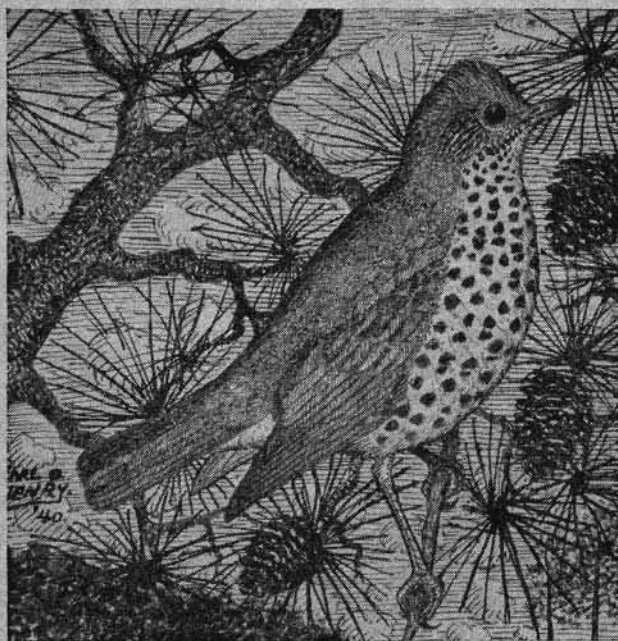


The Migrant

A Quarterly Journal Devoted to Tennessee Birds



JUNE, 1940

Published by The Tennessee Ornithological Society

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JUNE, 1940

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Published by the Tennessee Ornithological Society, to Record and Encourage the Study of
Birds in Tennessee. Issued in March, June, September and December.

TRAMPING WITH THE 'BIRD MAN'

By BRUCE P. TYLER

VI. THE VULTURE'S CAVE

High in the dolomitic cliffs along the waters of the upper Holston River, the Black Vultures find small caves admirably suited to their nesting habits. Nesting early in the season, they are a special temptation to the oologist and an inspiration to the ornithologist—just like the first fruits from the garden, the first blooms from the pansy bed, which cheer and encourage the gardener to further efforts.

With their minds set on securing photographs of a Vulture's home and eggs, the Bird Man and his colleague, Bob, start at early dawn for the craggy home of *Coragyps atratus atratus*. Success attends their efforts and satisfactory photographs are obtained. While the Oologist is within the cave packing his trophies the Bird Man is at the diminutive entrance packing his photographic outfit.

It is said of fishermen that what they desire most is to be on the other side of the river they are fishing, feeling sure that luck would be more favorable if only a line could be dropped from yonder boulder. The same idea must invade human minds engaged in other pursuits—perhaps, even the minds of bird photographers, even the mind of the Bird Man. It seems to him that on the cliff just across the mouth of the cave (on the other side as it were) there would be more room for easy manipulation of photographic paraphernalia. So, gathering up his outfit, the Bird Man steps gingerly along a very narrow ledge of rock, then takes a full stride across the mouth of the cave to a substantial looking rock covered with grey moss. Appearances were deceiving—the moss and rock crumble under the impact of the Bird Man's boot. There is no opportunity for recovering a secure footing and, camera in hand, the Bird Man falls against the face of the cliff, starting on what might be a long journey. Either the sudden shadow across the mouth of the cave or the sound of falling rubble alarms Bob inside. With adroit promptness he leaps to the mouth of the cave just in time to see the Bird Man and outfit starting on an unceremonious ride down the cliff, but fortunately, just in time to grasp him by the coat.

Now the Bird Man knows one thing never before contemplated—or thinks he knows—just how an aviator finding it necessary to bale out, feels when the harness tightens and he is aware that his parachute is open and his safety assured.

VII. THE YEAR OF DROUGHT

Dry is no name for it. The Bird Man labors in his garden with hoe and hose to save his plants. One evening, near the sunset hour, finds him watering his evergreens. Now the birds hear very well, indeed, and they love the water. The sound of dripping from the foliage of the evergreens comes to the attention of a Yellow Warbler which was nesting in a nearby tulip tree. Sitting on the guy wire of an aerial support, above the evergreens, is mother warbler, fluffing and ruffling her feathers in joyful anticipation of a bath long deferred. The Bird Man turns the spray from the hose high into the air, allowing it to fall on the bird. While so doing the Bird Man's memory carries him back to the days of the joys of his own "old swimming hole." Mother warbler enjoys her bath to the fullest then disappears. Returning soon with her mate, she plunges again into the spray, but her mate, a 'doubting Thomas,' keeps at a goodly distance, notwithstanding the urging of his mate. Soon, however, the mother bird's reassurances and example wins him over and he, too, enjoys the luxury of a bath in the 'man-made' shower.

VIII. PLANTING FOR THE BIRDS

The Bird Man loves his flower garden in the early morning hours just as the sun peeks in from the Eastern horizon—the plants dripping dew.

What is in the garden and why? Well the garden has been planted with regard to the needs and wishes of the birds, as well as to the needs and wishes of Mrs. Bird Man. The particular morning that is in mind is in the early fall of 1939. The garden is surrounded with a hedge of scarlet sage, now in full bloom, for the Hummingbirds. There is a cluster of baby sunflowers which pleases the Goldfinches. Plantings of anemones, dahlias, zinnias, phlox, delphiniums, pinks, and a patch of chrysanthemums, together with a bird bath for all the birds, complete the autumnal setting of the garden.

The birds are migrating. Most conspicuous among them is the Ruby-throated Hummingbird. This morning there are twenty, by count, loving the nectar of the sage and sporting in the vicinity of the Bird Man. They seem to understand that there is no danger. Within a few moments one of these lustrous beauties thrice feeds not two feet away from the Bird Man's eyes. How they all love to play in the sunshine. Now, two are snapping their little beaks at each other, flying as high as the cottage roof, then, folding their wings, they dive for the hedge of sage. Rare, indeed, are the days when twenty hummers are seen at one time in the garden, yet seldom at this time of the year are they absent entirely. Twice this season the Bird Man holds one of these shimmering, lovely little creatures in his hand just for a caress and a wish for its joy and safety.

The sunflower patch is ever filled with Goldfinches now wearing their winter garb, the young birds still begging their parents for food, but being instructed in **gleaning** for themselves. Also this season brings to the garden the Nashville and Tennessee Warblers for their only visit of the year.

Near the flower garden is the berry patch, beloved spot of all the birds. In the early summer there is competition among the birds for proprietorship. Even when the Bird Man essays to pick the berries for his table, he is soundly scolded by the Catbirds, interrogated by the Carolina Wrens, ogled by the Robins, and his judgment deplored by the Red-headed Woodpecker who views with disdain the procedure from the top of a nearby telegraph pole.

IX. NOT SO VERY NICE

The Bird Man has a worthy and faithful colleague, Robert Barton Lyle, with a leaning toward oology. From early youth Bob has combed the forests and fields for specimens (never disturbing nests save for a full clutch) and now, after years of search, he has a most beautiful private collection. Well, that is nice, but, this item is titled 'Not So Very Nice' for reasons that you will soon observe, we had best return to our text.

One early spring morning, to Bob's great joy, he discovers a Turkey Vulture nesting in a hollow log, lying prone on the forest floor. The nesting bird is flushed and reveals a fine pair of eggs deep in the woody recess of the log. With difficulty the eggs are retrieved, but not without the vigorous disapproval of mother vulture who keeps diving at the despoiler of her home with no apparent success. But Bob, eggs in hand, is departing when the vulture dives at him again and, deeming the situation most critical for herself, she plays her highest trump, regurgitating a meal of carrion upon his person. We have the 'Geranium Pussy' odoriferously protecting itself, but who could imagine that any bird could be such a competent competitor?

JOHNSON CITY, June, 1940

FURTHER NOTES ON MISSISSIPPI BIRDS

BY M. G. VAIDEN

In the regular routine of certain work for Dr. Louis B. Bishop, Pasadena, California, I am publishing, with his permission, certain identifications of skins sent to him. These are marked with an asterisk (*) at the beginning of each specimen described. Other specimens have been identified for me by Dr. Alexander Wetmore of the U.S. National Museum, Washington, D.C., and due credit is given under each species he has identified. All specimens not marked with an asterisk (*) are in my personal collection.

I believe that the additional list given here will be of interest to the readers of *The Migrant*, for in some instances the identified forms should establish a breeding range for certain species in this immediate territory at least. It is interesting in one's field work to believe that his observations cover a certain form of the species of what he might reasonably expect during the nesting season and during the migration season should he be a careful and fortunate observer. One making field observations must keep in mind always that two objects must contact, and mainly by chance, when in search of birds. You, as one object, may pass over several seasons without meeting the other object, the bird you are making careful search to record.

Near the flower garden is the berry patch, beloved spot of all the birds. In the early summer there is competition among the birds for proprietorship. Even when the Bird Man essays to pick the berries for his table, he is soundly scolded by the Catbirds, interrogated by the Carolina Wrens, ogled by the Robins, and his judgment deplored by the Red-headed Woodpecker who views with disdain the procedure from the top of a nearby telegraph pole.

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Today some of the birds are here, and tomorrow they are gone. While you know the favored localities the birds will visit, yet your arrival may not coincide with the time of the bird's visit. If you are a true field naturalist, you will not give up and will generally meet with success should you continue to search for those birds normally expected to be found occasionally in your home area. Your daily field cards may show that you should find a certain species at approximately a given date, but when you make a search of your favorite woodland, you will not find one of the species you are especially in search of.

This article is a continuation of a former one appearing in *The Migrant* for September, 1939, pages 44-46.

EASTERN RED-TAILED HAWK, *Buteo jamaicensis borealis*.—A specimen taken April 24, 1935, an adult female, was identified as this form. It is the nesting form for this territory. (*Buteo borealis borealis* of the 1931 A.O.U. Check-list).

(*) KRIDER'S HAWK *Buteo jamaicensis krideri*.—A specimen taken four miles south of Moorhead, Mississippi, January 15, 1940, an immature male, was identified by Dr. Louis Bishop, Pasadena, California, as this subspecies of *jamaicensis*. I do not find where this bird has been collected in the state heretofore. (*Buteo borealis krideri* of the 1931 A.O.U. Check-list).

WESTERN RED-TAILED HAWK, *Buteo jamaicensis calurus*. This form was again taken in our state (*The Migrant*, 1939, p. 44), and is the second reported collection for the state. This specimen was taken November 28, 1939, near Rosedale and was a female. Identification was made as to subspecies by Dr. Alexander Wetmore, U.S. National Museum, Washington, D.C. (*Buteo borealis calurus* of the 1931 A.O.U. Check-list).

(*) WESTERN MOURNING DOVE, *Zenaidura macroura marginella*. A male collected one-half mile southwest of Moorhead, Mississippi, on April 1, 1940, was identified by Dr. Louis Bishop as this western form of the dove.

WESTERN BURROWING OWL, *Speotyto cunicularia hypugaea*.—This form was again taken in Mississippi, when on February 21, 1940, Sammie M. Ray collected one near a gin site some twelve miles north of Moorhead, Mississippi. It is a male in fine plumage and is in the collection of the writer.

FLORIDA BARRED OWL, *Strix varia georgica*.—Two specimens sent to Dr. Wetmore, a male collected May 3, and a female December 5, 1939, were identified as *georgica*. This should establish the nesting form for this territory as the Florida Barred Owl by reason of the May 3 collection. (*Strix varia alleni* of the 1931 A.O.U. Check-list).

(*) FLORIDA BLUE JAY, *Cyanocitta cristata cristata*. A male of this form taken on April 2, 1940, one-half mile south of Moorhead, Mississippi, was identified by Dr. Bishop as the southern form and should be the nesting species of this immediate area at least. (*Cyanocitta cristata florincola* of the 1931 A.O.U. Check-list). In connection with this species it would be

well to review pages 416-419 of Bulletin 28, Department of Conservation, State of Louisiana, 1938, by Dr. Harry C. Oberholser.

SOUTHERN CROW, *Corvus brachyrhynchos paulus*. A male taken March 17, 1938, proved to be this form and should establish the nesting form here as of this subspecies. Identification by Dr. Wetmore.

(*) WESTERN PARULA WARBLER, *Compothlypis americana ramalinae*. A male of this form was collected south of Moorhead, Mississippi, on April 3, 1940. This should be our nesting form.

ROSEDALE, MISS., May 12, 1940.

PRICELESS NOTES

BY BENJ. R. WARBLER

I never tire of thumbing the pages of my bird diary. The record has been only crudely kept, yet with enough accuracy to tell a fairly complete story of my experiences of the birds in wood and field. In the beginning, some fifteen years ago, a majority of the various varieties were new ones for me, as I knew only the commoner kinds. The positive identification of each stranger always brought a degree of real pleasure. My notes now enable me to live over again each happy moment. I recall the exact spot, together with all other details, where I first found a particular kind. For instance, there was that first Oven-bird; and again several years later the second one. The first during October, just across the Tenn.-Miss. line on a pine and hardwood hillside. The other was under a shrub at my backdoor, on a day in May. Only two Oven-birds have come my way.

I could go blind-folded to the hickory tree deep in Tuscumbia Bottom where I saw my first Redstart; and farther on in the same territory to the place where a Swainson's Warbler ranged furtively in dark shadows along the edge of a slough. There has been only one other Swainson's but there have been a thousand Redstarts.

As a matter of fact I do not need the notes to recall most of the high spots; yet the notes do make each experience more vivid. I have found it quite difficult to learn the songs of all of the birds; nevertheless I have worked untiringly at the job. I have found that it helps, to record a description for permanent keeping of the songs with which I am not familiar. There was that first song of a Fox Sparrow; the first of a Ruby-crowned Kinglet; and the first of a Kentucky Warbler. I remember well the first Maryland Yellow-throat that sang for me while he perched on a reed beside a ditch. I thought the sprite would split his throat. My first Yellow-breasted Chat did everything vocally that John Burroughs described as being characteristic of that rascal. I have come across many birds whose songs I did not know, but I have been content in the knowledge that every bird that sings and flies away will live to sing another day.

True, my notes do contain many of the commonplace bits of bird lore, but mixed in the pages there are red-letter days that stand out vividly enough to make each fresh perusal of them a real joy. I make it a rule to jot down, at least in abbreviated form, the record of each bird hike. Something of interest always turns up to be recorded.

CORINTH, MISS., May 6, 1940.

GREEN: BANDING CHIMNEY SWIFTS IN THE REGION OF CHATTANOOGA, TENNESSEE

A REVIEW BY JOHN POND

The material of this article arose from Prof. Wyman R. Green's banding work in 1928, 1929, and 1930 and from the co-operation of Dr. W. K. Butts and of Louis Cook who banded in 1931 and 1932, respectively, at Station 9 which Green had used in 1930. With the exceptions of work done at Snoddy, Tennessee, and at Jasper, Tennessee, all trapping was done either in the city of Chattanooga or in the immediate environs. Station 7 was at Snoddy, 19 miles north of Chattanooga. Station 10 was at Jasper, 27 miles west, across Walden's Ridge and the Sequatchie Valley. A tabular summary of the banding done by Prof. Green follows:

Sta.	Date	No. Banded	Repeats	Recoveries	Returns-1	Returns-x
1	Oct. 16, 1928.....	1,000	—	10	81	14
2	May 25, 1929.....	91	—	—	9	2
3	Sept. 21, 1929.....	1,500	13	12	80	15
4	Oct. 8, 1929.....	1,147	12	11	85	7
5	Oct. 19, 1929.....	—	flock of 985 examined only			
6	Sept. 24, 1930.....	880	146	6	24	15
7	Sept. 28, 1930.....	2,650	34	16	49	—
8	Sept. 30, 1930.....	2,272	151	24	37	1
9	Oct. 4 & 5, 1930.....	6,357	25	50	71	3
10	Oct. 9, 1930.....	1,268	—	11	10	—

A total of 17,165 Swifts were banded in the three seasons. Of these 1,058 individuals have been reported retaken in the years 1929-1940. Shortly after the above banding operations Prof. Green removed to Drew University, Madison, N.J.

(NOTE:—The last four columns were compiled by the reviewer and are captioned by terms different from those used by Prof. Green. The 'repeats' are those retrapped the same season, 'recoveries' are those taken outside the Chattanooga area, 'returns-1' are those retrapped some subsequent season at Chattanooga by Green, Butts, or Cook, and include an occasional bird recovered individually in the city. 'Repeats-x' are those arbitrarily termed 'repeats' by Prof. Green, being those birds retrapped twice or more and thus include 'repeats' which subsequently are 'returns' or vice-versa and also 'returns-2', 'returns-3', etc.—EDITOR).

Green, Wyman R. 1940. Banding of Chimney Swifts (*Chaetura pelagica*), in the Region of Chattanooga, Tennessee. *Bird-Banding*, Vol. XI, April. Pp. 37-57.

Recoveries from those banded at each station indicate a wide dispersion of the members of each flock during the summer months. From records on Station 9 we find clear evidence of the hypothesis: one of these Swifts was reported in Manvel, Texas on April 30, 1931; only four days later, one was recaptured in Marietta, Ohio. On May 7 and 8, 1931, two were reported from Ashland, Virginia and Woleska, Georgia, respectively. June 3 and 4 one was reported from Fisherville, Ontario and another from Vanceburg, Kentucky. June 7 and 9 one at Hillsboro, Nebraska, and one at St. Hillaire Village, Quebec. Reports for the month of June show recoveries in Georgia, Ohio, Michigan, Kentucky, Wisconsin, New York, Ontario, and Quebec. The flock was most obviously well scattered during the summer of 1931. Yet here Mr. Green finds opportunity to bring out another point which he has found to hold with regard to the general migration habits of the Chimney Swift; i.e., regardless of apparently total dispersion during the summer, the flock tends to move southward in the fall over the same route it has followed going north in the preceding spring. In October, 1931, the same flock of Station 9 which had covered the country during the summer was in Chattanooga in such strength that Dr. Butts recaptured 49 of these birds in their southward migration. Likewise from the eight other bandings the Swifts have always scattered to the north and west in summer after the fall of banding; yet during the next fall 22 birds of flock 1 were retaken in Chattanooga, 3 of No. 2; 71 of No. 3; 77 of No. 4; 22 of No. 6; 45 of No. 7; 33 of No. 8, and 10 of No. 10. It seems evident, too, that the same flock moves northward each year over the same route, since it not infrequently happens that as high a proportion of a given flock can be recaptured at a given station two years after banding as one year after banding.

A perusal of the dates of return and recovery in relation to the dates of banding and a tabulation therefrom by the reviewer shows the minimum-age groups to be as follows:

1 year	406	6 year	8
2 year	147	7 year	3
3 year	20	9 year	3
4 year	11	10 year	1
5 year	17	11 year	1

In calculating the above, Swifts banded in the fall of the year were considered to be at least one year old all thru the following season from the time they returned to this country until they left in the fall, a year from date of banding. About 31 Swifts are included in more than one group above. From the data as given it was not possible to eliminate such records.

The oldest record was of a Swift banded October 16, 1928 and recovered Oct. 22, 1939, at Nashville, Tennessee by Mrs. Amelia R. Laskey. This bird was retrapped and released 11 years and 6 days after banding. Two other records were of a Swift recovered by R. B. Brown at Mt. Vernon, Ohio, 10 years, 4 months, and 5 days after banding, and another at Nashville (Laskey), 8 years, 11 months, and 14 days afterwards.

The history of 'repeats' (Swifts banded by Green and retaken two or more times subsequent to banding are designated by Green as 'repeats') opens the way for the investigation of several questions: Are Swifts monogamists? Does the family bond hold a group of birds together for a season or two? Two birds of Station 1 were retaken at No. 4 a year after banding; these same two were recaptured at No. 7 two years after banding, along with four others which had been banded with them at No. 1. Two days later all six were taken again at No. 8. Again, out of seven repeats from No. 4, one group of three were taken, after a year, at No. 6 and ten days later at No. 9; a second group of three appeared at No. 7 a year after banding and eight days later at No. 9. Perhaps these cases are evidence of the uncommon occurrence of the family group among Swifts; to explain them as mere coincidences calls for a wilful disregard of mathematical expectancy.

In conclusion we reproduce Prof. Green's summary verbatim below:

SUMMARY

"1. *Effects of the death rate.* Assuming that we band 1,000 swifts on their southward migration, it appears that we can account for the diminishing numbers (see preceding paragraph) we can recapture at the same station each year thereafter on the basis of the known rate alone, even though it be true that nearly all of the members of the entire flock should pass southward through the same region each year after banding. If this be true then conclusion No. 2 follows.

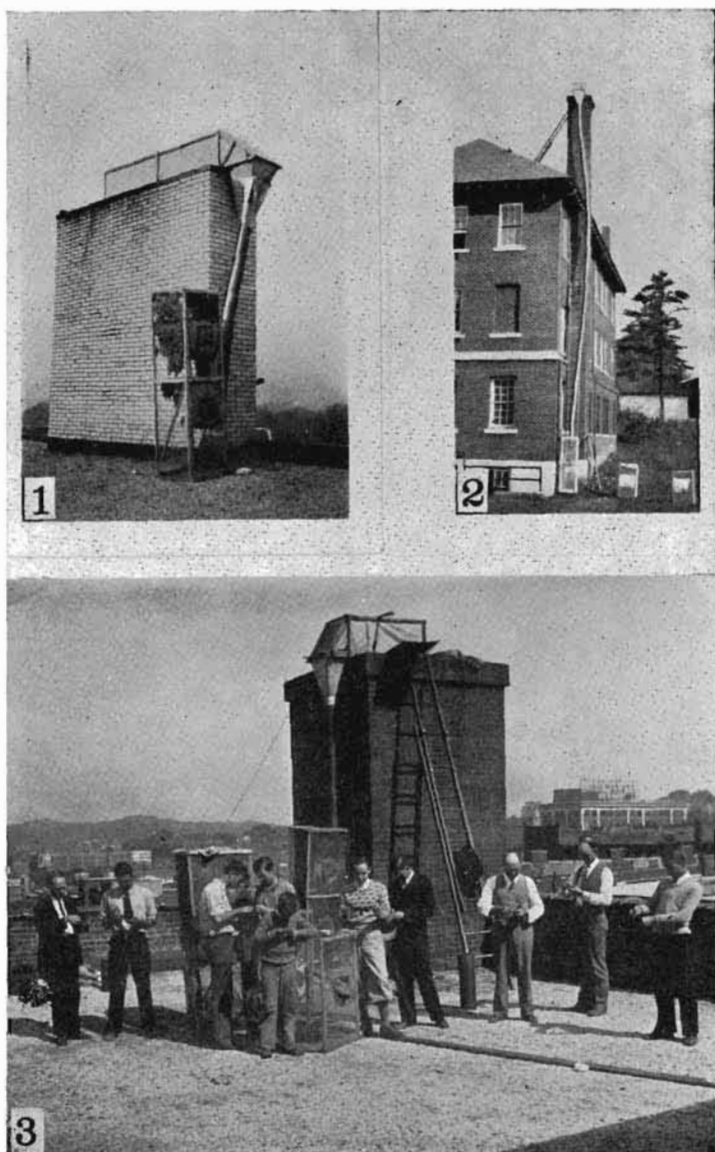
2. *Diffusion.* That we can recover only about 1% of the swifts banded at a given station just a few days after banding means not that the flock has at once largely dispersed to other distant regions, but that we had probably banded a very small percentage of the swifts in the vicinity, and that there is a daily general diffusion of the swifts in the immediate region. This is in line with the work of other banders. (H. S. Peters, 1937, Calhoun, 1938.)

"3. *Migration routes.* The general direction of migration movements is northeast-southwest, more or less parallel with the Atlantic coast, as other banders have noted. It seems that in general a given flock will become more widely scattered as they move northward; but evidently they get together again at their winter quarters, and traverse about the same routes annually, since it not infrequently happens that as high a proportion of a given flock can be recaptured at a given station two years after banding as one, or for that matter, a few days after banding.

"4. *Monogamy.* There is some good evidence that swifts pair for more than one season, and that family solidarity may account for the fact that several individuals may be found together more often than could likely be due to chance. These phenomena merit full investigation.

"5. *Future work.* While the banding of flocks should continue, the writer is convinced that the work should be definitely planned and coordinated throughout the country. Banders should now give their attention to the banding of the nesting pairs, and their young before they leave their nests."

MEMPHIS, June 15, 1940.



COURTESY BIRD-BANDING

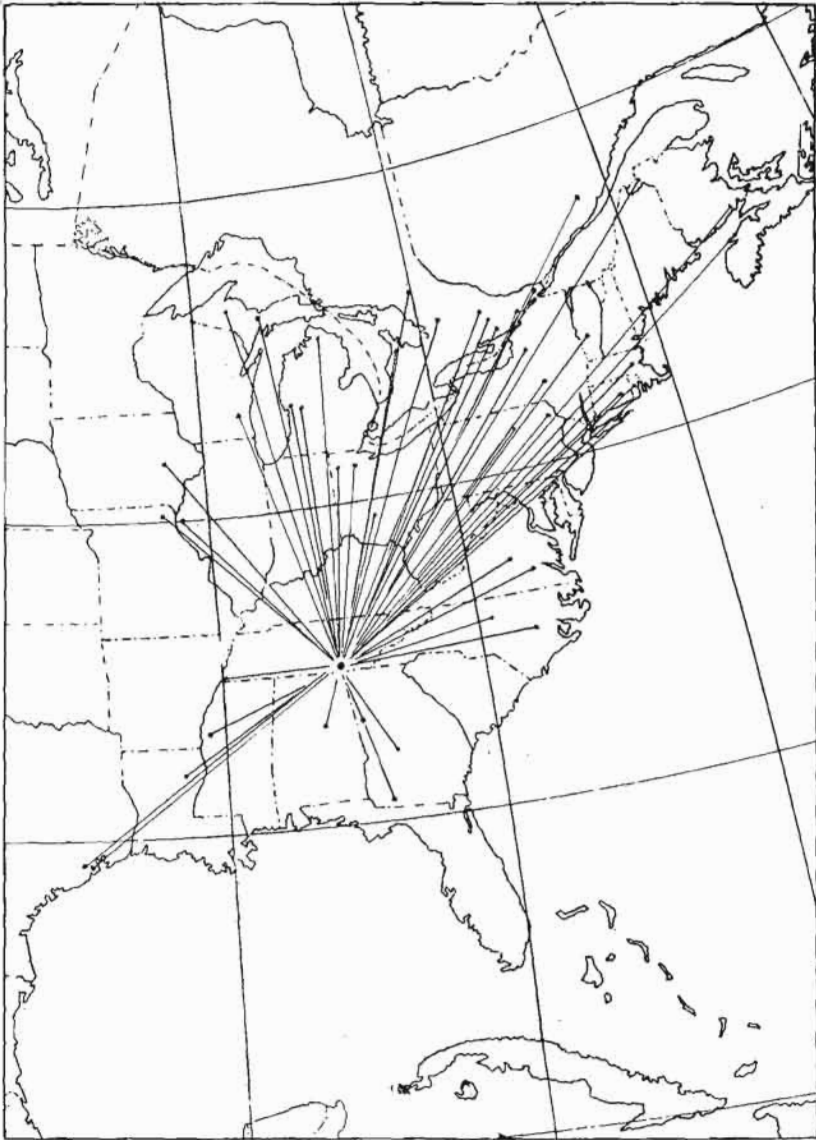
- FIG. 1. Trap and receiving cage containing about 800 Chimney Swifts. On Central High School, Chattanooga, Tenn. Station 6.
- FIG. 2. Showing the same trap with a nearly fifty-foot stovepipe leading to the ground. On the M. E. Church, St. Elmo, Tenn. Here on Sept. 30, 1930, 2,272 swifts fluttered down this long tunnel to the receiving cages below and were banded. Station 8.
- FIG. 3. A group of enthusiastic banders at work on top of the Tivoli Theater, Chattanooga, Tenn. The total catch here was about 8,000, of which 6,357 were banded on Oct. 4 and 5, 1930. Station 9.



COURTESY BIRD-BANDING

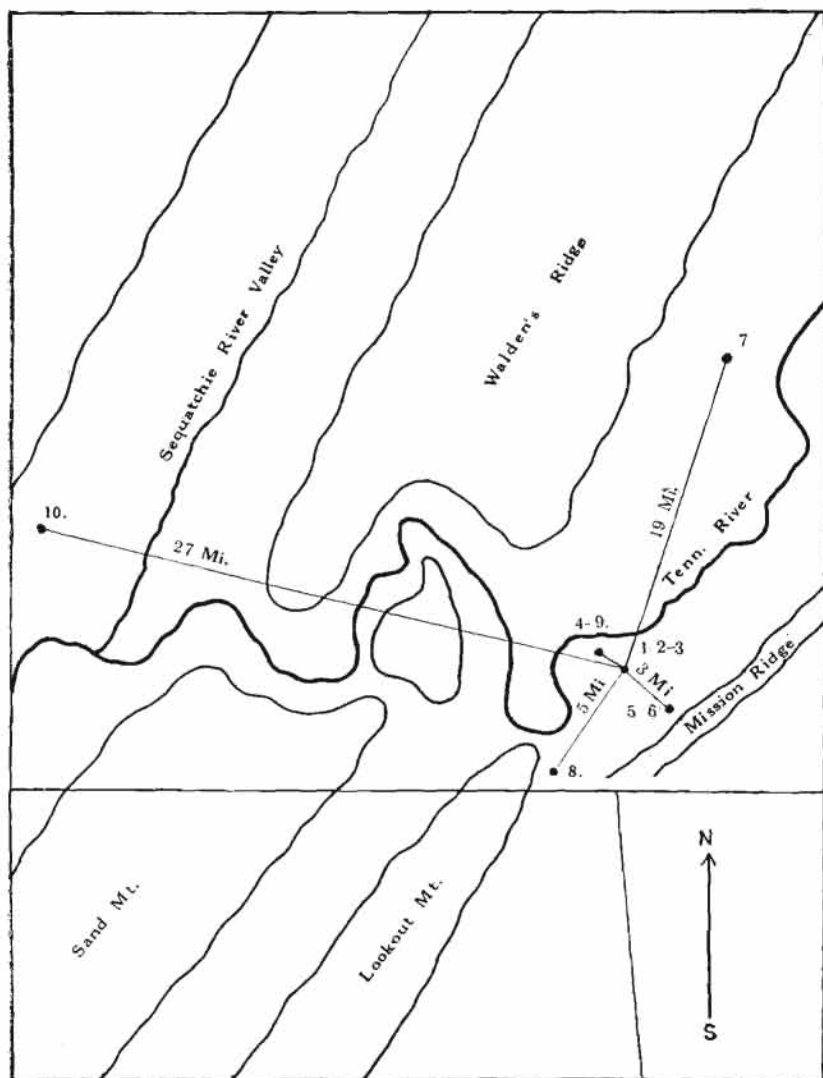
FIG. 4. Robert Sparks Walker, Chattanooga's nature poet, right, and the author, co-operating. We found that two thus working together can band about four times as many swifts per hour as one working alone.

FIG. 5. Showing how inexpensive pliers can be modified into an efficient banding tool. Bird banders will find them indispensable. (Kennard, 1930).



COURTESY BIRD-BANDING

FIG. 6. Map showing where 47 of the swifts have been recaptured. While we have records of 1,058 recoveries, these 47 sufficiently indicate the general area over which our flocks have spread.



COURTESY BIRD-BANDING

FIG. 7. Diagram of the Chattanooga region, showing the location of our ten stations. Stations 1, 2 and 3, were near together on the campus of the University of Chattanooga. Stations 4 and 9 were near each other in the business district, and 5 and 6 were both on the campus of the Central High School. The distances of the outlying stations from the University campus are indicated in miles. Number 7 is Soddy, Tenn., No. 8, St. Elmo (near the state line), and No. 10 is Jasper.

TAXIDERMY ON A BRIDGE TABLE

BY PAUL K. BRYANT.

It all commenced when a well-meaning neighbor came over one evening, bringing a dead Sparrow Hawk which had been nesting in a hole at the top of a telephone pole at the edge of our yard.

"I shot this hawk because it was molesting those poor little Starlings that are nesting in that pole out there," the neighbor explained. "It came out of that hole on the Starling's back, trying to kill it. It also has egg on its bill and must have eaten the Starling's eggs." After explaining the relative merits of the two birds, we went to the telephone and called Albert Ganier. Yes, he would make a skin out of the specimen, so we drove the six miles across town to take it to him.

The following week the neighbor was back at our door again. "I got a Screech Owl today when I was out after doves," he said, and tossed the small bundle of feathers to us. Again we went to the phone. "Mr. Ganier," we began, (and if someone had only stopped the conversation there!). "Mr. Ganier, this is Bryant again. I am now in possession of a dead Screech Owl. If this parade of dead birds to my house is going to continue, I think I will start a collection of my own. How do I prepare this bird?" Very patiently Mr. Ganier gave us the necessary instructions, down to the last detail. We could hardly wait to get started.

In a few minutes we had a card table set up in one corner of a spare room. A partly used sack of corn meal, left over from making mush balls for carp fishing during the summer, a paring knife, three used razor blades, a pair of toe-nail snips, a box of borax, some arsenic, a ball of cotton and a piece of wire comprised the equipment and supplies that we were able to muster up from closets and pantry. Then the slaughter began.

With the apparent assurance of one who knew what he was about, we rolled up a ball of cotton and forced it down the owl's throat. Then placing the bird on its back on a newspaper in the center of the card table, we parted the feathers down the bird's breast and deftly made an incision with a razor blade. There was really nothing to it. Loosening the skin on each side of the slit, we took some meal from the sack and sprinkled it on the exposed flesh. The feathers must not get wet.

What is this? From out the meal scoots several brown bugs. Hastily we glance around. The wife is still busy in the front room. We pinch the bugs and drop them on the newspaper. That sack of meal should not have been left open on the floor of our fishing equipment cabinet.

The owl's skin is worked loose on down around the sides. A rather strong odor begins to permeate the air. Wonder just how long it had been since the neighbor went on that dove hunt? Something is crawling on our left sleeve. It is very small. A mite. We pinch him and leave a smear of corn meal on the cuff. The owl's leg will not come up through the breast opening, as Mr. Ganier instructed. We make the opening bigger. Bits of down and a few small feathers are floating about in the air. Our nose begins

to tickle but a glance at the smeared cuff shows that we can not scratch. We snort and blow, but the tickling continues. The nose is finally rubbed high up on the other sleeve. A flat yellowish bug slides across one hand and back into the feathers. Lice!

Pushing and pulling, the owl's leg is about to come through. Tilting the bird upwards, the cornmeal streams out, into our lap and on down to the floor. The wife is quiet in the other room, reading. We thank our stars for that, and the leg comes through. Mr. Ganier said to cut the legs off at the joint. Which joint? We cut it off at the knee, pull that out and cut off another joint. Fewer bones to scrape. The other leg is done the same way, all the while pouring on more meal and pinching more bugs. Then comes the vent. Mr. Ganier had said something about using a small pair of scissors and cutting carefully around it. The wife forbade us using her manicure scissors. Oh, well. A razor blade quickly cuts through that point and also frees the tail. Hurrah! Now we are getting somewhere. It is only 9:00 P.M., and we started at 7:00. The skin is worked loose up the back, the wings are peeled back and the flesh removed, and the bones unjointed where they hinge on to the body. Nothing holds it now but the head.

Carefully we work the skin wrongside-out up to the neck. More feathers get up our nose, and mites crawl unmolested on both hands. The floor around us is covered with so much meal that it has taken on a sanded finish. But we are now in this fight to the finish. Onward, my boy! Something sharp punctures the skin and sticks into the palm of our hand. It is the owl's bill. We push it back and go on. The owl's skull is at least three times as big around as its neck. We are reminded of the times as a child when we had to work a big orange out of our small Christmas stocking before we could get at the contents beneath.

At last we come to the ears. Did Mr. Ganier say anything about them? We have forgotten. The razor blade slices them off. Then the eyes. They meet the same fate. At last we are down to the base of the bill. We turn the bird over and try to get the neck loose. It won't come, so we cut it off. Slipping to the back door we toss the loosened carcass out to the ash heap. We will bury it tomorrow. We start pulling the fat and strips of meat off the skin. A big rip immediately appears. We scrape the rest with a blade.

Now to remove the brains. All instructions are forgotten. The hunter had saved us a lot of trouble here, as the skull was crushed on top. We dish the contents out, then dry the interior with meal. Piece by piece we flake out minute quantities of meat. Then we dust all the skin with borax and place it in an open window to dry. After a heavy session of house cleaning, we hit the bed at 11:30, tired but with the feelings of one who has triumphed over a difficult situation.

The following evening we fix wire and cotton in the skull, dampen the skin at the neck and start reversing the feathers. We pull a while, dampen a while, and cuss a while. At last the skin comes over! And what a look that bird has on its face! Mouth wide open, and all head feathers pointing straight out in front! They refuse to lay down. One side of the neck is

white and bare, and wire is visible through a rip in the other side. One side of the back is also bare. That bird must have been molting!

As we sit contemplating the results, another knock is heard at the door. If it is that neighbor We open the door. It is a neighbor from the other side. "Beg pardon," he says, "someone told me you were mounting an owl. My cat has dragged the main part of that owl up on my porch and I wish you would get it and bury it, if you don't mind."—I buried the owl.

But am I discouraged? Not after what George Woodring told me. He says that you have to make fifty skins before you get a good one. So I have only forty-nine more to go. Before I start another one I am going to have some fresh cornmeal. Some surgeons' scalpels. Several different kinds of chemicals. A work bench. A rubber apron. Some bone-snips, glass eyes, wire forms, etc., etc., etc. And my wife says I can also build a house to go around the whole works and stay in it until I get through.

NASHVILLE, June, 1940.

LINCOLN'S NEW BOOK

A REVIEW BY BENJ. R. WARRINER

Migration, unmistakably, is the most interesting phase of bird study, the most puzzling part of bird life. In spite of a vast store of knowledge gained, many problems remain hidden in mystery. This enigmatic condition adds zest to the pursuit of further information.

Much has been written about the birds that fly but it has remained for Dr. Frederick C. Lincoln to achieve the finest piece of work yet done. Associated with the U.S. Department of the Interior as Senior Biologist, Chief of the Section of the Distribution and Migration of Birds, he is an authority of unquestioned ability. In his new book, *The Migration of American Birds* (Doubleday, Doran & Company), he has used a great deal of old material, facts already revealed and known to all who are seriously interested in bird life. On the other hand Dr. Lincoln has crowded into the book a wealth of new discovery. He sticks to his subject faithfully and resists the temptation to stray away into other fields. As the title indicates, it is a book on migration. The publishers predict that the book will become a classic. Lacking only in the element of time it is already a classic.

Well illustrated with maps, some old and some new, the volume contains twelve chapters. Those on Bird Banding and the Flyway Systems contain the highlights. I refer particularly to only two items among hundred bits of intriguing information.

First, scores of records are cited of banded birds,—reports that have come in from points far and wide. All show that a majority of the birds meet tragic ends and that the birds' enemies are legion. The list is headed by man and boy with deadly shot and shell. Proof is positive that all the birds live precarious lives. When one banded bird is killed it is safe to

conclude that ten thousand birds that have not been banded meet the same fate.

Second, I quote from pages 164 and 166 of the book, "It (the Mississippi Flyway) is used by such vast numbers of ducks, geese, shore birds, blackbirds, sparrows, warblers and thrushes, that observers stationed at favorable points in the Mississippi Valley during the height of migration, can see a greater number of species and individuals of migratory birds than can be noted anywhere else in the world."

The map at page 167 shows this Flyway to be the greatest of all bird routes. As it passes through Arkansas and West Tennessee, it narrows itself down to a path some hundred and fifty or two hundred miles in width, with the great river as the central line of the path. Corinth, Mississippi, my home, is on the eastern fringe of the Flyway; here I miss many of the water birds that use the route. But thanks to Dr. Lincoln and his magnificent book, I can still know and see the birds that fly in answer to that mysterious urge.

CORINTH, MISS., May, 1940.

THE SEASON

MEMPHIS AREA:—On April 28 a Lark Sparrow was observed southeast of Gallaway, across the line in Fayette County. This is a very rare species in this area. Earlier a Red-breasted Nuthatch was recorded south of Arlington. This was evidently a late transient. The only other record for the season was made in Piney Woods during the January cold spell. In the Loosahatchie bottoms just east of Arlington we found 3 Swainson's Warblers, 2 being in song. Earlier another had been heard in the Wolf River bottoms just north of Germantown. The Arlington birds were not located on a return visit May 6. Others were watched for without success. However, one was found north of Greenwood, Miss. on May 26.—On the annual spring field day at Lakeview, May 5, 124 species were listed despite the fact that almost no shorebirds were present. The 'highway bar-pit' where we had nests of King Rail, Pied-billed Grebe, and Least Bittern, with young of the first two last year, had nothing to offer but an object lesson in conservation. It had been burnt off during the winter. Altho rarer species were seen by certain ones, the highlight of the trip for all our scattered morning groups was the soaring display put on overhead by first an Anhinga and later a Mississippi Kite.—One to two Kites were reported over Overton Park by Scouts from May 6 on. We saw 2 soaring overhead on May 30 but failed to find them June 9 or June 18.—On May 30 we found a male Towhee in Riverside Park. It couldn't be found an hour later nor on subsequent trips. This is a very late date as this species is usually absent after May 8. The Barn Swallows had built a new nest for the fifth successive season at the only nesting location yet found in this area (see *The Migrant*, 1936, p. 69)—Snowy Egrets now nest within 65 miles of Memphis.—BEN B. COFFEY, JR., Memphis.

CORINTH CHAT:—On Apr. 21 in a swampy space of two acres at Waukomis Lake I found ten kinds of warblers,—Redstart, Md. Yellow-throat, Hooded, La. Water-thrush, Worm-eating, Cerulean, Yellow, Palm, Myrtle, Black and White. On a hillside a few yards away was a Pine Warbler. Another bit of evidence to show that birds not of a feather often flock together. The next day at the same hour the same spot was entirely birdless.—All of the Wrens were conspicuous this spring because of their absence. The severe cold of last winter either killed or drove them away. I have seen more Kingbirds the first week in May than I have ever seen before in a whole year's time. Ten flushed from a small tree at roadside; fifty cavorted in a small newly-plowed field near the road; and there have been many others here and there. The usual large numbers of Goldfinches have been found in fields and woods everywhere; but they did not come to our town streets this year as they did last.—My red-letter day of the season was Sunday, May 6. In the plowed field where I saw the Kingbirds, five Scarlet Tanagers fed on worms and grubs that had been turned up by the plow. Nearby was a small wooded creek bottom and the Tanagers played back and forth between the woods and the open field. Nine Orioles appeared in a tall tulip tree at Waukomis early in the morning of Apr. 25. Three were male Baltimores, one a male Orchard, two were females and the balance were immature, or first-year birds. All of them came to the tree in a flock and all left together. Thirty-odd Cedar Waxwings fed beneath a cedar tree at the National Cemetery. The ground there was covered with berries of last year's vintage. Chestnut-sided Warblers unusually plentiful this year, together with Yellows and Blackpolls. On May 6 I prepared a short article for *The Migrant* and in it referred to the fact that in fifteen years I have found only two Oven-birds. Very late the next afternoon in Tuscumbia Bottom I found the third one—and instead of wagging his tail in Water-thrush fashion the scamp had his tail pointed upward at angle most jaunty. He came within ten feet of me so that identification was positive.—BENJ. R. WARRINER, Corinth, Miss.

THE ROUND TABLE

OSPREYS AND RING-BILLED GULLS AT ERWIN FISH HATCHERY:—The wide open fish rearing ponds at the federal fish hatchery at Erwin, Tenn., attract fish-eating birds and occasionally ducks and shorebirds. On May 25, 1939, two gulls were shot at the hatchery. Both appeared to be of the same kind and one had been banded. The superintendent, Mr. G. C. Robertson, showed me a letter from the U.S. Biological Survey, giving the following information. The bird was banded June 27, 1938, on Scarecrow Island, Lake Huron, by C. C. Ludwig, and was a Ring-Billed Gull (band number 648380). The Ring-Billed Gull is given a status of 'rare transient'

in East Tennessee (Ganier, Distributional list of the birds of Tennessee, 1933, p. 18). During the month of April, 1940, the spring rains have roiled the Nolichucky and neighboring streams and, apparently, as a consequence, the 'fish-hawks' have given unusual attention to the hatchery ponds. As nearly as the fish hatchery men can recall, twelve have been killed this month, April, 1940. Four were taken in one day. Once an Osprey was shot down as it soared off with a bass in its talons. Four have been turned over to the State College at Johnson City and two of these have been prepared as study skins for the Museum collection. The last one examined by the writer was a male, testes about one centimeter in length.—No nesting in this region is known to the writer. Two Ospreys are under the protection of the game warden at Greeneville Dam and may establish a breeding record for this territory.—CHARLES W. QUAINANCE, Johnson City.

MOURNING DOVE NESTING HABITS AT JOHNSON CITY:—The spring season has been unusually cold and wet and very much below normal in respect to temperature. This has delayed the Mourning Dove's nesting. However, we now have some nests near the campus. There are four nests so close together that one can stand at one point and see all of them. Just this morning I saw three male Doves sitting in the same tree, watching over the nests which are located about one hundred feet apart, while the females sat quietly on their little platforms of sticks, which hardly resemble nests at all. The nest is composed of a mere handful of sticks, thrown together in such a way that one would think the beautiful white eggs would fall through.

When incubation begins the doves are very careful not to let the eggs stay uncovered for a minute. They take turns sitting on the nest. I have been observing them very closely for over a week and I have never seen their eggs except when I purposely frightened them away. Early in the morning the male will leave the roost and go in search of food. When he returns, he takes the place of the female and she will go in search of food. Thus, for fourteen days the eggs are never cold.

It is believed by some qualified residents of East Tennessee that the Dove has reached a precarious status. Occasionally appeals are made to have the Biological Survey declare a closed season. Some believe that the Mourning Dove may go the way of the Passenger Pigeon. There is a similarity in the nesting habits. Also like the Passenger Pigeon the Dove stays in flocks which makes it easier to kill them in great numbers.—CLAUDE HUGHES, Johnson City.

FLICKER-STARLING NESTING RELATIONSHIPS:—On Mar. 28, 1940, a pair of Flickers were observed to be very much interested in a nesting hole about 30 feet above the ground in the side of an oak on the State Teachers' College Campus at Johnson City. On Apr. 6 they were keeping close watch over the prospective home. During approximately four hours

of observation that day, they were seen to keep watch by turns, sitting within an inch or two of the hole. A group of Starlings were in the upper branches and nearby trees but were not molesting them. This watching period went on until Apr. 12. On that date the male worked most of the day enlarging the hole. On Apr. 13 a group of 5 Starlings came fussing and quarreling around. The Flickers left without a fight and a pair of Starlings began to carry nesting material into the stolen home site. The Flickers left the campus and went to an apple tree about two hundred yards away. This site did not suit them so they were back on Apr. 17 at the original nesting location. They then chose a place about 18 inches above the old hole and began a new home. This was completed by Apr. 25. During the writer's intermittent observation of approximately 15 hours of the home building, the male appeared to do all the digging. The female was not usually around, but on two occasions she was seen to chase a Starling away—once at 10:00 A.M., Apr. 20 and 1:00 P.M., Apr. 22. The Flickers are now incubating about 18 inches above the family of Starlings. The female peers out every time she returns to the nest-hole but does not come out until she wishes to leave again on a foraging expedition. The Starlings seem to try to steer clear of the new hole. They do not stop any closer to it than is necessary to gain entrance to their nest.—EVERETT LOWE, Johnson City.

A SCOTT COUNTY HORNED LARK RECORD:—While driving north through Tennessee on April 1, 1940, returning from a three weeks' ornithological tour of Florida, I chanced to discover a group of Prairie Horned Larks (*Otocorus alpestris praticola*) which, to all appearances, were breeding birds. Just past sunrise my driving companion and I stopped the car at a point on U.S. Route 27 just north of Oneida in Scott County, with the purpose of stretching our legs after driving all night. Almost immediately I heard the tinkling songs of Larks, and a short excursion into the plowed field near the road revealed 5 or 6 of them, several of which were singing from elevated points on the ground. They continued to sing for 15 or 20 minutes, and then 2 of them took flight and towered higher and higher finally to disappear, uttering their twittering flight song all the while.—In view of this behaviour and the late date it seems quite probable that the birds were nesting in the vicinity. The Horned Lark apparently nests sparingly in the vicinity of Louisville and at other points in central and south-eastern Kentucky; however, I am unfamiliar with its status in the mid-Tennessee plateau. Therefore I submit this record, hoping that it may possibly prove of interest.—ROBERT M. MENDEL, Louisville, Ky.

NOTE:—This species is apparently an uncommon summer resident in the state. It has been reported in Houston County and near Nashville (*The Migrant*, 1931, Vol. 2, pp. 30-31) and young birds have been found at Memphis.—EDITOR.

THE MIGRANT

A QUARTERLY JOURNAL DEVOTED TO THE STUDY OF TENNESSEE BIRDS.

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*"The simple truth about birds is interesting enough,
it is not necessary to go beyond it."*

PLEASE NOTIFY THE SECRETARY OF A CHANGE IN ADDRESS

YOU CAN HELP

The next issue will be in honor of the Society's twenty-fifth anniversary and we are asking everyone's co-operation in getting it out in ample time before the anniversary meeting at Nashville, October 19-20. Especially in assisting the secretary-treasurer to compile a list of active members. It is human nature to put off but the habit is a stumbling block to your officers voluntarily trying to serve you and the Society. To prevent an interruption in our members' files of *The Migrant* several sets of books have to be kept. Most organizations operate on a calendar year only and most of our dues are in order on January 1. For the convenience of new members a July 1 group has gradually been built-up. If many of these latter could now pay up until January 1, 1942, it would lighten the treasurer's job, giving him one busy season rather than two.

Instead of publishing the customary list of new members in this issue, it has been decided to publish a new and revised list of our entire membership in the Anniversary issue. So we are calling on you now, individually and by Chapters, to bring your list of active members up-to-date so that all can be included on the roll. Please do it now! Compiling and publishing such a list is quite a job and must be done in August if we are to handle other copy later. Please co-operate with a dead-line of August 15 and send all dues now to the treasurer, not to the editor.

Correct addresses are important for printed matter. A March issue was returned to us on June 9 on account of change in address. Others find their way back four to six weeks after mailing. At this writing we have several March copies undeliverable. All the work connected herewith is one thing, but if it is dragged out interminably it crowds into the next project. We desire to spell everyone's name properly. If it is wrong in past lists tell us. That's the only way it can be corrected. In copy received names of members are variously spelled and in editing we refer back to the lists published.

We are indebted to the Northeastern Bird Banding Association, publisher of *Bird-Banding* for the use of the four plates accompanying the review of Prof. Green's article on Swift banding. Prof. Green, a former T.O.S. member, had a large amount of data from his pioneer and extensive banding work. The original article embraces 21 pages.

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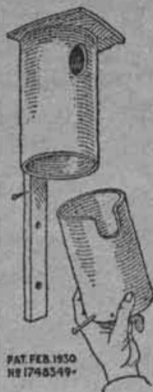
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CALENDAR—T. O. S. ACTIVITIES

FALL FIELD DAYS AND TRIPS

- July 4—Up to you.
Sept. 1-2—Likewise.
Sept. 7-8—Mud Lake (Memphis) shorebird census, depending on water levels. Write.
Oct. 13—Knoxville Chapter, Lake Andrew Jackson.
Oct. 13—Kentucky Orni. Soc., Mammoth Cave Natl. Park.
Oct. 18-20—Twenty-fifth Anniversary, T. O. S. Meeting near Nashville.
Oct. 27—Blue Grass Chapter, Porter farm, Columbia.
Nov. 3—Memphis Chapter, Shelby Forest.

Incidentally the copy basket is practically empty. We regret that several areas were not represented in this issue. Please send all copy as soon as possible and seasonal material by Sept. 1st. We appreciate the co-operation of those who helped make this issue possible.

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