BIRD BANDING IN AMERICA

BY S. PRENTISS BALDWIN

This list is intended to include the more important papers on bird banding, without attempt to include every paper on the subject. During the last three years the newspapers and magazines have contained many articles, which have been chiefly compiled from the following papers. For the benefit of those who wish to complete their files there is stated as to each paper, whether the paper can be obtained and to whom to apply for it:

1903. Cole, Leon J., Suggestions for a method of studying the migration of birds: Bull. Michigan Orn. Club, vol. 4, No. 1, p. 19, March. Out of print.
1904. Bartsch, Paul, Notes on the herons of the District of Columbia: Smiths. Misc. Coll., vol. 45, Quart. Issue, vol. 1, pp. 104-111. Out of print.
1904. Taverner, P. A., The tagging of birds: Bull. Michigan Orn. Club, vol. 5, No. 2, p. 50, June. Out of print.
1909. Cole, Leon J., The tagging of wild birds as a means of studying their movements: Auk, vol. 26, no. 2, pp. 137-143, April. Out of print.
1910. Cole, Leon J., The tagging of wild birds; report of progress in 1909: Auk, vol. 27, no. 2, pp. 153-168, April. Out of print.
1913. Cleaves, Howard H., What the American Bird Banding Association has accomplished during 1912: Auk, vol. 30, no. 2, pp. 248-261, April. (Reprinted in Ann. Rept. Smiths. Inst. for 1913, pp. 469-479, 1914.) Out of print.
1919. Baldwin, S. Prentiss, Bird-banding by means of systematic trapping: Abstr. Proc. Linnæan Soc., New York, no. 31, pp. 23-56.
First systematic description of the methods of trapping and banding, and instructions as to traps, handling birds, and procedure. Out of print.
1921. Baldwin, S. Prentiss, Recent returns from trapping and banding birds: Auk, vol. 38, no. 2, April.
Report of "Returns" taken at Cleveland, Ohio, and Thomasville Ga., in 1919 and 1920.
1921. Baldwin, S. Prentiss, The marriage relations of the house wren: Auk, vol. 38, no. 2, April.
A brief study of the mating of House Wrens.
1921. Lincoln, Frederick C., The history and purposes of bird banding: Auk, vol. 38, no. 2, April.
The above three papers may be obtained, bound together in one cover, upon application to U. S. Biological Survey, Washington, D. C.
1921. Lincoln, Frederick C., Instructions for "Bird Banding," Department Circular 170, U. S. Biological Survey.