

well down on the sides anteriorly and defining the upper abdominal region; the rest of the lower surface, including the lower tail-coverts, pure white. Feet and tarsi deep yellow; the soles shaded with dull brown. Iris hazel brown. Bill yellow with a shading of blue close to the cere. Cere and naked skin of forehead orange with a strong carmine shading.

Geographical Range. So far as known the eastern part of Territory of Chubut or Chupat, Patagonia.

This carrion hawk, apparently heretofore undescribed, was received in an exchange of bird skins from the Museo La Plata in Buenos Aires. The bird is undoubtedly fully adult, and was taken near the settlement of Chubut in February, 1896. The original number is 8 and the bird was labelled *Ibycter americanus*. It is excluded from the group of this genus to which *americanus* belongs by the difference of the coloring of the under parts and tail. In certain respects it approaches *Ibycter carunculatus* but is much larger than that bird and from a widely remote district. The only other bird near it in coloration is *I. megalopterus*, with the throat, breast and chest black. This species, too, so far as known, is confined to the Pacific side of the Chilian Andes and perhaps encroaches upon extreme southern Patagonia to the eastward.

THE TAGGING OF WILD BIRDS: REPORT OF PROGRESS IN 1909.

BY LEON J. COLE.

AT THE meeting of the American Ornithologist's Union in Cambridge in November, 1908, the writer presented a proposition for the study of the migrations and other movements of wild birds by means of numbered bands, which should be placed around the birds' legs.¹ The great advantage claimed for this method was the accurate data that might be accumulated relative to the movements of individual birds. This work had already been attempted on a

¹ Cole, Leon J. *The Tagging of Wild Birds as a means of studying their Movements.* Auk, Vol. XXVI, No. 2, pp. 137-143, April, 1909.

small scale during one season (1908) by a committee acting under the authorization of the New Haven Bird Club. This committee consisted of Dr. Louis B. Bishop and Mr. Clifford H. Pangburn of New Haven, with the writer as chairman. Owing to the fact that comparatively little actual field work could be expected from local members, it was decided to broaden the scope of the banding work, making it, if possible, of a national character. With this in mind, it was brought before the ornithologists at Cambridge, as stated. The proposition appeared to incite interest and to meet with considerable favor from those present at the meetings, and a sufficient number agreed to help in the work to make it appear advisable to proceed on the plans outlined. The present report is a brief summary of what has so far been accomplished.

First, however, it may be well to make some mention of similar work in this and other countries. Mention was made last year of Audubon's experiment of placing silver wire on the legs of a brood of young Phœbes, two of which were found nesting in the same locality the following season; also of Taverner's work, which was very similar in its plan to that proposed, and which resulted in the taking in Louisiana of a Flicker banded the previous summer in Iowa. The capture of two ducks wearing bands of unknown source was also mentioned. The writer was unaware at that time, however, of the interesting investigations in this line made by Dr. Paul Bartsch in the heron rookeries near Washington, D. C., as well as of the excellent progress that has been made in two or three countries in Europe. Dr. Bartsch's results will be discussed later in connection with those of this season on the banding of Night Herons. The European experiments deserve mention at this time, the following account of them being taken largely from a letter from Herr Jakob Schenk, adjunct of the Royal Hungarian Central Bureau for Ornithology, and dated at Budapest, April 20, 1909.

In 1899 Mr. Christian Mortensen of Viborg, began marking birds with aluminum rings, first Starlings, then later, Storks, Ducks and the larger Birds of Prey. His results were published in 'Dansk. Ornithologisk Vereeniging Tidskift,' Vol. I.

In 1903, the bird observatory at Rossitten, Germany, started marking, chiefly *Corvus cornix*, but later large numbers of Storks

and Gulls (*Larus ridibundus*). The results were published in the 'Journal für Ornithologie' for the corresponding year. This work is being directed by Dr. Thienemann.

In Hungary marking was started in 1908. A number of papers have been published giving the results,¹ which are most gratifying but which we cannot review at this time, further than to say that some of the most notable results have been obtained with Storks. A number of these birds tagged in central Europe have been reported from Africa, and one from away down in Natal, South Africa. One example which is of considerable interest is reported in 'The Pictorial,'² an illustrated magazine published at Durban, South Africa, as follows: "Last year a stork marked near Königsberg in 1906 was reported to the observatory [at Rossitten]. It was snared in the autumn by natives on the north back of the Fittri Lagoon, and the ring and foot came into the possession of a French officer. On his return to France in 1908, he found out the meaning of the legend on the ring, 'Vogelwarte, Rossitten, Germania,' and forwarded the interesting relic to its destination."

According to Herr Schenk, Mr. W. C. Tait, Oporto, was this season going to attempt banding birds in Portugal, and he adds that the work will probably be taken up in France as well, while in England a similar movement has been begun by Mr. H. F. Witherby, the editor of 'British Birds.'³ It is stated⁴ that "already [July, 1909] some 1500 rings have been sent out" for use.

Preparation for the Season of 1909.

The bands used in 1908 were largely of the "closed" type, that is they were complete rings of aluminum, which consequently could be used only on very young birds whose feet had not yet

¹ Schenk, Jakob. Bericht über die Vogelmarkierungen im Jahre 1908. *Aquila*, Vol. XV, 1908, 8 pp.

Schenk, Jakob. Der Frühjahrszug des weissen Storches in Ungarn. *Journal für Ornithologie*, Jan., 1909, pp. 39-98, pl. v.

² Far-travelled Storks. *The Pictorial*, Vol. IV, No. 31, May 6, 1909, p. 975. I am indebted to Mr. J. H. Fleming of Toronto for the copy of the magazine containing this note.

³ The scheme was propounded in *British Birds*, Vol. III, No. 1, June, 1909. See Auk, Vol. XXVI, July, 1909, pp. 332, 333.

⁴ Bird Marking and Migration. *Knowledge and Illustrated Scientific News*, N. S., Vol. VI, No. 7, July, 1909, p. 274.

reached full size or in which the bones were still so soft that the band could be forced gently over. These bands have some advantages, but also a number of serious objections. The first of these is that anyone proposing to do banding must have on hand a variety of bands of several different sizes; and unless one knows before hand just what species of birds are going to be banded, it is apt to be just the size of band needed that one will be out of. This is obviated by the use of the "open" bands, two sizes of which have been found practicable to use on birds ranging in size from warblers to ducks and the larger owls. The second objection to the closed band is that of expense. In the first place they are cut from aluminum tubing, which is more expensive than sheet aluminum; but what is of far greater importance, the open bands can be stamped with the address and serial number while they are flat, before being rolled, while the marking of the 'closed' bands is a difficult and tedious (and hence expensive) process.

The styles of bands finally decided upon were made from sheet aluminum of the required thickness and cut to the desired size. The smaller band (designated No. 2) was from sheet aluminum 0.5 mm. thick, and are approximately 4 mm. wide and 26 mm. in length. The larger bands (No. 4) are 6 mm. wide, 44 mm. long, and 0.7 mm. in thickness. The "return address" is impressed on the flat band with a steel stamp, made in one piece, so that the whole address is put on with a single impression. Through the kindness of the editors of 'The Auk' we have been allowed to use the name of this journal for the "return address," the inscription reading

NOTIFY
THE AUK
NEW YORK

as here shown. Although arranged, as indicated in three lines, the letters are less than 1 mm. ($\frac{1}{32}$ inch) in height, so that the whole goes easily on the width of even the small band, and uses up only 7 mm. of its length. The number is now added beside this inscription, the whole occupying about 15 or 16 mm. of the length of the band. If the blank end of one of the No. 2 bands be cut off close to the number, the portion bearing the inscription and number may now be rolled into a small circular ring with an internal

diameter of approximately 4 mm. when the ends of the metal meet evenly. This is about the size that would ordinarily be used for sparrows and the like. For larger birds the band is merely cut a little longer, while on the other hand, the ring may be made smaller by allowing the ends to overlap, the extra weight being insignificant. In practice, as a matter of fact, it is found more convenient to allow the ends to overlap a bit in all cases.

The record blanks which are sent out with the bands, and are to be filled in when the bands are used, are essentially the same as those described last year. A somewhat different method is employed, however, of keeping these records when they are turned in. Instead of being copied on larger cards, they are gone over carefully to see that they have all the requisite data, and are then filed serially in the order of their numbers, since they bear, of course, the number of the band used. When a "return" record now comes in, that is, when a banded bird is found and reported, the data of this are filled in on a red slip of the same size as the banding record, which is on white paper. The return records can then be filed in their appropriate positions with the banding records, where on account of their conspicuous color, they may easily be found when desired.

Having made these arrangements for the season's work, all that remained was to distribute the bands and banding record blanks among persons who were willing to assist in the undertaking. A number of well known ornithologists, and some others connected with educational institutions, were asked to assist by acting as local agents for distribution of bands to field workers in their vicinity. A considerable number complied with this request, and to these we are deeply grateful for their disinterested assistance. In addition to this quite a few persons made application for bands directly, as a result of the publication in 'The Auk' last April of the paper setting forth the plans of the work. In all something over 5,000 bands have been distributed this year, and we consider it extremely satisfactory for the first season's work that approximately one-fifth of these were used and are now being worn by a very considerable number of species of wild birds. This leads us to a brief consideration of the

Results of the Season's Work.

The actual number of records that have been returned to date¹ is 911. It is safe to say, however, that if all the records of birds that have been banded were in, the number would easily reach the 1000 mark, since several who did banding have not as yet, for one reason or another, been able to send in all their blanks. The number of returns from banded birds that have been received is also encouraging, but it is more difficult to say just how many of these there are, since a "return" may be for a bird which is perhaps found dead in the same locality soon after banding (there are several such cases due to one cause or another), or for one not taken for a long time, and then at an entirely different place. Record is made of all such cases which come to notice, and there are now in the file 31 of the red slips, which shows that slightly over 3 per cent. of the birds banded have been heard from since. This should not be taken as indicating actually the degree of efficiency of the system, since it must be remembered that there is a chance of hearing from the other 97 per cent. for a number of years yet — for as long, in fact, as the span of life of the birds.

As to the kinds of birds banded, these were of great variety, especially as banding was done in all sections of the northern United States. As would be expected, however, perhaps the species most often banded, with the exception of those which live in colonies, was the Robin, and the first good return record was from a bird of this species. I wish it were possible to mention individually all those who have helped in the work, but the list would be too long. I cannot refrain, however, from naming a few of those who have rendered most signal service. Messrs. Leonard W. Pearson and Alfred C. Redfield of Wayne, Pa., members of the Delaware Valley Ornithological Club, sent in altogether 219 records, nearly 200 of which were for Black-crowned Night Herons banded at Barnstable, Mass. Prof. S. A. Courtis, of Detroit, banded 99 birds, mostly Common Terns, at the St. Clair Flats. Mr. Charles W. Miller, director of the Worthington Society for the Study of Bird Life, Shawnee-on-Delaware, Pa., caught many birds, especially Orioles

¹ December 1, 1910.

and Song Sparrows, in traps, banded them, and set them at liberty. Some of the birds he caught again six or eight times after they had been banded. Mr. Miller sent in 74 records. Dr. R. M. Strong, of the University of Chicago, took an active interest in the work, and as a result of his own efforts, and the bands he gave out, 72 birds were banded, 37 of them being by Mr. Ralph W. Chaney, also at the University of Chicago. Mr. William L. Finley of Milwaukee, Ore., sent in 41 records, and Mr. A. A. Saunders, with the U. S. Forestry Service in Montana, 32, both of them including a variety of species. Mr. Roy Thompson, of Cando, N. Dak., together with Mr. D. S. Englar, sent in 32 records, and so on. The writer, with the assistance of several friends, succeeded in banding 209 birds, most of which were young Common and Roseate Terns on the Wee Pecket Islands in Buzzards Bay.

Time will not permit of an enumeration or discussion of all the "returns" from the banding that have been received, so only some of the more interesting cases will be given. These will be enough, I think, to convince the most skeptical that the scheme is practicable and promises valuable results, even if we did not have also the notable results which have been gained abroad by this kind of work.¹

The first return record obtained by us was for a Robin which was banded with one of the old-style closed bands in 1908. The data may be given briefly as follows:

No. N. H. 251. Robin, half fledged. Banded in an orchard at Kingston, R. I., August 4, 1908, by Leon J. Cole and Wm. F. Kirkpatrick. Shot at Kingston, R. I., by Mr. Kirkpatrick, on April 9, 1909. This bird was taken the following spring after being banded, and at the poultry plant only 200 yards or so from the orchard in which it was reared. We know nothing, of course, as to where it had been in the meantime, but at any rate we have incontrovertible evidence that it had returned to its place of nativity. It should be said in passing that this Robin was not shot for the purpose of obtaining the band, and that Mr. Kirkpatrick had no

¹ Since the above was written there have been several interesting "returns," including that of a Bluebird banded near Portland, Maine, and killed in Rutherford County, N. C., and of a Robin banded near Sandusky, Ohio, and taken near Nashville, Tenn.

thought of the possibility of its being banded until he picked it up. The bird was shot in connection with certain pathological investigations being made at the Rhode Island Agricultural Experiment Station. Sparrows and a few other birds were taken to determine in how far the so-called "blackhead" disease of turkeys might be prevalent among them, and what rôle they might perhaps play in its dissemination.

Of most interest are the returns from the Black-crowned Night Herons, tagged when nestlings, in a rookery at Barnstable, Mass., between June 21, and July 8, 1909. Of these seven have since been reported, as follows:

No. 4675. Banded June 23, by Leonard S. Pearson. Shot August 27, at Holliston, Mass., by Mr. Albert Bailey, who "took it for a hawk" after his chickens! Time, 65 days; distance, 70 miles.

No. 4686. Banded June 24, by Leonard S. Pearson. Caught in a steel trap August 29 at Berkley (near Taunton), Mass., by A. R. Graham and Son, who have a trout farm, and have to wage war against the herons because of their depredations on the young trout. Time, 66 days, distance, 45 miles.

No. 4696. Banded June 24, by Leonard S. Pearson. Taken at Minot (near Marshfield), Mass., August 18, by Dr. E. L. Parker, who writes that it "had evidently been shot as it had a broken wing." He killed the bird, and found the band. Time, 55 days; distance, 35 miles.

No. 4705. Banded July 8, by Alfred C. Redfield. Shot at Goat Island, Cape Porpoise, York Co., Maine, Sept. 11, by Clifford H. Poole. Time, 65 days; distance, 120 miles.

No. 4724. Banded June 24 (?) by Alfred C. Redfield. Shot at Wellfleet, Mass., about the middle of August, by Elmer Wiles. Time, about six weeks; distance, 20 miles.

No. 4770. Banded July 8, by Alfred C. Redfield. Shot by unknown gunner; found by Mr. Fred Seaver on Sept. 4, at East Orleans, Mass. Time, 58 days; distance, 15 miles.

No. 4792. Banded July 8, by Alfred C. Redfield. "Found on the marshes in a crippled condition" at Seabrook, N. H., Sept. 17, by Mr. Charles C. Buswell. Time, 71 days; distance, 90 miles.

These records bring out a number of interesting points. First,

it is interesting to note the vicissitudes of these young Herons; the mortality rate among them must be very high, that such a considerable number should fall into man's hands. It further illustrates that the average man with a gun is not at all particular as to what he shoots, since few birds are safe that fly within range, and the young and inexperienced Night Herons have to pay a heavy tribute. It may be by this sort of selective elimination, rather than by the actual learning on the part of individuals, that many birds have become so wary of man, and especially of man when he carries a gun. Another noticeable feature is the direction of dispersal of these birds after leaving the rookeries. As will be seen by a glance at the accompanying sketch-map (Fig. 1), the general trend of dispersal was northerly. I suspect, however, that instead of being interpreted as a definite northward migration of these birds, it should be looked upon rather as a scattering of the young in all directions in search of food, which must be relatively difficult to obtain near the rookeries where the parents have been foraging during the breeding season. The reason that this movement appears to be largely northerly in the present instance may be due to the fact that there is no land to the south, dispersal in that direction being therefore precluded. However, the data lead to the conclusion that merely because young birds appear in a certain locality in the autumn, it must not be inferred that they have necessarily come from the north. Mr. Brewster, in his 'Birds of the Cambridge Region,' speaks of the fact that young Night Herons often appeared there in the late summer, and casually suggests that they have come from further north. From what the present records teach us, it seems not at all unlikely that these birds which appeared near Cambridge in the fall may have been reared on Cape Cod.

In the present connection it will be of interest to compare with those given above the results obtained by Dr. Paul Bartsch with Black-crowned Night Herons which he banded at Washington, D. C.,¹ of which work, as has already been stated, the writer was unaware when he made his last report. Dr. Bartsch used a method in all essentials like the one used by us. All his Herons were

¹ Bartsch, Paul. Notes on the Herons of the District of Columbia. *Smiths. Misc. Coll.*, Vol. XLV., Pub. No. 1419, Quart. Issue, Vol. I, Pts. 1 and 2, pp. 104-111, pls. xxxii-xxxviii. Washington, 1904.

banded in the vicinity of Washington. The dates of banding are not given, but were during the breeding season. In 1902 one "return" resulted, the specimen being shot September 24, 1902, at Abingdon, Md., about fifty-five miles northeast of Washington.

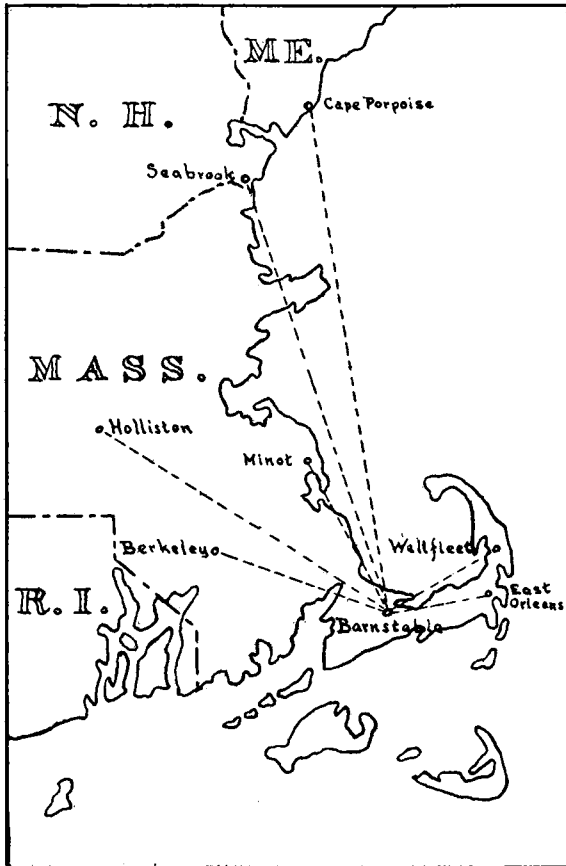


Fig. 1. Dispersal of young Black-crowned Night Herons from colony at Barnstable, Mass.

In 1903 seventy-eight young were banded. There were five returns from these: one was captured July 19, in a street in Leesburg, Va.; the second was caught July 20 in a fish trap on the Potomac

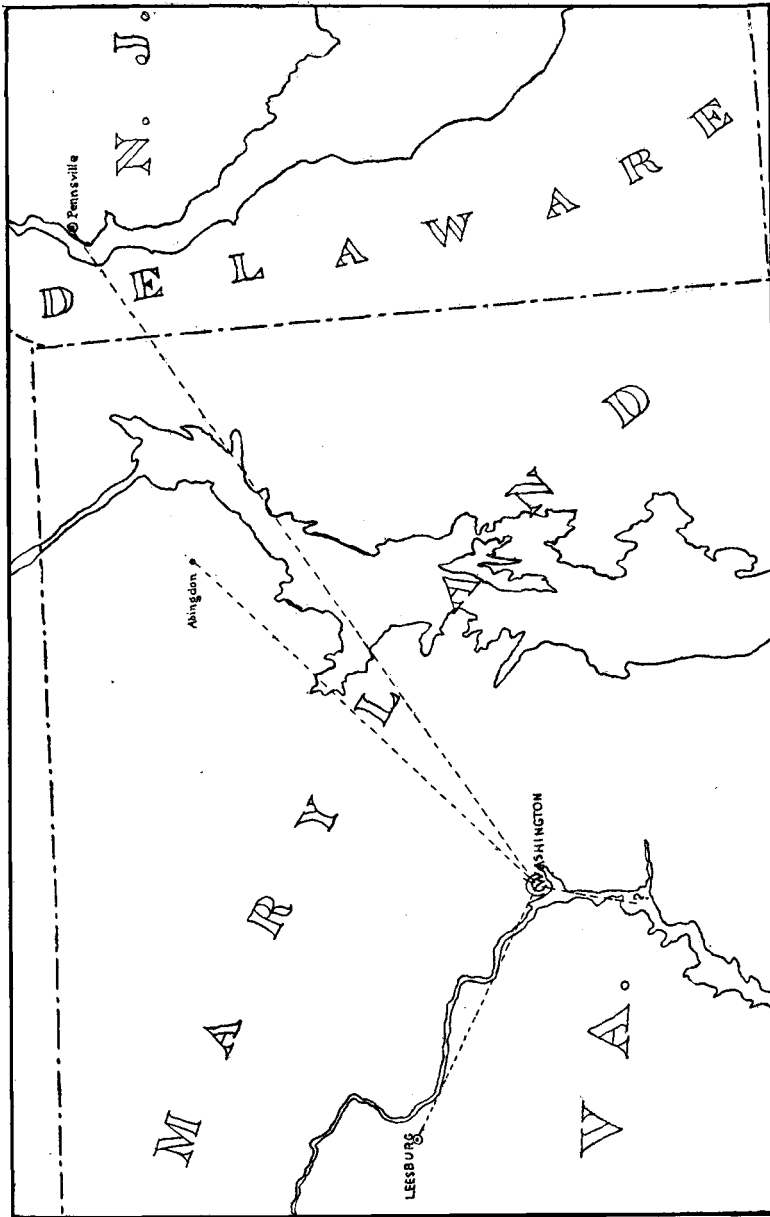


Fig. 2. Dispersal of young Black-crowned Night Herons from colony near Washington, D. C. (From data given by Barisch.)

below Washington; the third was shot at Pennsville, N. J., July 18; while the fourth and fifth were found dead under the tree in which they had been marked. The second chart (Fig. 2), constructed from Dr. Bartsch's data, together with a consideration of the dates in the two cases, shows the striking similarity between his results and those obtained by us in New England. Here, again, although the number of records is small, we get a suggestion of the general dispersal of the young as soon as they are able to get away from the parent colony. Furthermore, there is an indication that this dispersal preponderates in northerly directions.

One or two others of the more interesting "returns" will be all that our time will allow:

No. 577. Flicker, fledgling, tagged at Kingston, R. I., June 30, 1909, by John R. Eldred. Shot by a student in a different building at the same place, September 22, 1909. Reported by Prof. John Barlow.

No. 832. Sora Rail, adult, was caught May 5, 1909, on Wooded Island, Jackson Park, Chicago, and banded by Archibald Church. On May 8, three days later this same bird was captured alive on the same island by Paul Pause, Jr.

No. 988. Robin, 6 days old, banded at Berwyn, Pa., by Leonard S. Pearson, June 6, 1909. Found dead at Devon, Pa., one and one-half mile from where banded, on July 4, 1909, by George A. McCook. In commenting on this record Mr. Pearson says it shows that the parent birds must feed and care for the young when they leave the nest prematurely, since these birds were unable to fly when they started out into the world.

No. 1930. Red-breasted Merganser, fledgling, banded August 7, 1909, at Plum Lake, Vilas Co., Wis., by Ely Whitehead. Shot on Big Lake St. Germain in the same county by F. Wagner, on September 28, 1909.

No. 4169. Common Tern, about two weeks old, tagged at the St. Clair Flats, Lake St. Clair, July 5, 1909. Shot at the Flats, not far from place of banding, on August 23, 1909. Reported by Lou J. Eppinger of Detroit.

Other records might be enumerated, but those already given are sufficient to indicate the sort of results that may be expected from this work, and that are, in fact, being obtained. Since the birds

have gone South there has been a lull in the "returns," but it is to be hoped, if any of them are so unfortunate as not to survive to visit us next spring, that they will at least arrange to fall into someone's hands, and that the records may finally come to us. It is an exciting moment when a "return" comes in, and while the banding record for the number is being looked up, and some light is thrown on that particular bird's past history and travels, a story that in most cases has ended as a tragedy.

And now a few questions of general import should be considered. Many have asked: "But what is going to be the effect of this banding work upon the birds? Is it likely that they will be shot in the hope of securing the bands? Will not the bands injure their legs, or catch in the nest materials, or on twigs? Will not the handling of the young disturb the nests so that the parents will desert and abandon their young? These and other objections have been raised, and we must face the questions frankly. As to the first question, that I believe may be answered unreservedly in the negative. So far as the results of this season go, they show that in no case was a bird killed for the purpose of securing the band; in fact, there was no knowledge of the existence of the band until the bird was picked up. In the one case where there might have been such an expectation, we are assured by Mr. Kirkpatrick that he had no thought of the possibility of taking a banded bird until he had the Robin in his hand and noticed the band on its leg. By no one would the indiscriminate shooting of birds in the hope of recovering bands be more discountenanced than by those who are interested in this method of investigating bird migration.

Considering the second question, there appears to be little or no danger of injury to the leg by the bands. In the case of nearly all the "returns" the question has been asked of the finder whether the birds showed any signs of having been incapacitated or inconvenienced by the bands, or whether the legs showed any abrasion or other injury as their result. All the replies received have been in the negative. On the other hand, Mr. Benjamin T. Gault, who banded some Purple Martins and other birds in Du Page Co., Ill., reported one case in which a young bird of the former species lost its life as a result of the nesting material becoming entangled in the band, while in several cases it was reported that birds which were at the

time nearly ready to fly anyway could not be induced to remain in the nest after they had been removed in the process of banding. In several instances banded young were later found dead near the nest, but it was not definitely ascertained whether this was in any way due to the banding. It is not an uncommon thing to find the young out of a nest even when they have not been banded. This is probably, however, the greatest danger to the birds from our work, and it is one that we must learn to avoid. To this end we have been collecting testimony of the experience of as many of our field workers as we could, and should welcome more. If there are certain species which are especially liable to be disturbed in this way, or if the young are more likely to desert the nest prematurely at any particular age, then we want to find out, and govern our operations accordingly. There is probably little or no danger of desertion of the young by the parents on account of their being disturbed; every one who has made many observations afield, knows that birds who will desert their eggs at the slightest provocation, will stay by their young with the greatest fidelity.

These are, as I have said, some of the points upon which we need more data, and there are also a number of others. For one thing the bands we are at present using, though answering very well, are not in every respect satisfactory. The aluminum is rather stiff and lacks sufficient pliability, so that several have complained of having bands break when they were attempting to use them. Others have objected that it was very difficult to shape the bands to the legs of small birds and to bend them on; but we have found by personal experience that this could be done very readily with the aid of a small pair of round-nosed pliers, while in addition a pair of strong scissors was needed for snipping off the ends of the bands. We hope to be able to find a kind of aluminum that is more pliable, and will overcome some of the objections, but any one who can invent an improved band will be doing the cause a great service. It is a question, also, as to what extent these bands are practicable for use on sea birds and others that go into salt water, which may so corrode the aluminum as to render the inscription and number illegible.

ADDENDUM.

At a meeting of persons especially interested in the proposition to study the movements of birds by the banding method, held in the Hotel Endicott, New York City, on the evening of December 8, it was decided to form a definite organization for carrying on the work. Accordingly a committee was appointed which drew up the following:

ARTICLES OF ASSOCIATION.

Article I. Name.

The name of this organization shall be the American Bird Banding Association.

Article II. Object.

The object shall be the banding of wild birds and the recording of accurate data on their movements.

Article III. Membership.

Any person interested in the objects of the Association may become a member upon payment of the annual dues.

Article IV. Dues.

The dues shall be one dollar annually, payable January first.

Article V. Officers.

An executive committee of five members, elected by the Association, shall transact all business of the Association and shall render an annual report. This committee shall have the power to fill all vacancies which may occur in its membership.

Article VI.

Upon the written petition of twenty (20) members, made to the Executive Committee, any question may be brought to a vote by the Association.

Article VII.

Any member more than two years in arrears for dues shall automatically cease to be a member of the Association.

The organization thus started with a membership of over thirty persons, being mostly members of the American Ornithologists' Union who were in attendance at the annual meetings of that

organization then being held in New York City. It is earnestly hoped that all other members of the Union who are interested in this proposition will aid in the work by becoming members of the Association. We look also for similar support from the members of other Ornithological Clubs, and in fact from any persons who may take an interest in the movement. Persons desiring to become members should send their names to the Secretary-Treasurer, Mr. C. J. Pennock, Kennett Square, Chester County, Pennsylvania.

It should be understood, however, that it is not necessary for one to become a member of the Association in order to assist in the actual work of tagging birds, though it is believed that such persons as are willing to assist in the field work will in most cases be sufficiently interested to lend also the small financial aid which will be conferred by actual membership. Members will receive without further expense all reports of the Association, and such other circulars or bulletins as may be published.

In addition to having merely the names of those who wish to enroll as members, the Executive Committee would be glad to communicate with all persons who will take a supply of the bands and assist in the actual banding of birds. The committee desires especially to get into communication with persons who have access to large colonies of birds suitable for banding, and with hunting clubs, organizations for game preservation, and the like, who could as a result of banding their birds, not only help in the general questions of migration, dispersal, etc., but could at the same time tell what is becoming of their own birds.

It is proposed to publish later a leaflet giving full directions for using the bands.

LEON J. COLE, *President and Chairman of the Executive Committee*, College of Agriculture, University of Wisconsin, Madison, Wis.

C. J. PENNOCK, *Secretary-Treasurer*, Kennett Square, Chester Co., Pa.

LOUIS B. BISHOP, 356 Orange St., New Haven, Conn.

GLOVER M. ALLEN, 16 Louisburg Square, Boston, Mass.

THOS. S. ROBERTS, 1603 Fourth Ave., S., Minneapolis, Minn.