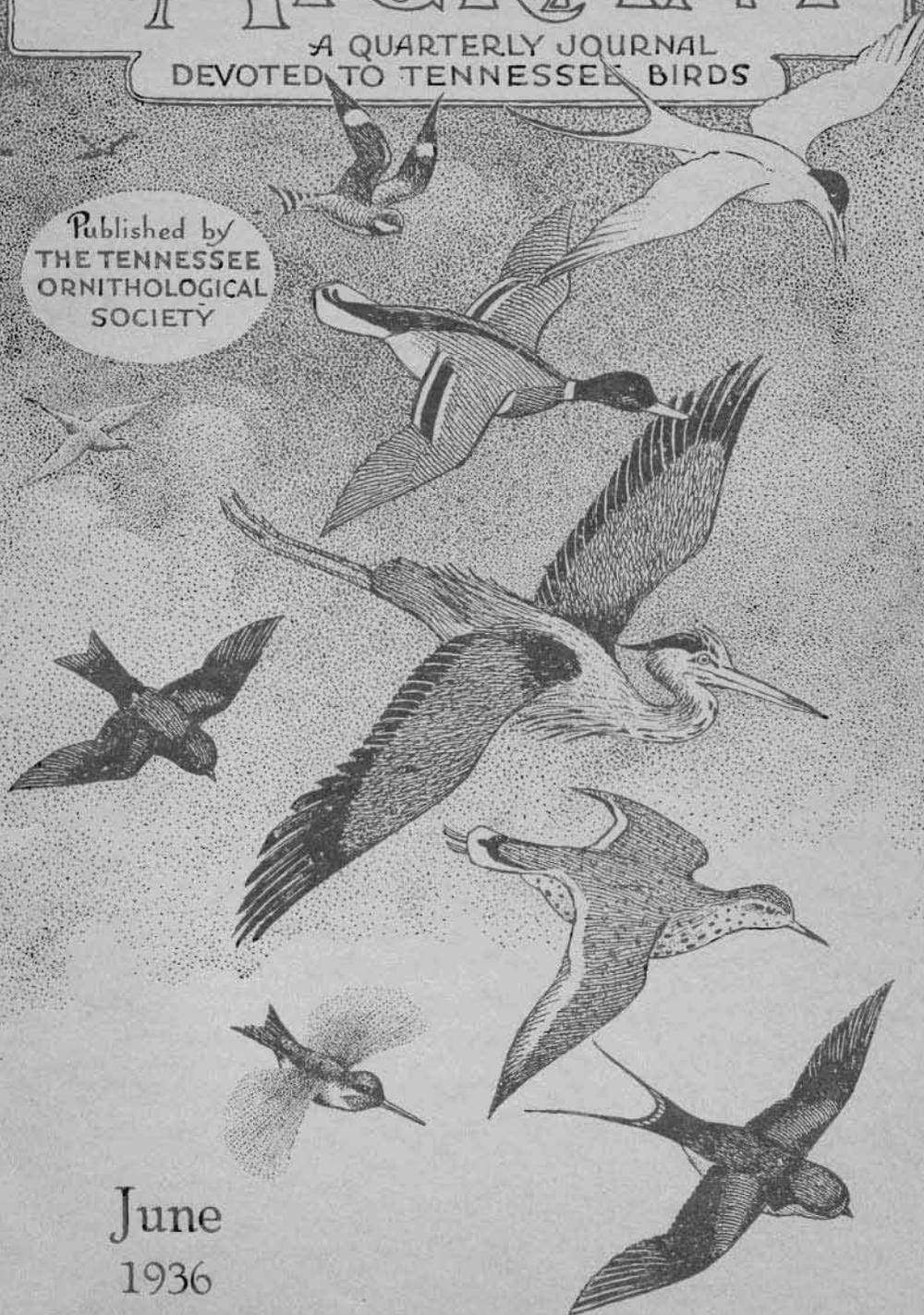


THE MIGRANT

A QUARTERLY JOURNAL
DEVOTED TO TENNESSEE BIRDS

Published by
THE TENNESSEE
ORNITHOLOGICAL
SOCIETY



Jams
'35

June
1936

BIRD BOOKS

We have in our store, or can obtain for you on short notice, these books on Bird Life.

Pocket Nature Guides

These are the accepted pocket guides for use on field trips. Size 3½x5½ inches, profusely illustrated in colors. Each \$1.25.

Land Birds East of the Rockies. By Chester A. Reed.

Water and Game Birds. By Chester A. Reed.

Wild Flowers East of the Rockies. By Chester A. Reed.

Butterfly Guide. By Dr. W. J. Holland.

Tree Guide. By Julia Ellen Rogers.

- A FIELD GUIDE TO THE BIRDS. By Roger Tory Peterson. Your library is not complete without this new book. Copiously illustrated in wash and color. The greatest aid for identification.....\$2.75
- BIRDS OF AMERICA, Edited by T. Gilbert Pearson, 834 pages fully illustrated with 106 color plates, many photos and drawings, one volume. Original 3 vol. edition sold for \$16.00, now.....\$3.95
- WILD BIRDS AT HOME, By F. H. Herrick. 350 pages, 137 illustrations. A very complete treatise on everyday habits of our birds\$4.00
- SINGING IN THE WILDERNESS. By Donald Petrie. A charming new biography of Audubon. Illustrated, including some plates after Audubon\$2.50
- TRAVELING WITH THE BIRDS. By Rudyard Boulton. Lithographed illustrations by W. A. Weber. A book on bird migration. Very interesting and instructive\$1.00
- Handbook of Birds of Eastern North America. By F. M. Chapman. Well illustrated in colors. 580 pages. The standard handbook.....\$5.00
- The Book of Bird Life. By A. A. Allen, Ph.D., Cornell University. A wealth of informaton, profusly illustrated.....\$3.75
- Bird Neighbors. By Neltje Blanchan. All about those birds that are most worth knowing. Illustrated.....\$1.00
- How to Make Friends With Birds. By Neil Morrow Ladd. Giving many methods of attracting birds.....\$1.50
- Birds of the South. By Charlotte H. Green. Permanent and winter birds of gardens, fields, and woods. Illustrated.....\$1.50
- Stay-at-Home Birds. By Mae Norton Morris. A charming book for the children. Well illustrated.....\$1.50
- Birds of Tennessee. By A. F. Ganier. 64 pa. A distributional list showing how, when and where all species are to be found.....\$0.50

All bird lovers are cordially invited to visit our store, or write to us for information on books about birds, nature, gardening and out-of-doors.

METHODIST PUBLISHING HOUSE

810 Broadway

Nashville, Tenn.

Tel. 6-2641

THE MIGRANT

VOL. VII

JUNE, 1936

NO. 2

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

NESTING OF THE CLIFF SWALLOW IN TENNESSEE

BY A. F. GANIER AND S. A. WEAKLEY

Tennessee numbers among her birds six members of the swallow family, the Northern Cliff Swallow, the Bank Swallow, the Rough-winged Swallow, the Tree Swallow, the Barn Swallow and the Purple Martin. Of these all except the first two mentioned had been found nesting within the State up to the present year. Local bird students have been on the lookout for some evidence of the nesting of Cliff Swallows (*Petrochelidon albifrons albifrons*) for a good many years but without success. Their normal nesting range lies well north of Tennessee and there the birds usually attach their nests of mud pellets to the outside eaves of a barn or other out-building. In earlier times however their nesting colonies were confined to cliffs and from this habit they received their name. Even as transients, these birds are not frequently recorded in our State though occasionally, in the mixed flocks of swallows that congregate in migration over lakes and ponds, one can pick out a number of these conspicuously marked birds. They are gaudily clad little fellows, being marked with dark red, dark blue, brown, black and white. They somewhat resemble the Barn Swallow except for the lack of a forked tail.

On May 24, 1936, the writers investigated a colony of these birds that had been reported breeding on the Cumberland River, at Dover, about 60 miles west of Nashville. In our party were also Messrs. G. R. Mayfield and H. S. Vaughn of Nashville, and from Clarksville, Messrs. C. F. Pickering, Alfred Clebsch, Sr., and sons, Alfred and William, John Lewis and Dexter Haynes. We crossed the river at Dover, then drove on through the Fort Donelson Park and halted at the river bank above Lock D and its connected dam. Looking ahead, we saw numbers of the swallows skimming over the water and darting under the guard wall of the lock that faced the river above the dam. Walking across the lock gates and peering upstream under the parapet, we could see the clustered nests and from them flew hundreds of the birds. After we had watched them for some time, those of us who had brought movie and still cameras took a skiff and rowed around to where we could look up at the nests just above our heads. Photos taken from the boat are shown on page 40. The wall is about 110 feet long and is-reinforced by 7 buttresses surmounted by a concrete walkway. This construction formed 6 recesses under the walk, each 3 feet deep, 12 feet long and rising to 12 feet above the water. The nests were built back in these recesses and were therefore well sheltered from the sun, rain and from all enemies, save those who might approach with a boat. In the six recesses we counted 310 nests (91-72-43-40-34-30). Of half a dozen we opened, all held 4 or 5 eggs well incubated except one set of 4 which was nearly fresh. Many nests however were in various stages of construction, a number being just begun.

The nests of this species are perhaps the most unusual of any of our native birds, as will be noted by examining the photographs on pages 40 and 41. They are constructed entirely of little pellets of mud, each stuck around the rim until the structure finally takes the form of a crooked necked squash or gourd, with the down-pointing stem left open for entry. One of these stems hung down for more than a foot. The nests sometimes overlap each other. The late ones are begun below those that are already finished but as close up

as possible. In those under construction, the last laid pellets were still dark colored due to their dampness. For lining, there was merely "a pinch" of soft dead grass leaves and on this the eggs rested. The latter are white, thickly speckled with reddish brown. The nests remain until the flood waters of winter rise above them and they then dissolve and fall away, leaving the concrete clean for the following spring.

As we sat quietly in the boat, the swallows would sweep past us in flocks, going in and out of their nests except those that were very close to us. They kept up an incessant "conversational chatter" which was not unpleasant to hear and which blended with the low roar of the water going over the dam. The birds receive complete protection here and there is every reason to believe that the colony will be a permanent one. The lock and dam was built in 1916 and the birds have been there for a number of years. We were told by one of the lock tenders that a small colony branched off a few years ago and built some nests on the north bank pier of the new (1930) bridge a half mile upstream. We visited this site but saw neither nests nor birds.

In the Tennessee River, about 13 miles northeast (down-stream) from Savannah, Tenn., there is an island which from early times has been called Swallow Bluff Island. On the Decatur County shore, at the end of a long limestone bluff where the steamboats stopped, the place is called Swallow Bluff Landing. The names were derived from the fact that here, there exists another nesting colony of Cliff Swallows. The photographs reproduced on page 41, show (d) the low cliff under which the long line of nests are built and which, after rising sheer from the water, juts out to form a wide over-hang, (e) a close-up view showing how the nests are stuck to the vertical face just below the shelving rock, and (f) a general view of a part of the cliff with about 90 nests in sight in the section shown. This colony has doubtless been in existence for many years. It is quite probable that the early nests are destroyed every few years by late spring floods. The photos were taken from the official photograph album of the U. S. Engineer's Office at Nashville and are by Mr. Allison Trice of that office.

The two locations described represent, so far as we know, the most southerly breeding sites of this species at the present time. Mr. A. H. Howell, in his state list, *The Birds of Alabama*, states that in 1913 he visited a colony of about 100 nests on a cliff above the Tennessee River near Fort Deposit, Ala. This site is 120 miles southeast of Swallow Bluff. The birds have not been seen in that vicinity on recent river trips (by Weakley) but a more careful investigation will be made at a future date.

NASHVILLE, TENN., May, 1936.



WATERFOWL IN SPRING ON NORRIS LAKE

BY JAMES TRENT, JR.

The recent completion of the Norris dam, north of Knoxville, and the heavy rainfall of early spring, caused the rivers to rapidly begin filling the valleys and to form a lake extending for many miles above. This lake is the beginning of a body of water that will, at the maximum depth of about 200 feet at the dam, cover an area of 34,200 acres extending 72 miles up the Clinch River and 63 miles up the Powell.

On April 10, 1936, having learned that a large number of migrating waterfowl had already found the new lake, George Foster, Jr., and the writer decided to spend the day there and make a census. We launched our canoe from the east shore, at the head of the arm known as Big Ridge Lake, a narrow water-filled valley extending about a mile from the main Clinch River valley. The water here was rather muddy and a considerable drift of weeds and corn stalks was floating about. Our first birds were a pair of Blue-winged Teal which flushed nearby as we paddled on out toward the main lake. Most

of the Blue-wings we saw on the trip were in pairs. We soon began to encounter large numbers of Coots but they did not seem to "feel at home" or else had been shot at, for they flushed at long distances ahead.

Turning eastward, we found that the shallow inlets were each well provided with ducks and Coots. On taking flight they would follow the water route back to the main lake, thus giving us a good view of their flight pattern as they passed near our canoe. In the second inlet we found the largest flock of the day. About 400 Lesser Scaup arose from the water on our approach and were presently joined by 200 more from further up the inlet, presenting a sight new to East Tennessee eyes. As we paddled out again we saw several large gulls approaching and as they came closer we were able to identify them as Ring-billed Gulls. Trailing in their wake was a smaller bird which on its closer approach was seen to be a Bonaparte's Gull. Later in the day, as we were paddling over the site of the village of Loyston, now under a hundred feet of water, we came across four more of the Bonaparte's Gulls resting on the water. By paddling to windward and then letting the boat drift toward them, we were able to observe them from a distance of 100 feet. One was in perfect mature plumage, two were immatures and the fourth seemed midway between. Their ability to use the force of the wind in lifting themselves from the water makes them appear as light as thistle down and in flight they are exceedingly graceful.

As we proceeded up the lake we saw more and more ducks but only the Scaup were in sizable flocks. As Ringnecks and Blue-winged Teals flew out of the inlets, they came so close that the finest details of color and markings could be observed. Black Ducks were present in very small numbers and Mallards were seen only twice; we found a few Baldpates and Green-winged Teal. In one of the wide sections of the main lake we discovered a pair of the uncommon little Ruddy Ducks. At mid-day, after we had pulled up on a small island to eat our lunch, Foster hiked around its shore and on returning, reported two Shovellers, a pair of Baldpate and seven Gadwalls. Paddling back into the second inlet, mentioned above, we were elated to find three Canada Geese feeding on the shore. As we approached to within 150 yards they became restless and then took flight with an enormous amount of honking for so few birds.

As we concluded the day, we checked over our list and estimated that we had seen approximately 1500 water birds. These were as follows: Lesser Scaup 800, Coot 500, Blue-winged Teal 59, Ring-necked Duck 39, Black Duck 34, Gadwall 8, Baldpate 5, Common Mallard 4, Shoveller 3, Green-winged Teal 3, Ruddy Duck 2, unidentified ducks 100, Canada Goose 3, Ring-billed Gull 4, Bonaparte's Gull 4 and Lesser Yellowlegs 1. On the following day we returned, having with us Mr. William Vogt of New York, Editor of *Bird-Lore*, and in addition to most of the birds enumerated above we also listed an American Merganser, Horned Grebe and Herring Gull. On April 12, on a shorter trip on the lake, we added a Hooded Merganser to the list, making an even dozen species of ducks.

Aside from our narrow rivers, East Tennessee has heretofore had no "way station" for transient waterfowl such as Norris Lake is and will continue to be. It is particularly interesting to note that these transients found it in large numbers during the first few months of its existence. Since the draw-down late in the year will reduce the lake to 13,500 acres, it is a moot question whether the ducks will find it to their liking, for the fluctuating water level will discourage the growth of plant food. But one thing is certain—this spring has seen the finest concentration of migrating waterfowl ever seen in this section and it is our hope that through the protection they may expect to receive on this lake, this concentration may occur each year in the future.

KNOXVILLE, TENN., May, 1936.

COWBIRD NESTING RECORDS FOR DAVIDSON COUNTY

By HARRY C. MONK

The Cowbird is one of the rare breeding birds of Davidson County, some seasons passing without a single nesting record being obtained. It is also our only parasitic species, laying its eggs in the nests of other birds and depending upon them to hatch and rear its young. For these reasons it has seemed worthwhile to compile the local breeding records which are now scattered in a number of private files.

Twenty-eight records, divided among thirteen species, have been gathered and are tabulated below. These records were obtained in twelve of the past nineteen years, beginning in 1918. The year 1919 leads with five records; it is further remarkable that all five were found in one locality, Acklen Park, and in the nests of one species, the White-eyed Vireo. A dozen localities within the county have furnished Cowbird records, but one half of these were obtained in the Acklen-Centennial Park area. Egg dates range from April 27 into the first week of July. The great majority are evidently laid in May.

Study of these records shows the Cowbird follows its well-known preference for the nests of smaller birds, especially warblers and vireos, as a receptacle for its eggs.

Seven local observers have contributed data to this paper, as follows: Mrs. Laskey, Dr. Harry Vaughn, George Woodring, A. F. Ganier, Dr. Shaver, Compton Crook and the writer. Their records are credited in the following list either by name, or the corresponding initials. Unless otherwise stated the records were obtained in Acklen-Centennial Parks by the writer. Not more than one Cowbird egg has been found in any nest.

Carolina Wren, July 9, 1933, a nest placed in a crotch of a roadside tree at Radnor Lake contained 3 eggs of the wren and one of the Cowbird. This record was so unusual that it was reported in *The Auk*, 1934, p. 384. It is also our latest date for Cowbird's eggs at Nashville. Found by Crook.

White-eyed Vireo. The following five records were made in 1919 in Acklen Park. April 27, one egg of vireo and one of Cowbird, left until May 1, when both showed some incubation. April 27, one fresh Cowbird egg, no vireo eggs; nest evidently deserted as no birds were present when revisited May 1. May 1, a fresh Cowbird egg, no vireo eggs; left until May 7, nest deserted. April 28, 1 vireo egg; revisited May 2 and contained 3 vireo eggs and one Cowbird. May 17, bird sitting on 4 vireo eggs and one Cowbird, all fresh. May 13, 1924, 4 vireo eggs and one Cowbird, all fresh, at Radnor Lake, Dr. Vaughn. This species leads all others in number of records, probably because of its size, its local abundance, and the ease with which its low swung nests may be examined.

Red-eyed Vireo. May 28, 1920, 3 vireo eggs and one Cowbird, all fresh, the bird sitting closely, Centennial Park. May 8, 1936, 2 vireo eggs and one fresh Cowbird egg, at the Knapp Farm club-house, Dr. Shaver. June 2, 1936, a fresh egg laid in a new nest before the vireos could lay, Centennial Park. The vireos deserted.

Warbling Vireo, May 24, 1933, a nest examined by Crook and the writer held 4 vireo eggs and one of the Cowbird; all were well incubated, but the Cowbird egg most advanced.

On July 9, 1935, Mrs. Lasky banded a young cowbird in the care of Warbling vireos. (see *The Migrant*, 1935, p. 61.)

Yellow Warbler, May 3, 1922, 2 warbler eggs and one of the Cowbird, all well incubated, but the Cowbird egg most advanced. No attempt made to cover the Cowbird egg, as this warbler often does. May 4, 1924, 2 warbler eggs plus a fresh Cowbird egg. The latter was removed and when revisited May 11, it held 4 warbler eggs.

Prairie Warbler, May 17, 1925, 3 warbler eggs plus one Cowbird all fresh, A. F. Ganier, Pinhook creek. May 24, 1930, 3 warbler eggs and one of Cowbird, all fresh, Couchville Pike, Crook.

Louisiana Water-Thrush, April 28, 1928, 3 eggs plus one of the Cowbird, incubated 5 days. Stewarts Ferry Pike, found by AFG, now in Vaughn collection.

Maryland Yellow-throat, May 11, 1920, 3 eggs plus one of the Cowbird, all fresh; bird sitting. HCM. May 31, 1934, 3 eggs plus one of the Cowbird, incubated 5 days, Montague. HSVaughn. June 10, 1936, pair with well grown young Cowbird, in lot on Long Blvd., no young Yellow-throats; still present June 17.

Orchard Oriole, June 13, 1933, a pair with a young Cowbird just out of nest, no young Orioles, Centennial Park.

Summer Tanager, a nest found completed, but empty May 23, 1920; on May 30 held 3 eggs of the Tanager and one of the Cowbird; deserted, but showed a trace of incubation.

Cardinal, May 1, 1932, 3 eggs plus one of the Cowbird, showed trace of incubation; Radnor Lake, Compton Crook. In the aggregate local students have examined thousands of Cardinal nests with only one Cowbird record, indicating how very rarely this species is parasitized.

Indigo Bunting, May 19, 1918, 2 eggs plus one of the Cowbird. Latter removed and found to be fresh. Two buntings left the nest June 8. Herman Wright and Harry Monk. June 22, 1922, 3 eggs plus one Cowbird, incubated 5 days, Loves Hill, AFG. June 14, 1936, 3 eggs plus one of the Cowbird, all fresh, Rivercliff, Stones River, A. F. Ganier.

Towhee, May 24, 1930, 3 eggs plus one of the Cowbird, Couchville Pike, Crook. April 19, 1932, a nest which held 3 eggs of Towhee on 11th and 13th, on this date held also one of the Cowbird. Later the nest was destroyed. Found by George Woodring in Belair Avenue area.

NASHVILLE, TENN., June, 1936.



THE PEACE MESSENGERS

BY MRS. JOHN H. EAGLE

During the spring of 1918, while working in my garden, I noticed a pair of Mourning Doves on top of the little red brick church next door to us. The male bird, as I supposed, was perched on the very peak of the roof and was sending out his crooning call "s-o-o-n, s-o-o-n, s-o-o-n", while his mate apparently was feeding, mincingly picking her way up and down the steep roof, peering into the crevices and angles about the chimney as though in search of something. As this little performance was staged at frequent intervals for several days in succession—the doves meanwhile becoming more familiar and unafraid, I decided they must be prospecting for a building site or even building a nest. After a bit of patient watching it was discovered that they had begun a nest and that it was located where it was least expected to be—high up under the eaves, in the gutter of our house. I had thought that nothing less daring than an English Sparrow would undertake so hazardous an enterprise.

It so happened that their chosen location was directly over the vacant room of our soldier-boy, so at once I adopted them as my own particular peace messengers. Peace, but at what price I thought! Peace from war or that other, the peace of the poppy fields?

The building went on uninterrupted until I judged the nest was nearing completion, when a heavy rain fell and it was washed out. Naturally, I felt it was all over for them—and me. But in a few days the crooning from the house-top was resumed and the building in the gutter was begun all over again, only again to meet the same misfortune as the first. The thin nest was promptly undertaken once more and soon finished. Incubation was evidently in process when the worst wind and rain storm of the season occurred. This time I hurried out to see how my brave bird friends were faring. Already,

the little "ark" was being lifted on the water until the dove's back could be seen above the gutter's edge and as it rocked and swayed with each gust of wind—driven rush of water, the brooding mother stretched her slender neck turned her head from side to side in quick alarm, but each time settling back again as the water receded.

So long as I was able to stand the storm myself, she stayed steadfastly at her post of duty. But next morning I missed the prophetic "*s-o-o-n, s-o-o-n, s-o-o-n*". The nest and its precious contents had been swept out by the storm. At such a time, the tears of motherhood were never far from the surface and I wept over the little tragedy.

Imagine my delighted surprise, a few days later to find the doves crooning and building again in the same location. A period of dry weather set in at this time and the fourth nest was finished and the little doves hatched out in due time. From day to day I watched the parent birds fluttering over the nest, brooding and feeding their young. One morning I looked out as usual but the little family had moved out, for by now the young were able to fly and of course they never returned to the gutter under the eaves.

The boy came back to his room under the nest. Certainly the doves had nothing to do with his safe return, but they did furnish me a kind of comfort, and watching their persistence and courageous battle against odds and their final victory over a seemingly hopeless situation, did give me hope and courage to "carry on" during that long drawn-out summer of suspense and heartache. *No, I couldn't kill a dove.*

SPARTA, TENN., March, 1936.



SPRING BIRDS OF CHATTANOOGA

By BRADFORD TORREY*

*(NOTE:—The following list of birds, observed in and about Chattanooga from April 27 to May 18, 1894, is taken from Mr. Torrey's "Spring Notes from Tennessee," published two years later. Since this book has long been out of print and is only available in certain libraries, it has been thought worth while to re-publish the list in this publication. Mr. Torrey, who died in 1912, at the age of 69, was a naturalist-author with a thorough knowledge of ornithology. He was a native of Massachusetts and made visits during the winter to southern states to gather material for his writings. Thus it was he came to spend the three weeks at Chattanooga, employing all of his time with trips afield studying the birds, viewing the mountain scenery and conversing with the rural people whom he met on his rambles. His biographer (*The Auk*, 1913, p. 157) says that "he combined to a very unusual extent the scientific with the aesthetic habit of mind." In this connection, we hope to publish in a future issue, one or two of the charming chapters from his book. Although the observations were made a number of years ago, they doubtless apply equally well today to the bird-life of the environs of Chattanooga. About 75 of the birds listed are summer residents of the area, the other 18 were migrating transients. The names are reproduced as published in 1896 and, as evidence of the instability of scientific names, it is interesting to note that 29 of the 93 given have been changed since that time.—EDITOR.)

Green Heron. *Ardea virescens*.—A single individual seen from a car window.

No other water birds were observed except three or four ducks and a single wader, all upon the wing and unidentified.

Bob White. Quail. Partridge. *Colinus virginianus*.—Common.

Ruffed Grouse. "Pheasant." *Bonasa umbellus*.—Heard drumming on Walden's Ridge.

Carolina Dove. Mourning Dove. *Zenaidura macroura*.—A small number seen.

Turkey Vulture. Turkey Buzzard. *Cathartes aura*.—Common.

- Black Vulture. Carrion Crow. *Catharista atrata*.—Two birds seen.
- Red-tailed Hawk. *Buteo borealis*.—One bird seen from Walden's Ridge.
- Sparrow Hawk. *Falco sparverius*.—One bird, on Walden's Ridge.
- Yellow-billed Cuckoo. *Coccyzus americanus*.—Common. First noticed April 29.
- Black-billed Cuckoo. *Coccyzus erythrophthalmus*.—Seen twice on Lookout Mountain, May 7 and 8, and once on Walden's Ridge, May 12.
- Belted Kingfisher. *Ceryle alcyon*.—A single bird heard on Walden's Ridge.
- Hairy Woodpecker. *Dryobates villosus*.—My notes record seven birds. No attempt was made to determine their specific or sub-specific identity, but they are presumed to have been *D. villosus*, not *D. villosus audubonii*.
- Downy Woodpecker. *Dryobates pubescens*.—A single bird was heard (not seen) on Walden's Ridge,—a noticeable reversal of the usual relative commonness of this species and the preceding.
- Red-cockaded Woodpecker. *Dryobates borealis*.—Found only at Chickamauga, on Snodgrass Hill, in long-leaved pines—two or three birds.
- Pileated Woodpecker. "Logcock." *Ceophlaeus pileatus*.—Said to be common on Walden's Ridge, where I heard its flicker-like shout.
- Red-headed Woodpecker. *Melanerpes erythrocephalus*.—One seen near Missionary Ridge and one at Chickamauga. The scarcity of this bird, and the absence of the red-bellied and the yellow-bellied, were among the surprises of my visit.
- Flicker. Golden-winged Woodpecker. *Colaptes auratus*.—Not common. Three birds were seen at Chickamauga, and it was occasional on Walden's Ridge, where I listed it five days of the seven.
- Whippoorwill. *Antrostomus vociferus*.—Undoubtedly common. I heard it only on Walden's Ridge, the only place where I went into the woods after dark.
- Nighthawk. *Chordeiles virginianus*.—Common.
- Chimney Swift. *Chaetura pelagica*.—Abundant.
- Ruby-throated Humming-bird. *Trochilus colubris*.—Common in the forests of Walden's Ridge. Seen but twice elsewhere. First seen April 28.
- Kingbird. *Tyrannus tyrannus*.—Seen but three times—nine specimens in all. First seen April 29.
- Crested Flycatcher. *Myiarchus crinitus*.—Noticed daily, with two exceptions.
- Phoebe. *Sayornis phoebe*.—Common on Lookout Mountain and Walden's Ridge. Not seen elsewhere.
- Wood Pewee. *Contopus virens*.—Very common. Much the most numerous member of the family. Present in good force April 27, and gathering nest materials April 29.
- Acadian Flycatcher. Green-crested Flycatcher. *Empidonax virescens*.—Common.
- Blue Jay. *Cyanocitta cristata*.—Scarce (for the blue jay), and not seen on Walden's Ridge!
- Crow. *Corvus americanus*.—Apparently much less common than in Eastern Massachusetts.
- Bobolink. *Dolichonyx oryzivorus*.—A small flock seen, and heard singing, April 27.
- Orchard Oriole. *Icterus spurius*.—Common, but not found on Walden's Ridge.
- Crow Blackbird. *Quiscalus quiscula*?—Seen on sundry occasions in the valley country, but specific distinction not made out. Both forms—*Q. quiscula* and *Q. quiscula æneus*—are found in Tennessee. See Dr. Fox's List of Birds found in Roane County, Tennessee. "The Auk," vol. iii, p. 315. My own list of the Icteridæ is remarkable for its omissions, especially of the cowbird, the red-winged blackbird (which, however, I am pretty certain that I saw on the wing) and the meadow lark.
- House Sparrow. English Sparrow. *Passer domesticus*.—Distressingly superabundant in the city and its suburbs.
- Goldfinch. *Spinus tristis*.—Abundant. Still in flocks.
- White-crowned Sparrow. *Zonotrichia leucophrys*.—Seen but once (May 1), two birds, in the national cemetery.

- White-throated Sparrow. *Zonotrichia albicollis*.—Common. Still present on Walden's Ridge (in two places) May 13. Sang very little.
- Chipping Sparrow. Doorstep Sparrow. *Spizella socialis*.—Common.
- Field Sparrow. *Spizella pusilla*.—Common.
- Bachman's Sparrow. *Peuceea aestivalis bachmanii*.—Common. One of the best of singers.
- Chewink. Towhee. *Pipilo erythrophthalmus*.—Rather common. Much less numerous than I should have expected from the nature of the country.
- Rose-breasted Grosbeak. *Habia ludoviciana*.—A single female, May 11.
- Indigo-bird. *Passerina cyanea*.—Very abundant. For the first time I saw this tropical-looking beauty in flocks.
- Scarlet Tanager. *Piranga erythromelas*.—Common on the mountains, but seemingly rare in the valley.
- Summer Tanager. *Piranga rubra*.—Common throughout.
- Purple Martin. *Progne subis*.—Common.
- Rough-winged Swallow. *Stelgidopteryx serripennis*.—A few birds seen.
- Red-eyed Vireo. *Vireo olivaceus*.—Common. One of the species listed every day.
- Yellow-throated Vireo. *Vireo flavifrons*.—Common. Seen or heard every day except April 27.
- White-eyed Vireo. *Vireo noveboracensis*.—Abundant. Heard every day.
- Black-and-white Creeper. *Mniotilta varia*.—Very common.
- Blue-winged Warbler. *Helminthophila pinus*.—One bird seen at Chickamauga, and a pair on Missionary Ridge.
- Golden-winged Warbler. *Helminthophila chrysoptera*.—Common, especially in the broken woods north of the city.
- Parula Warbler. Blue Yellow-backed Warbler. *Compothlypis americana*.—Only on Walden's Ridge.
- Cape May Warbler. *Dendroica tigrina*.—One bird seen on Cameron Hill, and a small company on Lookout Mountain—April 27, and May 7 and 8.
- Yellow Warbler. Golden Warbler. *Dendroica aestiva*.—Common, but not observed on Walden's Ridge.
- Black-throated Blue Warbler. *Dendroica caerulescens*.—Common, April 27 to May 14.
- Myrtle Warbler. Yellow-rumped Warbler. *Dendroica coronata*.—Noted April 27 and 28, and May 7 and 8.
- Magnolia Warbler. *Dendroica maculosa*.—Not uncommon, May 1 to 12.
- Cerulean Warbler. *Dendroica cerulea*.—One bird, a male in song, on Lookout Mountain.
- Bay-breasted Warbler. *Dendroica striata*.—Common to May 13.
- Black-poll Warbler. *Dendroica striata*.—Common to May 13.
- Blackburnian Warbler. *Dendroica blackburnia*.—Seven birds—May 1 to 18.
- Yellow-throated Warbler. *Dendroica dominica*. (*Albilora?*)—Found only at Chickamauga (Snodgrass Hill), where it seemed to be common.
- Black-throated green Warbler. *Dendroica virens*.—Common.
- Pine Warbler. *Dendroica vigorsii*.—Not numerous but found in appropriate places.
- Palm Warbler. *Dendroica palmarum*.—The specific—or sub-specific—identity of this bird was not certainly determined, but I judged the specimens—seen on four dates, April 29 to May 11—to be as above given, rather than *D. palmarum hypochrusea*.
- Prairie Warbler. *Dendroica discolor*.—Very common.
- Oven-bird. *Seiurus aurocapillus*.—Common on Lookout Mountain and Walden's Ridge. Seen but once in the lower country.
- Louisiana Water-thrush. *Seiurus motacilla*.—A few birds seen on Walden's Ridge.
- Kentucky Warbler. *Geothlypis formosa*.—Very common, and in places very unlike.

- Maryland Yellow-throat. *Geothlypis trichas*.—Common.
 Yellow-breasted Chat. *Icteria virens*.—Very common.
 Hooded Warbler. *Sylvania mitrata*.—Common, especially along the woodland streams on Walden's Ridge.
 Wilson's Blackcap. *Sylvania pusilla*.—A single bird on Walden's Ridge, May 12, in free song.
 Canadian Warbler. *Sylvania canadensis*.—Seen on three dates—May 6, 11, and 12.
 Redstart. *Setophaga ruticilla*.—Common. Not seen after May 14.
 Mocking-bird. *Mimus polyglottos*.—Rare. Not found on the mountains.
 Catbird. *Galeoscoptes carolinensis*.—Very common, both in the city and in the country round about.
 Brown Thrasher. *Harporthynchus rufus*.—Common.
 Carolina Wren. Mocking Wren. *Thryothorus ludovicianus*.—Common.
 Bewick's Wren. *Thryothorus bewickii*.—Not common. Seen only on Missionary Ridge.
 White-breasted Nuthatch. *Sitta carolinensis*.—Common at Chickamauga and on Walden's Ridge. A single bird noticed on Lookout Mountain.
 Tufted Titmouse. *Parus bicolor*.—Common.
 Carolina Chickadee. *Parus carolinensis*.—Common.
 Blue-gray Gnatcatcher. *Poliophtila cærulea*.—Common.
 Wood Thrush. *Turdus mustelinus*.—Very common. A bird with its beak full of nest materials was seen April 29, at the base of Missionary Ridge.
 Wilson's Thrush. Veery. *Turdus fuscescens*.—Rare.
 Grey-cheeked Thrush. *Turdus aliciae*, or *T. aliciae bicknelli*.—Two birds, May 2 and 13.
 Swainson's Thrush. Olive-backed Thrush. *Turdus ustulatus swainsonii*.—In good numbers and free song. Seen on four dates, the latest being May 12.
 Robin. *Merula migratoria*.—Five birds in the national cemetery, April 29.
 Bluebird. *Sialia sialis*.—Common. Young birds out of the nest, April 28.

THE ROUND TABLE

THE SEASON AT MEMPHIS: The Purple Martin was again "first arrival" this year, being seen in Memphis on March 7 by Scouts Jackson and Clayton. Mr. L. G. Guth at Whitehaven, just south of town, reported Martins at his box on March 2. At Lakeview, Miss., on the 15th we noted for the first time, Vesper Sparrow, 3; L. Yellowlegs, 5; Pectoral Sandpiper, 9; and Blue Geese were heard passing over at dusk. McCamey heard at least 200 of the latter from the uptown bluff on the 19th. Shovelers were first noted March 8 at Lakeview. An American Bittern and an Amer. Egret were observed there on March 22. On the 28th, Pond and Clayton found a female Bufflehead on Mud Lake. Black-crowned Night Herons were noted by Pond on April 10 and the same four were seen by me the next day, and one by McCamey on the Field Day, May 3. King Rails were, for some reason, not seen until May 3, about six weeks after usual records. Soras were fairly common on that day.—Previous to this year our only record for the Virginia Rail was one in the Memphis Zoo. On April 25, independently of each other and at separate "bar-pits", Harold Elphinstone and John Pond each saw a Virginia Rail. I was unable to locate it myself, but a week later John found another one for me, farther west along the same pit. It was there the next afternoon—May 3—and that one bird received a lot of attention from novice and veteran alike as nearly every member remaining for the afternoon trip of the Field Day had a chance to observe it closely. Four Soras in quick succession had been found when the Virginia was located and took up a place of partial concealment

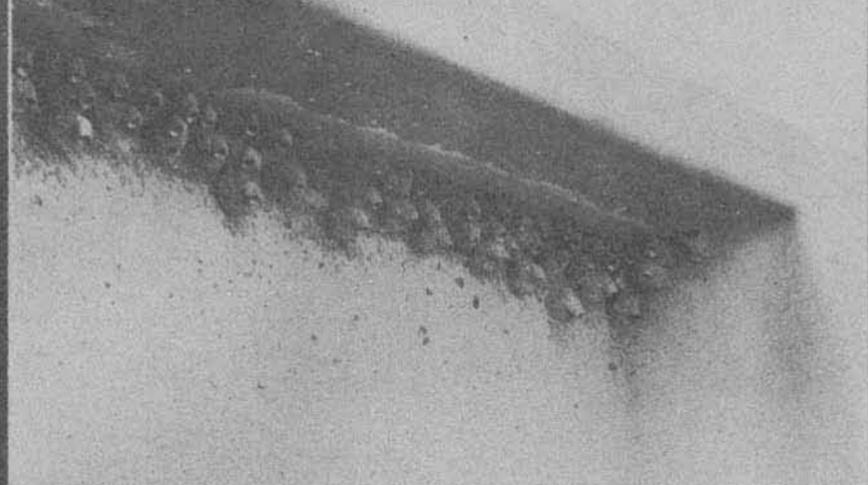
among the willows. Later an unafraid Prairie Marsh Wren passed along the edge of the willows, running the gauntlet of eyes. A Purple Gallinule was found and Pond recorded a second Virginia Rail for the day.—Shorebirds were less common than usual this year although some likely stopping-off places were available. Only a few Greater Yellowlegs, Least (and ?) Sandpipers, and Spotted Sandpipers were seen with Lesser Yellowlegs, Solitary Sandpipers, and Pectoral Sandpipers fairly common, the last species less so than usual. Wilson's Snipe were common; Semipalmated Plovers, generally fairly common, were not recorded this spring.—The highway pit, where Pied-billed Grebes have been recorded as nesting in 1932, 1933 and 1935, dried up this spring before nesting season. Some of the other pits failed to yield signs of their nests but on May 17, R. B. Humphries found two Grebe nests and a Least Bittern nest.—No Upland Plover were seen at Lakeview on March 22 or at Lake Forest on March 25, but on our first visit to the old Bry's Airport (inside city) on March 25, we found 11 present there. We saw them frequently the remainder of the month and from 2 to 5 were present continuously up to April 23. (On April 5 and 7, 30 and 18 Pectorals, respectively, were found there.) On April 10, Pond found two of the Plovers along the levee at Lakeview; five were seen there the next day and Whittemore reported ten on April 13. On the 10th, I heard one passing over Overton Park.—On April 10th and 11th, four Black-crowned Night Herons were seen at Lakeview—Broad-winged Hawks were regularly noted between April 9th and 13th and through the 24th.—One or two Veeries were heard singing in Overton Park from April 28 through mid-May.—The House Wren, with not more than two records for any previous spring, was noted in Overton Park on April 14, 20, 21, 24 (two), and 25; a few were found singing.—A Lincoln's Sparrow was present in my yard, April 14 and 15, singing continuously at times. An Orange-crowned Warbler was observed on April 5 in Overton Park. Mourning Warblers were reported several times by Pond and Wallace and a Connecticut Warbler on April 23, by Pond.—BEN B. COFFEY, Memphis.

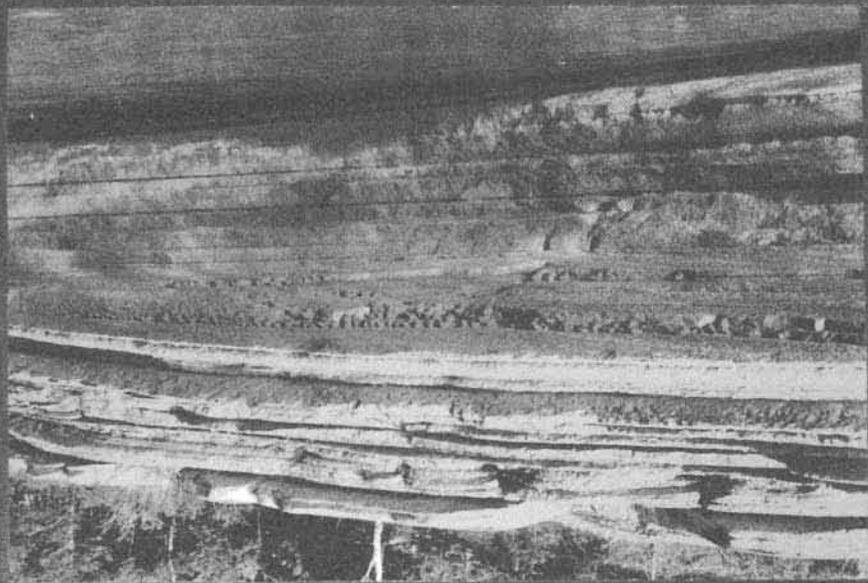
BREWER'S BLACKBIRD AT LAKEVIEW, MISS.: On March 8, 1936, I noted several blackbirds at the grassy edge of a small pool of water, out in the open from the willow covered "bar-pits". They were slightly smaller than grackles, three being male Brewer's Blackbirds and one being a female with the diagnostic dark eye. They were examined through 8X binoculars for several minutes. The next night in the blackbird roost in the low willows, I found another female, observing it with a spotlight at less than five feet. We were not able to capture any of this species but did band a few Rusty Blackbirds, male and female. Two males were chiefly purplish on the head but proved too small for Brewer's. This is the first record of Brewer's Blackbird for the Memphis area.—BEN B. COFFEY, Memphis.

A BROWN PELICAN AT MEMPHIS: The Horn Lake territory to the southwest of Memphis continues to yield unusual records. On May 17, a cool, cloudy day with frequent showers, Wendell Whittemore, Wm. Moore and the writer arrived at the northern end of the lake (which is in Mississippi) shortly after daybreak. Just as we came in sight of the water, a great, bulky bird, with long, broad wings and apparently an immense head, glided past about 50 feet above the near side of the lake. We ran to the water's edge to get a better view, and watched the great dark bird as it circled at a distance of

OUR ILLUSTRATIONS:—On the opposite page is shown a portrait of a Crested Flycatcher at the entrance cavity to its nest, as described in note by Dr. Pickering in *The Round Table*. On page 40 are shown Cliff Swallows and their nests at Dover, Tenn., on the Cumberland River and on page 41, their nests and nesting site on the Tennessee River, as described in the article by Messrs. Ganier and Weakley in this issue. On page 42 are shown Spring Field Day groups of the T. O. S. at Nashville and at Knoxville, further mention of which will be found among the news items on another page.









Group at Annual Spring Field Day, Nashville, May 10, 1936



Group at Knoxville T.O.S. Annual Spring Bird Census, May 3.

75 yards, and came to rest on the lake. After resting motionless a few minutes, it took off again, and commenced circling, about 30 feet above the water. In flight, the bird progressed by flapping its great wings a few times, then sailing for a while; it carried its long neck drawn in against its body, the large dark pouch resting comfortably on the lower part of the neck. It showed a dark brown color on the under parts, dusky silvery gray on the back and top of wings. Underneath the wings was a light brown, showing much darker, almost black on the primaries. The great bill, distinctly showing its large pouch, was very dark. The top of the head was silvery white, and this color extended in a narrow stripe down the side of the neck, stopping at the breast. The front and back of the neck were brown, the back lighter than the front. Suddenly the bird closed its wings and dropped to the lake with a tremendous splash. Shaking itself as it rose from the water, it pointed its bill upward, apparently swallowed a fish, and rising above the trees, vanished behind them to the north. Without question, the bird was a Brown Pelican (*Pelicanus occidentalis*).

An hour later when we waded to the edge of a small lake a mile to the north (in Tennessee), we found a Pelican, probably the same one, sailing low over the lake. As we watched, it glided into a large dead tree, breaking off a few limbs trying to light; it finally found one strong enough to hold it, and settled itself comfortably. It remained in this tree, almost without moving, for more than an hour, while we were walking around the lake. Then we left, and it was not seen again. The nesting range of this bird is on the coasts of Louisiana, Florida and South Carolina, according to Chapman's Handbook. They are reported to stray northward after breeding; so this was probably a visitor from a coastal colony where the birds nest in December.

Several other interesting birds were noted on this trip, chiefly in the barrow-pits along the levee south of Horn Lake. Four Least Bitterns were seen in the willows, and one of their nests was found by another party; it held 4 eggs. Two American Bitterns were flushed from the same place, and two more carefully observed later as they flapped back and forth over us, about two miles from the first place. King Rails and Sora Rails were flushed occasionally from the edges of the pits, and a Black-crowned Night Heron was observed at close range as he perched in the willow thickets a short distance from the bank. Least Terns occasionally flew over, and two Blue-winged Teal once whistled by. Prairie Marsh Wrens were often seen in the high grass bordering the pits. At the highway pits we had an excellent comparison as a Greater and Lesser Yellowlegs flew and fed together for a few minutes. The woods north of Horn Lake were full of Warblers, among them several Ceruleans and a Canada.—FRANK M'CAMERY, Memphis.

NOTE: The Brown Pelican is a new bird for the Tennessee list.—EDITOR.

A GOLDEN PLOVER NEAR MEMPHIS: On April 11, 1936, near Lakeview, Mississippi, a few miles south of Memphis, I observed a bird that I am reasonably sure was of this species (*Pluvialis dominica dominica*). With me were George Clayton, Gene Wallace and Jim Vardaman. It was not wading in the water with the other shore birds but kept to the marshy ground nearby. Our attention was first drawn to him because, as he flushed with a flock of 75 Pectoral Sandpipers and 8 Lesser Yellowlegs, he showed a complete absence of light color in the tail and of outstanding wing stripe. The next time he flushed and flew overhead, we discovered that he had no wing stripe where had been a slight appearance of one at first because the primaries were slightly lighter than the brownish secondaries and tertiaries. His bill was pure black, short, and of plover shape. His dark grey legs were slightly shorter than those of a nearby Lesser Yellowlegs. The top of his head was slightly darker than his forehead, cheeks or nape of neck, giving the appearance of a dark crown or cap. The plumage was brownish above with a golden tinge, buffy below with streaks of a faintly darker color on the breast. At one time I approached to within 15 feet and observed that the golden appearance was caused by gold spots on the tips of the upper feathers. We watched his

movements for more than half an hour and at intervals of two or three minutes each, we observed him as closely as 15 feet. The Golden Plover has not yet been recorded from Tennessee. Its spring migration is said to follow the plains states, some distance west.—JOHN POND, Memphis.

NOTE: Mr. A. C. Bent, in U. S. N. M. Bulletin 146, p. 181, says: "Most of the birds we see here in the spring are in full adult nuptial plumage, but I have seen quite a number of birds, some taken on the breeding grounds, that showed, more or less, old, worn, winter plumage: these may be young birds in their first nuptial plumage. . . . The prenuptial molt of the body plumage begins in March and lasts until May in some individuals."—EDITOR.

SUMMER TANAGER BEHAVIOR: A pair of Summer Tanagers have spent the past three years with us, building their nests near the house and raising two broods each year. These birds became our very close friends. We placed food on our porch for them daily, and they frequently came for it while we were sitting on the porch, and between bites, would pause long enough to chirp a few words of thanks. Many times the female would come within a foot of us and eat without any indication whatever of fear.

The most interesting experience with them, however, was after they had raised their first brood and it was time for the building of a new home for the second family. Their first home had been near the house, but they began building the second on a limb just a few feet above the porch swing. The first day they both worked diligently. They both appeared supremely happy and contented, and uttered sweet little words of love to each other in the most tender tones. The next day, we noticed the female was working alone, with no help at all from her gayly colored mate. That afternoon, we saw them perched on a wire, and from all indications, they were having a real "family row". The little tender phrases of the day before had changed to the most raucous tones. The "spat" continued for some time, and operations on the new home ceased. The following morning, they both resumed work on their new home on the site of the old one. All seemed to be well again, since "papa" had his way. Whether this idea of the superiority of the "stronger sex" originated with the birds or with human beings, it seems to be prevalent in both realms, and concession to this idea often becomes necessary in order to bring about a happy, harmonious home.—MIRIAM A. (MRS. T. I.) KLYCE, Memphis.

A NORTH MISSISSIPPI HERONRY: A few miles east of the Mississippi River and just south of Lake Washington in Washington County, lies a shallow body of water, of several hundred acres, called the P. L. Mann Lake. The Reedland quadrangle map (1) shows it to be a low area more than a mile across. The water is quite shallow and is covered with buttonbush, willow and cypress; very few other trees being found in the lake proper. It is admirably suited for a heronry, being inaccessible to the average marauder. Food is plentiful in nearby Lake Washington and in small neighboring sloughs. This study was begun during the month of May, 1935, and a preliminary report was made and published along with reports of other field work of the Department of Biology. (2) Several visits have been made to this lake this spring.

The first 1936 visit was on March 20, before the trees began budding. We discovered a colony of Ward's Great Blue Heron (*Ardea herodias wardi*) nesting in the tall cypress. We counted fifty-three trees with a total of two hundred and fifty-seven nests. Three weeks later we returned to make moving pictures of the colony. Some of the boys climbed to the nests and found most of them with young birds. There were only a few nests with eggs. This second visit also revealed many American Egret (*Casmerodius albus egretta*). They were nesting in large colonies in the small willows and button bushes. These birds are so numerous that it is impossible to accurately count the birds or nests. A few Little Blue Herons (*Florida caerulea caerulea*) were seen, but no nests were found on this date.

On May 8, we made another visit to the heronry. Our search revealed many Little Blues, a few Snowy Egrets (*Egretta thula thula*), and Water

Turkeys (*Anhinga anhinga*) were numerous. Some of the latter were nesting in the cypress trees and even using vacated nests of the Great Blues. Their eggs were collected from the same nests from which we had previously collected Great Blue eggs.

On May 24 the writer accompanied Mr. Ben Coffey, of Memphis, and a group of Boy Scouts to the Lake. The group banded over one thousand birds. Among them were each of the species mentioned above and also the Florida Gallinule (*Gallinula chloropus cachinans*), the last species being reported to me by Mr. Coffey, who discovered a nest containing four eggs and three newly hatched young. Upon our last visit (June 6) we banded several more Little Blues and Snowys. One specimen of the Black-crowned Night Heron (*Nycticorax nycticorax hoactli*), apparently about five weeks old, was captured and banded. One nest containing four young of Least Bittern (*Ixobrychus exilis exilis*), and another with seven nestlings of Little Green Heron, were captured and banded. The Purple Gallinule (*Ionornis martinica*) was also found here but no nesting record was established.

All of these birds that were found in numbers seemed to have established definite nesting areas. The Great Blues were in the cypress trees; the American Egrets in the small willows and the buttonbush near the cypress trees; the Little Blues and Snowys in the smaller bushes and nearer the open lake; the Water Turkeys were in the cypress and the buttonbushes, but they were more secluded and higher than the Little Blues or Egrets. The tendency to occupy the trees is probably due to the constant shooting of these birds by the negroes for food. The owner of this property has been consulted and definite efforts will be made to protect the birds as long as they stay in this area. This study will continue this summer and probably through next nesting season.—R. L. CAYLOR, Delta State Teachers College, Cleveland, Miss.

(1) War Dept. map, U. S. Engr's Office, Vicksburg, Miss.; (2) *Biological Field Work, Bul. Delta State Teacher's College*, vol. XI, no. 3, 1935.)

NOTES—The above constitutes the most northerly nesting location of the Snowy Egret in the Mississippi valley, so far as I am able to learn.—EDITOR.

PROTECTING A ROBIN'S BROOD: We first noticed the Robin about the last of February, 1933, busy on the high shelf on which the grocer placed deliveries. This shelf was somewhat protected by a dead clematis vine which had grown upon a trellis. The nest finally took form and was a work of art; the foundation broad and flat then sloping upward to the cup-shaped cavity. Three blue eggs were laid. The grocery man was warned what we would do to him if he molested the nest so thence forward he left his packages on the floor while the Robins rented the shelf. One night after the three young were more than a week old, we heard a noisy commotion and immediately thought of our birds. I rushed to the door, flashed on the light on the porch and there beheld a great grey cat in the act of seizing a baby Robin. Without stopping to think how I might be scratched, I grasped the cat by its tail and with a mighty swing I pitched it out into the yard. Needless to say, I had something to remember the cat by for several days.

We then lifted the nest, birds and all and took it inside, placing it close to the breakfast room window. Early the next morning we heard them calling and the old birds "talking" to them so we placed the nest and young back on their shelf in order that the parents could resume feeding. The cat did not seem to notice them during the day. We did this every evening for four nights but on the fifth night they rebelled and it seemed we had young robins all over the house until they were captured. The next morning the nest and young were again placed on the shelf and through the day we saw that they were standing up, stretching their wings and taking notice generally. Before night they had flown. The following March, 1934, the Robins returned and again took possession of the shelf, building in almost the identical place as before. This time they were unmolested.—ALICE FOX, Clarksville, Tenn.

A CRESTED FLYCATCHER'S NEST: On page 39 of this issue will be found a portrait of a Crested Flycatcher sitting at the entrance of a cavity, in a small tree, which held its nest. On May 24, on our excursion to Dover, our group stopped our cars on the river bluff above Hayne's Lake and there at the edge of a small woodland, noticed a flycatcher that would not fly away. While observing it at close range, it presently flew to the cavity above mentioned and peered within. We immediately knew there must be a nest and later, with the aid of a small flashlight, saw that there were eggs. The cavity was only five feet above the ground, about fourteen inches deep, and since the tree was small, the little compartment was only about three inches across inside. We wondered how the bird, nearly nine inches long could make the many necessary trips to the bottom of the cavity and out again without damaging its plumage. The bird obligingly sat in its doorway while Mr. Ganier took the photo at a distance of five feet.—CHAS. F. PICKERING, M.D., Clarksville, Tenn.

SPRING MIGRATION AT CLARKSVILLE: The following record of spring arrivals, up to May 1st, was made at Clarksville by members of our local T. O. S. chapter. Purple Martin Feb. 25 (see note in March *Migrant*); Chipping Sparrow Feb. 29; Vesper Sparrow March 8; Brown Thrasher March 10; La. Water Thrush, Green Heron, Blue-gray Gnatcatcher and Black-and-white Warbler March 29; Chimney Swift March 30 (on April 12 we noted about 750 going to roost in a factory chimney); Barn Swallow and Rough-winged Swallow Apr. 5; White-eyed Vireo Apr. 6; Red-eyed Vireo Apr. 7; Philadelphia Vireo Apr. 13 (a rare bird but we believe our identity correct); Geese Apr. 13 (flock of 8 near sunset, flying in a straight line); Black-throated Green Warbler Apr. 11; Hooded and Prothonotary Warbler Apr. 12; Catbird Apr. 16; Warbling Vireo and Lark Sparrow Apr. 17; Wood Thrush, Olive-backed Thrush, Crested Flycatcher, Sycamore and Yellow Warblers Apr. 19, Baltimore Oriole Apr. 21, Palm Warbler and Maryland Yellowthroat Apr. 22; Orchard Oriole, Solitary Sandpiper, Lesser Yellowlegs, Prairie and Kentucky Warblers Apr. 23; Nighthawk Apr. 24; Summer Tanager and Redstart Apr. 25; Spotted Sandpiper Apr. 26; Indigo Bunting, Sora and Whippoorwill Apr. 26; Hummingbird Apr. 28; Blackpoll Warbler and Cliff Swallow Apr. 29; Ovenbird and Scarlet Tanager Apr. 30; Rose-breast Grosbeak and Greater Yellowlegs May 1.—ALFRED CLEBSCH, SR., Clarksville.

RECENT EAGLE OCCURRENCES: During the past winter and spring, 8 eagles have come to my attention as having been captured or killed in Tennessee. Of these, 5 were Golden Eagles and 3 were of the Bald species. Two of the latter were from West Tennessee and one, an immature trapped the last week in May, came from Sumner County near Portland. The Golden Eagles came from the region lying between the eastern Highland Rim and the Cumberland Plateau. They are believed to nest in the sandstone escarpments which fringe the plateau and its gorges. Six of the above mentioned birds were sent to the Great Smoky Mountain National Park to be released there. Two of them were banded by Mrs. Laskey.—JOHN CALDWELL, State Dept. of Game and Fish, Nashville.

NOTE: When eagles are trapped by farmers it is usually claimed by them that they had been molesting pigs, lambs, kids or poultry. Formerly, the majority of them were killed but now, as a result of publicity in their behalf, most of them are being turned over to the Game and Fish Dept. The Golden are then "deported" to the National Park and the Balds will be sent to Reelfoot Lake. One of the Golden above mentioned was trapped in Moore County, near the Lincoln County line, on April 1st. A pair of these birds were seen near the same point on April 12 last year, one of them being killed. Eagles found far from suitable nesting sites at this season are believed to be roving, homeless birds.—EDITOR.

NOTES FROM NASHVILLE AREA: Two Tree Sparrows were found on Jan. 11, some miles from the one banded and reported by Mrs. Laskey on Jan. 21; these were the first we have recorded in some years.—On March 1, an assemblage of about 200 Black Vultures was found at Indian Lake near Hendersonville. The attractions were dead spoonbill catfish, 2 to 3 feet long, which had been killed by the freezing solid of the shallow end of the lake during the severe winter. No Bald Eagles and only 3 Turkey Vultures were present.—Doves were very scarce during the past winter so a flock of 30, on a nearby burned over sedge field, were noted with interest.—Another sight on the above date was that of a Red-tailed Hawk being "teased" by a flock of several hundred Starlings. As he soared along they would rise above him, then suddenly dart downward enmasse, completely enveloping him as they passed. Whether the bolder ones struck him or not I could not tell, but as they swept by, he kept up a rapid beating of wings until he emerged from the cloud of birds. The performance was repeated dozens of times at intervals of about a minute and between attacks the hawk soared serenely along.—A picturesque nest of the Golden Eagle, which I found in Van Buren County last October, was re-visited on March 8 with all paraphernalia necessary to go over the cliff to the nesting ledge. I was accompanied on this trip by Messrs. G. R. Mayfield and H. O. Todd. We were somewhat disappointed to find that a Great-horned Owl had appropriated the nest and had laid two eggs, now well incubated. The eggs were collected.—The Barred Owls whose nest and eggs I reported last year on March 24, were not to be found this year; I strongly suspect a nearby "squatter" of having shot them, since I found a dead one in a hollow roosting tree not far away. Another pair, located last year, were found to have three well incubated eggs in their nest on March 15. As I approached the tree she flew across the river and was at once set upon by a half dozen Crows. After seemingly debating, between the frying pan and the fire, she flew directly back to the deep nesting cavity and dived headlong within.—One of the two pair of Sharp-shinned Hawks, previously reported nesting west of here in Cheatham County along the Turnbull River, was visited on May 31st and the female found sitting on 4 eggs. They were incubated about two weeks. This is an early date for them.—A Purple Gallinule was found on a trip to Coffee Co., March 16-17. It was in a small marsh near Morrison and when flushed from the marsh grass, sought to hide by flying into the thick leaves of a small tree on the bank. This marsh is about 21 miles north of Goose Pond where I found a nest last year. Its nest was not found nor could I find the bitterns which nested here in 1935. A despoiled nest of the Knig Rail and many nests of the Redwing were in this 4-acre pond, now quite shallow, due to drouth. Wood Ducks were found at Sinking Pond, some miles south. I was unable to re-visit Goose Pond near Pelham.—My 13-year-old Cardinal and his mate of last year came through the hard winter in good condition and began a nest in the privet hedge on March 28. On April 18, incubation began on 3 eggs but the following morning the eggs were gone. The nest was undisturbed and I attribute the loss to Grackles. Two days later they began a nest close to the dining room window and on May 1, incubation began again. On the night of May 19, the 3 young, nearly grown, were stolen from the nest, either by Screech Owls or a cat. A cat trap "tastily" baited under the shrub, failed for lack of a patron.—A. F. GANIER, Nashville.

AN ALBINO NIGHTHAWK: On May 23, while out looking for birds, I came to a large rocky glade covered here and there with strips and patches of loose rock or short grass. It was the type of place at which Nighthawks like to nest, so I began to walk about to try to flush one. Presently a white bird flew up about fifteen feet ahead and alit on a fence post a few feet further on, permitting me to view it carefully with glasses. It was an albino Nighthawk, being pure white all over except that where the black markings usually are, these were ashy gray. Looking again at the spot from which the bird had flushed I found two eggs on the small loose rock of normal markings.—HENRY O. TODD, Murfreesboro.

MIGRATORY WATERFOWL ON THE WHEELER RESERVOIR: The Wheeler Dam, located just east of Florence, Alabama, while only fifty feet high, is creating of the Tennessee River a lake approximately 110 miles long, having a shoreline of some 1,130 miles. Obviously, therefore, it is a shallow-water lake, and hence its creation is being watched with great interest by those who, for one reason or another, are concerned with our migratory waterfowl. It was with keen anticipation, therefore, that I visited the Wheeler reservoir area between April 6 and 13, 1936, and a note on what I found is perhaps not out of order as indicating what may be expected once the water is more or less stabilized. To say that ducks were abundant is to put it mildly: Wheeler was black with them. So very abundant were they that nothing but an estimate could be attempted in order to get at their numbers. I saw one flock of Lesser Scaup ducks (*Nyroca affinis*) which extended from practically at my feet out across the lake in a long diagonal as far as the field of vision of an 8X binocular could reach; and this was only one of many flocks seen. I saw acres of coots. The species involved, and their approximate numbers, seen on April 7 alone, are as follows:

Lesser Scaup 50,000 to 75,000, Coot 25,000, Blue-winged Teal 1,000, Mallard 500, Black Duck 350, Baldpate 250, Pied-billed Grebe 150, and Lesser Snow Goose 74.

The last species named is of especial interest, for these birds (*Chen hyperborea hyperborea*) ordinarily migrate west of the Mississippi and were certainly not to be expected on Wheeler Lake. The number in this case is an actual count.—A. R. CAHN, Chief, Wildlife Unit, T.V.A., Knoxville.

THE 1936 WARBLER MIGRATION: The warm dry spring of 1936 seemed to make some difference in the numbers present of certain species of warblers. My daily records show that the Bay-breasted, Blackpoll, Chestnut-sided, Tennessee and Canada Warblers were less common than usual. The Tennessee Warbler in particular being much rarer and less noisy than in recent years. The Blackburnian, the Cape May and the Magnolia Warblers were seen in greater numbers than usual. The sixteen species of warblers known to nest in the Nashville area do not seem to vary much from past years; if any difference, the balance is in favor of larger numbers.—G. R. MAYFIELD, Nashville.

NOTES ON WOODCOCK, GROUSE AND TURKEY: A nest of the Woodcock was found on March 13th in Williamson County. The parent bird was sitting on four eggs at the time and was so gentle that she permitted herself to be touched. A considerable number of Ruffed Grouse have been noted during the past season. These were in White, Van Buren and Fentress Counties while others were reported from Putnam, Cumberland and Grundy. It is probable that these birds are more common than we think, at least in this Plateau region. Fifteen bunches of Wild Turkeys, totalling about 35 pair, were located in Van Buren County during the winter. This county is heavily wooded, thinly populated, and contains the new Falls Creek Park of 7500 acres.—JOHN CALDWELL, State Dept. of Game and Fish, Nashville.

A LATE GOLDEN-WINGED WARBLER IN THE CUMBERLANDS: A male Golden-winged Warbler (*Vermivora chrysoptera*) in perfect plumage and full song remained in one small field in a deep hollow near Stamp's Hollow, Putnam County, Tenn., from May 19, 1935, to May 26, 1935. The situation was ideal for nesting. The bird sang continuously from the same perch on the first date above, and on May 21. On May 26, however, he was roving about, and sung in an adjacent field as well as from his previous perch. No female was ever seen or heard. From one and one-half to three hours were spent in the vicinity on each visit. No visit was possible after May 26, so it is not known whether or not the bird remained for the summer. The lateness of the date would so indicate.—COMPTON CROOK, Western Reserve Univ., Cleveland, Ohio.

SPRING MIGRATION AT KNOXVILLE: The present season has not been far from the average in relation to migration. The earlier arrivals were somewhat erratic, notably the Purple Martin and the Chipping Sparrow; and likewise our arrival dates for some of the later migrants are "out of line" because in our study of special subjects we more or less neglected to comb the best territories for warblers. The transient list for the winter and spring season is quite varied. The construction of Norris Lake has attracted unusual numbers of waterbirds to this section of the state. Normally three or four species of ducks totalling twenty or twenty-five individuals was to us an unusual find, yet Norris Lake during the second week in April was the resting place for a very large number and variety of water birds. (See article elsewhere by Jas. Trent, Jr.—Ed.) A few Robins and Red-wing Blackbirds were locally present throughout January and February.

We have recorded the following arrivals: Purple Grackle (in large flocks) February 26, Purple Martin February 28 (observed in two localities about six miles apart), Brown Thrasher, Savannah Sparrow and Chipping Sparrow, March 8; Pine Warbler, March 21; Louisiana Water Thrush, March 28; Blue-gray Gnatcatcher, March 28, Black and White Warbler, March 28. Also the Cowbird and Rough-wing Swallow on the same date. Tree Swallow, March 29. On April 4 the Blue-headed and Yellow-throated Vireos and the Black-throated Green Warbler. We recorded the Green Heron on April 5 and the Barn Swallow for April 8. The Wood Thrush, April 9; and the next day we found the Lesser Yellowlegs and the Bachman and Grasshopper Sparrows. Chimney Swift, April 12; Yellow-throated and Philadelphia Vireos, April 13; Scarlet and Summer Tanager, April 14; Hummingbird, White Eyed and Warbling Vireos, the Maryland Yellowthroat and Yellow Warbler appeared on April 15; Crested Flycatcher April 16; Redstart on April 18; Blackburnian Warbler, April 19; Orchard Oriole, April 20. Other birds recorded in April are: King Rail, 22; Red-eyed Vireo, 22; The Catbird and Blue-wing Warbler, 24; Baltimore Oriole, Indigo Bunting, Cerulean and Orange-crowned Warblers, 25; on the 26th Greater Yellowlegs, Solitary Sandpiper, Spotted Sandpiper, Nighthawk, Kingbird, Wood Pewee, Bobolink, Ovenbird, Northern Water Thrush, Worm-eating Warbler, Nashville Warbler, Palm Warbler, Kentucky Warbler, Hooded Warbler and the Chat. May records are: Veery, May 2; Rose-breasted Grosbeak, May 3; others on May 3 are, Black-billed Cuckoo, Acadian Flycatcher, Olive-back Thrush, and the following warblers; Bay-breast, Blackpoll, Black-throated Blue, Chestnut-sided, Cape May, Magnolia, Parula and Prothonotary. The Tennessee Warbler and the Dickcissel were recorded May 17.—W. M. WALKER, Knoxville.

A MAY LIST FROM KNOXVILLE: On May 3, the annual spring census was taken in the vicinity of the Island Home Sanctuary, north of Knoxville, by the local T. O. S. Chapter and visitors. A total of 103 species was listed during the day. Showers and a drizzling rain made the warblers more active than usual. The list follows: Green Heron, Scaup Duck, Black Vulture, Sparrow Hawk, Black-billed Cuckoo, Bob-white, Kildeer, Spotted Sandpiper, Mourning Dove, Yellow-billed Cuckoo, Barn Owl, Screech Owl, Chuck-wills-widow, Whip-poor-will, Night Hawk, Chimney Swift, Hummingbird, Kingfisher, Hairy Woodpecker, Downy Woodpecker, Pileated Woodpecker, Red-headed Woodpecker, Red-bellied Woodpecker, Flicker, Kingbird, Crested Flycatcher, Phoebe, Wood Pewee, Acadian Flycatcher, Purple Martin, Barn Swallow, Rough-winged Swallow, Blue Jay, Crow, Tufted Titmouse, Chickadee, Carolina Wren, Brown Thrasher, Mockingbird, Catbird, Wood Thrush, Veery, Olive-backed Thrush, Robin, Blue Bird, Ruby-crowned Kinglet, Blue-gray Gnatcatcher, Cedar Waxwing, Starling, Red-eyed Vireo, White-eyed Vireo, Yellow-throated Vireo, Warbling Vireo, Black and White Warbler, Prothonotary Warbler, Parula Warbler, Yellow Warbler, Black-throated Blue Warbler, Myrtle Warbler, Magnolia Warbler, Cerulean Warbler, Chestnut-sided Warbler, Bay-breasted Warbler, Blackpoll Warbler, Blackburnian Warbler, Sycamore Warbler, Pine Warbler, Palm Warbler, Cape May Warbler, Prairie Warbler, Oven

Bird, Louisiana Water Thrush, Kentucky Warbler, Maryland Yellowthroat, Yellow-breasted Chat, Hooded Warbler, Canadian Warbler, Redstart, Cowbird, Red-winged Blackbird, Meadowlark, Orchard Oriole, Baltimore Oriole, Purple Grackle, Scarlet Tanager, Summer Tanager, English Sparrow, Goldfinch, Vesper Sparrow, Savannah Sparrow, Grasshopper Sparrow, White-throated Sparrow, Chipping Sparrow, Field Sparrow, Song Sparrow, Swamp Sparrow, Towhee, Cardinal, Indigo Bunting, Rose-breasted Grosbeak, Migrant Shrike and King Rail.—H. P. JAMS, Knoxville.

PRAIRIE HORNED LARK NESTING IN N-E TENN.: The scientific name of the Prairie Horned Lark, *Otocoris alpestris praticola*, when translated is, "The bird with the tufted ears of the alpine meadows." In America the Prairie Horned Lark is one of the birds that has to some extent changed its habitat as man-made conditions come to suit its desires. Originally a bird of the northern prairie, it comes now to Tennessee to make its home throughout the year. A ground loving, running bird, it occurs in flocks, frequently fifty or more in number, during the winter, feeding mainly on seeds in open fields on the sunny slopes. As the spring sun melts away the snow to the north, most of the birds leave for their more northerly homes, but some few remain—enough so that it may now be classed as a regular, rare, resident species. It was first observed here as a winter bird, as it is more common than in the breeding season, but it has also been observed breeding here. My colleague, Mr. R. B. Lyle, has a record of seeing a female feeding her young May 10th in the Boone's Creek territory about 6 miles north of Johnson City. I have a record of birds feeding young June 30th on top of Roan Mountain, at an elevation of 5900 feet, which elevation put them well within the Canadian Zone. To the east of Roan Mountain there is an extensive pasture covered with dense coarse grass and studded with scattered and dwarfed buckeye trees. Here I observed a small number of these birds, one persistently carrying food, but the nest was not found. Evidently the birds were maturing their nestlings, as at a subsequent visit to the Mountain on July 21st the birds were gone.

On April 19, 1936, I observed a Prairie Horned Lark rise from the road before my car, as I was slowly meandering a country by-road in the Boone's Creek section. At this unusual sight I stopped promptly and watched the bird as it flew over the roadside fence, alighting on the ground and immediately selecting some nesting material and flying a few rods to disappear in the grass. I marked the spot carefully and a week later returned with my colleague. We found the bird and the nest, but it was trampled by the stock that were pastured in the field. On May 3rd we returned again to the site, and after exhaustive search, flushed the bird and located a new nest, which was in a shallow excavation beneath a clump of sedge grass. The nest was constructed entirely of dead grass. It contained four fresh eggs, which measured .89 x .64. The finding of this nest makes complete the set of observations which fix definitely the status of the Prairie Horned Lark for this region.—BRUCE P. TYLER, Johnson City, Tenn.

The Division of Education of the Department of Game and Fish Conservation has just ended a very successful year. During this past year Tennessee has risen from 37th to 10th place in conservation work. In a recent meeting of the Board of Game and Fish Conservation Commissioners, the 1936-37 budget of this Division was set at \$12,500, an increase of about 75 per cent. All over the state results can be noted—more interest in conservation, birds, animals, etc. During the coming year the Division of Education will have three full time lecturers, one located in Knoxville, one in Nashville and one in Jackson. Mr. John Caldwell is in charge of the Division.

Remember that cats destroy vast numbers of unsophisticated young bird in summer. The feline population is about ten times too large and the avian population is much too small. Bird lovers should do what they can to rectify this condition.

CHAPTER NEWS

NASHVILLE: The annual Spring Field Day, on May 10, was attended by an unusually large and representative group of bird lovers. The site chosen was at "The Pinnacle" on beautiful Sycamore Creek near where it is crossed by the new Clarksville highway. Although the day was hot and dry, birds were observed in abundance and the total of the day's listing was 101 species. Delegations from Louisville, Ky., Florence, Ala., Knoxville, Murfreesboro, Clarksville and Dickson, Tenn., joined the Nashville group to swell the total attendance to 82 in all. A group photo will be found on page 42.—G. R. M.

KNOXVILLE: The regular Island Home Spring Bird Census was held on May 3 at the Ijams Farm on the Tennessee River and a total of 103 species were listed. The list is reproduced on another page and it is of interest to note that 26 members of the warbler family were recorded. The total attendance was about sixty. (See group photo on page 42.—Ed.) On May 2, the group went to the Great Smokies National Park, following the new "skyline drive" to the summit of Clingman's Dome. Near the latter point two Ravens leisurely flew by at fairly close range. A delegation from Nashville consisted of Mr. and Mrs. John Caldwell, M. S. Carter, A. F. Ganier, G. R. Mayfield and Mr. and Mrs. Vernon Sharp, Jr.—H. P. I.

MEMPHIS: The Spring Field Day of the Memphis Chapter, May 3, was held in the territory chiefly south of Memphis and for the first time in several years fair weather prevailed. The days' list was well over a hundred species, including many water birds from the Lakeview vicinity. The attendance was about ninety, this included a delegation of twenty from the Delta State Teachers College at Cleveland, Miss.—M. J. D.

CLARKSVILLE CHAPTER: An active branch of the T. O. S. was organized here early in the spring, largely through the enterprise of our first Clarksville member, Mr. Alfred Clebsch, Sr. This chapter now has thirteen members and has elected Dr. Charles F. Pickering as president and Mr. Clebsch as secretary. On March 28, Messrs. Ganier, Mayfield, Robins and Vaughn motored over from Nashville to formally "install" the chapter. Tabulation of migration records, observations on nesting, and listing the birds of Montgomery County have kept the members busy. The County list for 1936, up to June 1st, was 130 species. Migration notes are printed elsewhere in this issue.

From the Murfreesboro Chapter, Messrs. George Davis, H. O. Todd and Marion Edney, spent May 17 on Reelfoot Lake visiting the "cranetown" on the west side. The Herons, Egrets, Cormorants and Water Turkeys were found present in undiminished numbers. Some of the latter were found using old Ward's Heron nests.

As we go to press, a party of twelve T. O. S. members is leaving to spend a week on Roan Mountain in northeast Tennessee. They will study the birds of the summits, which is in the Canadian zone, and report in a later issue. Roan is one of the highest mountains in the eastern United States, rising to a height of 6,313 feet above sea level.

REVIEW: THE BIRDS OF CHAPEL HILL, NORTH CAROLINA, by Eugene Odum, Edmund Taylor, Coit Coker and Arnold Breckenridge, is an annotated list of the 195 species (i.e. forms) of birds that have been recorded within a six mile radius of the State University campus. The status of each form is very clearly and satisfactorily set forth. An excellent introduction, written by Mr. Odum, enables the reader to properly picture the region, the amount of field work done and to give proper weight to the information presented. The reviewer's only criticism is that extreme dates of arrivals and departures are given rather than average and that nesting data is meagre. A bibliography is appended. The list was published in *The Journal of The Elisha Mitchell Scientific Society*, vol. 51, no. 2, Dec. 1935. Mr. Odum advises that he has a small supply of the reprints which may be had at 25 cents each. His address is Chapel Hill. A copy of this list will be useful to any Tennessee bird student. for comparison.—A. F. G.

THE MIGRANT

A QUARTERLY JOURNAL, DEVOTED TO THE STUDY OF TENNESSEE BIRDS.
PUBLISHED AT NASHVILLE, TENN., BY THE TENNESSEE ORNITHOLOGICAL SOCIETY.

Editor-Treasurer, Albert F. Ganier, 2507 Ashwood Ave., Nashville.
Assistant to the Editor, Miss Georgie Reed, Nashville.

Regional Editors: Ben B. Coffey, Memphis; Harry P. Ijams, Knoxville
and Bruce P. Tyler, Johnson City.

Business Manager, Vernon Sharp, Jr., 220 Capitol Blvd., Nashville.

A complete list of officers is published annually in the June issue.
Subscription price, seventy-five cents per year, free to members.

Dues for Active and Corresponding Members, \$1 per year; for Juniors, 60c.
Items for publication and remittances should be sent to the Editor-Treasurer.

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

EDITORIAL CHAT

In working over the copy and reading and re-reading the proof of the articles in this as well as past numbers of *The Migrant*, the Editor is impressed with the fact that they contain a certain literary quality that is rarely found. The intense interest which students of bird life experience after close contacts with birds, and the enthusiasm which comes from learning first hand that the little incidents of their lives closely parallel those of we humans, makes it natural that we should wish to pass our experiences on to our fellows. As journalists, our contributors are all amateurs and glory in telling in their own informal way of the interesting incidents and unusual "finds" which come to all of us while studying birds. Your Editor is ever watchful, of course, to see that accuracy is carefully adhered to, for the permanent value of *The Migrant* lies in the fact that it is a repository for facts about Tennessee birds that will be available for reference through the years to come.

The weeks gone by have brought Tennessee one of the most severe drouths in many years and birdlife will be adversely affected. Since April 9, only two inches of rain fell through May and June (at Nashville) against a normal of eleven inches. Normal rainfall means not only drink but food as well and the lack of it causes birds to defer their nestings or to attempt smaller broods. Eggs often become infertile due to insufficient moisture and the young not infrequently die in the nest. Even the adult birds show a loss of vitality in times of drouth.

T. O. S. members can do their bit this summer by supplying water, and food as well, to the birds of their premises. A convenient drinking supply can be provided through the use of "baby chick waterers" purchasable at hardware stores. These consist of an inverted preserve jar screwed into a shallow metal saucer. A whirling lawn spray will attract many birds on a hot day.

Mr. William Vogt, Editor of *Bird-lore*, was the guest of the T. O. S., May 18 to 21, speaking to audiences in Nashville, Chattanooga and Knoxville. We greatly enjoyed his visit and trust that he will again come our way.

STATE OFFICERS, 1936-1937: At the Annual Spring Meeting, held at Nashville on May 10, the following State officers of the T. O. S. were elected. President, Bruce P. Tyler, of Johnson City; Vice-president for East Tenn., S. A. Ogden, of Knoxville; Vice-pres. for Middle Tenn., M. S. Carter, of Nashville; Vice-pres. for West Tenn., Ben B. Coffey, of Memphis; Editor-Treasurer, Albert F. Ganier, of Nashville; Secretary, James Trent, Jr., of 2104 Magnolia St., Knoxville, and Curator, Dr. H. S. Vaughn, of Nashville. Those elected will take office as of July 1st.

W. H. SEDBERRY

TAXIDERMIST
and
FURRIER

Thompson Station, Tennessee
(25 miles south of Nashville)



I specialize in the lifelike and
artistic mounting of birds.



Fish, Mammals, Heads and
Horns also mounted.



For my work I refer you to the
Tennessee State Museum, where
I have mounted some of the
specimens shown there and to
the Editor of *The Migrant*.

GLENHAVEN



Bird Banding Traps
Sparrow Traps
Cat Traps
Martin Houses
Bird Banders Equipment
of All Kinds



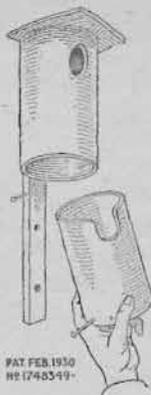
Write for Folder



GLENHAVEN BIRD
SANCTUARY

RUSSELL S. DAVIS
Clayton, Ill.

The Perfect Box for Birds and Banders



PAT FEB 1930
NO 1740549

REMOVABLE NEST
SECTION FOR BANDING,
OBSERVATION & CLEANING.
ONE QUARTER TURN
TRAPS PARENT BIRD (OR
ENGLISH SPARROWS ETC)
CORRECT DIMENSIONS
BY THOROUGH TESTS.
SELF VENTILATING,
DURABLE, ATTRACTIVE,
WEATHER AND RAIN
PROOF CONSTRUCTION.

*FASTENS AND OPERATES
FROM THE BOTTOM ~
CAN BE WORKED FROM THE
GROUND. ARMS LENGTH
ABOVE THE HEAD ~*

\$1.00 EACH 2 FOR \$1.75 6 FOR \$5.00
POSTAGE PREPAID

H. P. IJAMS
R. D. 9. KNOXVILLE, TENN.

Bean's Rubber-footed HIKING BOOTS AND SHOES

Are Light and Will Keep Your
Feet Dry



FREE CATALOG Ready Mar. 1
*Fully illustrated showing special
footwear, and clothing for hikers,
fishermen and campers.*

L. L. BEAN, Inc.
171 Main Street Freeport, Maine

DURY'S

Are Headquarters for

FIELD GLASSES

STEREO PRISM BINOCULARS

GRAFLEX CAMERAS

KODAKS

CINE KODAKS

Bell & Howell

MOTION PICTURE EQUIPMENT

ARTISTS' SUPPLIES

DRAWING MATERIALS

LANTERN SLIDES MADE TO ORDER

EXPERT DEVELOPING, PRINTING,

ENLARGING

GEO. C. DURY CO.

420 Union Street

Nashville, Tenn.