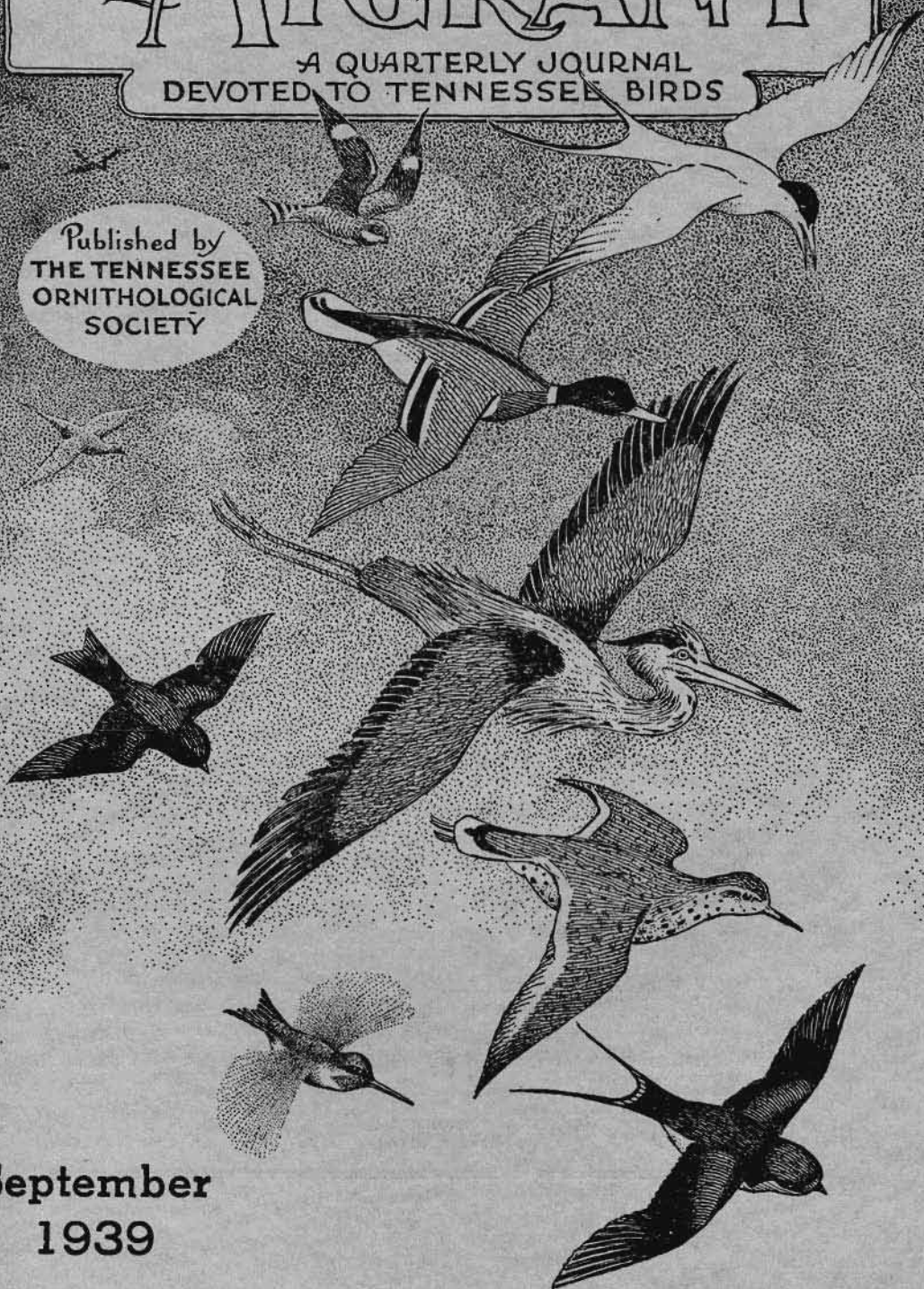


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A QUARTERLY JOURNAL
DEVOTED TO TENNESSEE BIRDS

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CANOEING FOR BIRDS ALONG RED RIVER

BY ALBERT F. GANIER

To be afield in mid-autumn in Middle Tennessee is an event to be looked forward to and an experience to be remembered. Particularly is this true along the streams of the Highland Rim where more than elsewhere the leaves take on in the waning year those rainbow hues that make them a riot of color. The streams run low in crystal clear water and the falling leaves of many colors dot their surface and lazily float along. Grape vines drape the bending trees and hanging masses of their purple fruit entice the transient thrushes to tarry on their southbound journey. The blue haze of woods-smoke mellows the autumn sun and make it not unwelcome to temper the chilling air of Indian Summer. To the nature lover there comes a yearning to leisurely and lazily tramp the woods and fields at this time, to watch the birds, and to note how they add life and zest to the scene at Nature's harvest time.

The third of October, 1936, found five of us on the bank of Red River, in Montgomery County near the pioneer settlement of Port Royal. In the water were two trim canoes with their prows pointed toward Clarksville, 22 miles downstream. The canoes had been brought on a truck, launched, and in them placed our needs for a glorious and leisurely two-day trip to this little river's mouth on the Cumberland. The day was clear and we were in high spirits over the prospects of carrying out our well matured plans. Our party was composed of Dr. Charles F. Pickering, Mr. Alfred Clebsch, his two sons, Alfred, Jr. and William, and the writer. After a bit of wading about in the clear shallow water and after taking photos of the boats and party under the old covered bridge overhead, we were soon gliding downstream to the tune of dipping paddles.

The Red is perhaps the most beautiful of Tennessee little rivers. Its course is margined with stately sycamores and other forest trees while every now and then great limestone cliffs rise high above the water. There are no roads close by, those nearest paralleling it a half mile or more away. It is therefore well off the beaten path and few there are who visit its banks except the farmers along the way who come with fishing pole and can of bait.

As we rounded a turn, there was a splashing in the water ahead as a flock of Wood Ducks arose and flew on down the stream. Yes, here, we

realized, was an ideal stream for the breeding of these birds, now rare over most of the country. Eight flocks were thus encountered on our two day journey, more we believe than could be found on any similar stream in the State. The flocks ran from two to twelve, averaging about seven. Further on, we came upon a lone Pied-billed Grebe which dived on ahead until it came to a shallow shoal where it mysteriously disappeared.

Some of the shoals were too shallow for our loaded canoes, in which case we stepped out and led the boats over the gravel bottom to deep water again. At times we beached the boats and explored the willows on the bars or the woods and ragwood patches on the banks. Among our finds here were two of the elusive little Lincoln's Sparrows, one of which was secured with a small collecting gun. The Yellow-bellied Sapsuckers had arrived from the north and a total of six were listed. We found warblers chiefly in the ragweeds. Among them were the Canada, Tennessee, Redstart, Magnolia, Chestnut-sided, Black-throated Green, Black and White, and the Oven-bird. We scanned the shores rather carefully for Water-thrushes and thought it unusual that not a single bird of this species was listed on the trip. They evidently go southward before this date.

At three points on our journey, a noisy squawk and flapping of wings ahead announced that a Great Blue Heron had been startled at our approach. But not a single Green Heron was to be seen although doubtless many of them breed here in summer. Neither were Sandpipers—the Spotted and the Solitary—to be found; to record one of the latter we had to visit a pond in a nearby pasture.

As the sun dipped lower we speeded up to make our half-way camping ground, where our truck had left some blankets, utensils and a bale of straw for us. There we drove our canoes up on the gravel bar, broke up a pile of dead sycamore limbs and soon had a rousing fire going while the cooking utensils were made ready. Presently everybody was frying, toasting, or boiling their particular assignment. Supper over and with not much light left, we climbed up on a little island behind us and prepared to spend the night there. Our roof was to be the starry skies above and our bed the bale of straw distributed on the ground between four logs dragged into place. There were blankets aplenty, thanks to the well made plans of my fellow voyagers, and sleeping five in a bed proved to be no discomfort in a bed made twelve feet wide.

As we sat and chatted before our camp fire we listened for nocturnal sounds and heard both the Great Horned and Barred Owls as well as a belated Nighthawk. The boys were mimicking the Barred Owl when suddenly a ghostly little apparition wafted itself into the firelight and perched on a limb just ten feet over our heads. It was a little red Screech Owl which seemed to enjoy the warmth of the fire as it half closed its eyes and sat, paying no attention to us at all. We addressed considerable conversation to our visitor, called him uncomplimentary names, accused him of murdering his feathered kin, yelled at him, and thru it all he ignored us completely.

A good night's rest we voted it as we arose with the sun next morning. Soon bacon was frying, coffee boiling and a stack of flap-jacks made ready for five keen appetites. Early morning was glorious, the air cool, and the birds and squirrels active in search of food. As we drifted along we noted how occasionally the limbs of the big sycamores, growing on opposite banks, would meet at midstream. For these we coined the name 'squirrel bridges'. Sure enough, before the day was over, we had the pleasure of seeing a squirrel using one of the 'bridges', far above our heads.

Kingfishers were seen on an average of one for each mile. When we would first come upon one he would fly several hundred feet ahead and take a new perch. This would be repeated for half a mile or so, then suddenly he would decide to 'run the gauntlet' by flying swiftly by us, sometimes even thru the trees, to take up his former stand. A Winter Wren in a pile of drift was of more than passing interest, in view of the early date. Of hawks, we listed the Cooper's (2), the Sparrow (2), the Red-tailed (1) and the Red-shouldered (4). One of the last mentioned hawks was seen to fly to the water's edge ahead of us and to wade along in the shallow water, probably searching for crawfish.

Pileated Woodpeckers were observed at sixteen points during the two days and conditions here were ideal for them. Plenty of big trees all along with occasional extensive woodlands and but few humans, probably indicate that these big woodpeckers are as common here now as in pioneer times. The Red-bellied Woodpeckers were busy as usual at this season, storing up beech nuts and acorns and giving their cheerful rattling call as they worked. The Downy, Hairy and Red-headed Woodpeckers were also listed. At one point, we saw a large dark bird perched ahead on a sycamore limb above the stream. As we approached we saw that it was a Turkey Vulture and its black head identified it as a young one. It kept its perch as we passed underneath; not yet having learned to fear man.

The leisurely pleasure of the day was not to go unbroken by a disconcerting incident. As one of our canoes was 'shooting a rapids', it was swept under a low limb and turned over with all hands, three, including the writer. We soon rescued the canoe and its equipment, all wet except my camera which I had held aloft as I went under. The air being too chilly to remain in wet clothes, we festooned them about a good fire and after an hour's delay and the endurance of gibes from the dry ones, we were again arrayed and on our way.

Clarksville was reached at dusk by paddling a mile up the Cumberland from the mouth of the Red River and thus ended a most interesting and enjoyable trip. Our list of birds included 60 species, which was considered good in view of the date and the fact that we were on the water most of the time. The following year we repeated the trip, but a week earlier, i.e., Sept. 25 and 26, 1937, and again our card showed 60 species. One Water-thrush was seen on this trip and one Green Heron, neither species having been recorded on the first occasion.

NASHVILLE, TENN., September, 1939.

NOTES ON BIRDS OF MISSISSIPPI

By M. G. VAIDEN

During the past thirty years the writer has had opportunity to study bird-life extensively in Mississippi, and for the past twenty years his study has been done principally in the Yazoo-Mississippi Delta of the state. The birds which I am recording in an annotated list are from the Delta, principally Bolivar County unless otherwise noted.

This section known as the Delta is an area with the Mississippi River as its west boundary, and high hills as its east boundary, running from the Tennessee line to Vicksburg, Mississippi, a distance of approximately 175 miles in length and sixty miles at its widest point. The area formed by the conjunction of the hills with the river at its northern and southern extremities is similar in shape to an ovate pyraform. It is plentifully covered with lakes, rivers, bayous, creeks, sloughs, swalls, brakes and potholes. There are thousands of acres of heavily wooded land. The soil is "madeland" from hundreds of overflows previous to the construction of the great levee system following some three hundred miles of meandering river. At no place is the area over two hundred feet above sea level.

The Arkansas and White rivers flow into the Mississippi near Rosedale, five miles below and three miles above town, respectively, forming a natural bird migration route from the north and west, now the greatest route known to this continent.

All specimens listed in this paper have been identified for subspecies by Dr. Alexander Wetmore of the U. S. National Museum, Washington, D.C., and to whom I am greatly indebted for making this paper possible. I also wish to thank Miss Florence Bogan of Rosedale for assistance given in editing and in checking Latin phrases.

WESTERN RED-TAILED HAWK, *Buteo borealis calurus*.—A male collected December 17, 1938, proved to be a dark phase of this form. This is the first record for Mississippi.

TEXAS BOB-WHITE, *Colinus virginianus texanus*.—A male found dead February 26, 1938, shortly after being released from a shipping crate, was of this sub-species.

EASTERN SOLITARY SANDPIPER, *Tringa solitaria solitaria*.—Two specimens collected August 14 and September 18, 1938, are of this form. One specimen (August 14) was identified by Dr. Wetmore. These birds are consistent spring and autumn migrants, singly and in occasional pairs.

BAIRD'S SANDPIPER, *Pisobia bairdi*.—Singly and in groups of three, four, and six, these little sandpipers are found running along the sandbars near the edge of water; mainly on the bars of the river. A specimen collected October 14, 1937, proved to be of this species. Generally they are in separate groups, not associating with others of similar species. A group of three was mingling with a flock of Least Sandpipers on October 26, 1938, at Legion Lake, near Rosedale. Records indicate that this is the first reported collection of a specimen in Mississippi.

LEAST SANDPIPER, *Pisobia minutilla*.—Specimens taken of this species

are: March 18, a male; August 13, a female; August 17, 1938, a male. It is the most common sandpiper seen here during migration. A flock estimated at 250 was noted on April 5, 1931, at Legion Lake.

SEMIPALMATED SANDPIPER, *Ereunetes pusillus*.—This is a fairly common migrant in spring and autumn. A male was collected August 9, 1938.

WESTERN SANDPIPER, *Ereunetes mauri*.—A male collected from a flock on August 17, 1938, is the first specimen reported collected in the State. It is a very common migrant.

FLORIDA SCREECH OWL, *Otus asio floridanus*.—Specimens taken March 5, 1937, and December 12, 1938, both females, are of this form. Quoting from Dr. Wetmore's letter of February 23, 1939: "One of your Screech Owls, a female in gray phase, is somewhat intermediate toward typical *asio* but has moderately small size and is darker than the averages so that I have identified it with the other specimen as *floridanus*."

WESTERN BURROWING OWL, *Speotyto cunicularia hypugaea*.—On April 11, 1937, a female of this species was collected from the edge of a wide and deep barrow-pit just south of Moon Lake, Coahoma County. This is the first record for the state.

NORTHERN DOWNY WOODPECKER, *Dryobates pubescens medianus*.—On January 10, 1939, a male collected proved to be this form, a regular migrant from the North. However, it has not been heretofore reported from Mississippi.

FLORIDA NUTHATCH, *Sitta carolinensis atkinsi*.—Our nesting species is of this form. A specimen was collected June 8, 1938.

SOUTHERN CREEPER, *Certhia familiaris nigrescens*.—A male of this recently described form breeding in the southern Appalachian Mountains was taken January 9, 1938. As yet there are few records outside its breeding grounds, and this is the first record for Mississippi.

OHIO HOUSE WREN, *Troglodytes aedon baldwini*.—On January 16, 1938, a male of this recently described form was taken.

EASTERN WINTER WREN, *Nannus hiemalis hiemalis*.—Typical specimens of the race secured are: a female, January 9; a male, November 16; and a male, December 9, 1938.

BEWICK'S WREN, *Thryomanes bewicki bewicki*.—A female of this species was collected on February 7, 1938. This is a rare breeding bird in the state. I have found only four nests in the past thirty years.

OLIVE-BACKED THRUSH, *Hylocichla ustulata swainsoni*.—On May 7, 1937, a male was collected which proved to be this form. It is a very common migrant usually appearing April 19 to May 14.

AMERICAN PIPIT, *Anthus spinoletta rubescens*.—A series of three males were taken on January 4, January 17, and November 10, 1937. This is a very abundant winter resident from October 18 to April 20, in suitable localities, principally feeding on the levee.

EASTERN WARBLING VIREO, *Vireo gilvus gilvus*.—A male specimen collected May 27, 1937, near its nest proved to be of the Eastern race. It is a fairly common nesting species.

GRINNELL'S WATER-THRUSH, *Seiurus noveboracensis notabilis*.—A male taken May 14, 1937, and two males on September 1, 1938, proved to be of this form. Specimens were taken from large migrating flocks. This is the first reported record in the state.

ALABAMA TOWHEE, *Pipilo erythrophthalmus canaster*.—Two males in moulting plumage were secured on August 20, 1938, at their nesting grounds near here. This collection establishes the breeding form as *canaster* for this section of the state.

EASTERN SAVANNAH SPARROW, *Passerculus sandwichensis savanna*.—Of a series of seven skins, four were of the Eastern form, while three were the recently described Churchill Savannah Sparrow, *oblitus*.

CHURCHILL SAVANNAH SPARROW, *Passerculus sandwichensis oblitus*.—See comments on preceding form. These are the first specimens taken in the state.

LECONTE'S SPARROW, *Passerherbulus caudacutus*.—On February 4, 1938, a male of this species was collected south of Rosedale. It was shot awing after being flushed the third time. This is the second record for Mississippi, the first record having been taken by Ben B. Coffey near Lake View on February 20, 1937. (*The Migrant*, p. 15, March, 1937).

EASTERN VESPER SPARROW, *Poocetes gramineus gramineus*.—This is a fairly rare migrant in autumn, but common in spring migration, usually associating with Savannah Sparrows along the slopes of the levee. A male obtained March 18, 1937, was the Eastern form.

EASTERN TREE SPARROW, *Spizella arborea arborea*.—This is a very rare migrant here. A male was collected April 1, 1938. I find no record of a specimen taken heretofore in the state.

EASTERN FIELD SPARROW, *Spizella pusilla pusilla*.—On November 30, 1938, a male was secured. This is our nesting form.

WESTERN FIELD SPARROW, *Spizella pusilla arenacea*.—A migrant, a male, taken February 27, 1937, is, I believe, the first recorded for the state.

GAMBEL'S SPARROW, *Zonotrichia leucophrys gambeli*.—A male specimen taken from a small flock of nine on March 2, 1937, was of this western form.

EASTERN FOX SPARROW, *Passerella iliaca iliaca*.—Birds taken January 26, and October 31, 1937, both males, were of the typical race. This is a common winter resident that has not been reported from the state before this time.

LINCOLN'S SPARROW, *Melospiza lincolni lincolni*.—During the winter of 1937-38, this species was a most common resident at Legion Lake, feeding in sagrain planted for winter pasture. Specimens, both females, were secured on December 4, and February 7, 1937. Groups of twenty to thirty-five were seen almost daily near this lake at that time.

SWAMP SPARROW, *Melospiza georgiana*.—Three specimens were collected: February 28, a male; November 7, a female; December 29, 1937, a male. It is one of our most common winter residents, being exceeded in numbers by only the White-throated Sparrow, *Zonotrichia albicollis*, and the Mississippi Song Sparrow, *Melospiza melodia beata*.

ROSEDALE, MISS., September, 1939.

BIRD BANDING BREVITIES—NO. 14

BY AMELIA R. LASKEY

Slate-colored Junco H32742, banded Feb., 1933, was a return-5 at the home station last December, being at that time over six years old. Although he has been retaken each winter since 1933, he has never re-entered a banding trap as a repeat during the season.—A female **Carolina Wren**, at least five years old, has a most interesting record. She was banded Nov. 19, 1934 and apparently has spent the intervening years in the environment of the station as she has been retaken at intervals since. She usually nests on a shelf in the garage or in the window box outside the living room windows among English ivy vines. This summer she had three successful broods of young; the first group of four left the nest in the garage (built in a dust mop on a shelf) on Apr. 20; the next brood of two left the window box nest in early June; for the third nesting, the nest used in April was reoccupied, and from it three young fledged Aug. 12.—**Field Sparrows** lead in numbers banded at the home station. In eight years of trapping more than 2200 have been banded. The tabulated records of retrapped birds, amounting to many thousands, show a definite migration of individuals, apparently dividing this 'permanent resident' species into summer and winter residents, as well as spring and fall migrants passing through on their way to wintering or breeding grounds. This past year has yielded my first foreign recovery record and the first link in substantiation of my migration theory for Tennessee. The Biological Survey reported that Field Sparrow 36-92075 was found dead in a suburb of Cincinnati, Ohio on Aug. 20, 1938. It had been banded Nov. 2, 1936.—Other especially interesting recovery reports received are those of two **Chimney Swifts** banded in September, 1938. Both were trapped and released by bird banders in May of this year, one in Maryland and one in Texas. Although much time has been spent this season searching for Swift roosts, only a few have been located in Nashville during August and these were very small, the largest containing only 400 birds. Last year the workers had banded several flocks of 2,000 to 4,000 each between August 23rd and September 1st. This year we trapped on August 14, 30, and 31, with a total banded of 724 birds and obtained 131 recoveries and returns in the three flocks. Most of the latter were birds banded here last year. One wonders if the peak of the migration will come later or if the breeding season has been less successful.—Through the efforts of William Simpson who is an excellent climber, a number of species have been banded from nests located in almost inaccessible places. These included 4 Green Herons, 2 Red-tailed Hawks, 4 Barn Owls, 2 Great Horned Owls, and 10 Crows. The Biological Survey is urging the banding of nestling Crows as well as Hawks and Owls to obtain more data on their movements.—Arthur McMurray was successful in banding 5 young **Nighthawks** (representing 4 broods) on gravel-surfaced roofs in the business section of town during June and July. One of the banded fledglings was found 18 days later in North Nashville, near the Cumberland River (3 miles from its home), with a broken wing and emaciated from lack of food. Indirectly the band doubtless saved its

life, for through the efforts of several people it was soon delivered to my home. It is now in excellent physical condition, molting into adult plumage, making short flights, and probably can be released in time to make its autumn migration journey.—Two immature Golden Eagles, possibly of the same brood, were taken during the past winter. One was captured near Gallatin and the other was slightly wounded by gunshot near Hartsville. Both were rescued by the State Conservation Department and sent to Great Smoky Mountains National Park for releasing. Mr. Stupka, Park Naturalist, has cooperated well in caring for these birds.—The most active of my substations is a newly established feeding station in Belmont Heights operated by Mrs. Miller Dismukes. In a small yard in this closely built section, she captured and banded 159 birds of 18 species in eight months.
NASHVILLE, TENN., Sept. 4, 1939.

AN ELECTRIC BIRD GAME

BY W. M. JOHNSON

Many of us have a speaking acquaintance with several birds and we always try to learn about each new one that visits our neighborhood and also more about the birds that are with us most of the time. We also realize that many people do not know birds and thus try to interest others. I have been fortunate, as from earliest remembrance some one of the family has been interested in nature study and more particularly in birds. The various birds were pointed out and we got so that we recognized birds just as we would recognize any of the neighbors. This interest has stayed with me and for several years I have been putting in more time trying to get additional information about birds.

After several discussions as to the best way to help create more interest among younger people, our Knoxville group decided to have a mounted collection of some of the more common birds. Twenty were mounted and placed in a glass fronted case which is lighted with bulbs. Several of us have taken the case to the schools here in Knoxville and Knox County. The children have been interested and the only trouble has been that we did not have enough birds to show. Questions were asked about many of the birds we did not have. Some months ago an article in *Bird-Lore* (July-Aug., 1938, pp. 262-268) was brought to my attention and it was suggested that I build an electric board that could be used for displaying bird cards or any one of many other kinds of cards.

This electric board is so constructed that a lamp will shine or a buzzer will sound when you touch the holder and the name of the bird. To prevent a simple memorizing of the birds by their place on the board the cards may be shifted in different groups. Three sets of the Audubon bird cards (post-card size) were purchased: 'Winter Birds', 'Spring Birds', and 'Summer Birds'. This lot of 150 cards show most of the birds that we have and others that we have not had the pleasure of seeing here at Knoxville. The board as constructed, accommodates 33 cards at a time and several different lists have been arranged. These lists are arranged to show birds such as ground feeders, birds of the air, birds to be found on the larger branches and trunks

of trees, and other possible combinations. Each holder is numbered on the board and the cards carry a number on the back to show where it should be placed for each different series. This helps get the cards in proper order without delay. The school children enjoy using the board and I feel certain that they learn by working with it.

In building the board, two pieces of plywood are used. These, in my board are thirty inches square and are of one quarter inch material. Heavy block tin is bent to hold the cards. These holders are attached to one board with brass screws long enough to go a quarter of an inch thru the board. Five rows of seven spaces are laid out on the board. Two of the spaces were not used, as the list of the birds is attached instead of the bird cards. This list is typewritten and a contact screw is put beside it where each name comes. A piece of bell wire is run on the back of the board from the card holder to the proper name screw, being soldered at both ends. The names are not in the same order as the pictures but are mixed so that you have to know the name of the bird if you want the light to operate. Two wires are attached to a metal flashlight, partially taken apart, so that if the circuit is completed the light will shine. The wiring on the back is protected by fastening on the second piece of plywood.

BY BEN B. COFFEY, JR.

A similar game was made at Memphis by Scout Neal Wyatt except that a door bell was mounted on the back, two No. 6 dry cells being used. Only one piece of plywood was used. No soldering was necessary as small brass bolts were used for contact points and the bell wire hooked under the nut. We would not advise getting coated bell wire as it has to be well scraped in order to make a good contact. The more common birds were represented by Audubon cards taken from the three \$1.00 sets. Since the cards were glued on, these sets were broken. A cheaper method was sought for other boards and the better pictures were cut from the 'Red, Blue, and Green Books of Birds of America' sold at Woolworth's for ten cents each. The smaller size of these pictures allowed more to be used. They were pasted on sheets of cardboard which had holes punched where contact points were located. The names were cut from under the picture and pasted in the column of names in one corner. The more common birds were placed on one sheet and the lesser known and less common species on a second sheet. The permanent residents, etc., on each sheet were grouped and a note above the names explained the grouping. After using sheet No. 1, then No. 2 could be substituted, using thumb tacks to hold the sheet on the board. Other sheets of birds, trees and the like could be made. Mr. Johnson's method of changing the groups, as described previously, seems to be a better plan. Two boards with identical wiring hook-ups were made by Scout Emmett Ellis and two sets of sheets made for them. These were placed in the Shelby County Schools for their use last fall a year ago. The original board was a big attraction at the Junior Garden Club conservation booth at the Mid-South Fair, September, 1938, and again at the Memphis City Schools bird study exhibit at the Fair in 1939. The cost of materials, exclusive of pictures, was about \$1.50 for each board. One of our county schools made one, however, for a cash outlay of 15 cents.

SUMMER BIRDS OF TISHOMINGO STATE PARK, MISSISSIPPI

By BEN B. COFFEY, JR.

Tishomingo State Park is located in the northeast corner of Mississippi in that topographical region designated by E. N. Lowe as the Tennessee River Hills. The entire state is located in the Austroriparian life zone but this subdivision more closely approaches the Carolinian life zone (in which most of Tennessee is located) than any other part of the state. The park itself is probably the most beautiful and rugged in the state and the most unique because of the marked contrast with the remainder of a state whose elevation varies only from sea level to 800 feet above it, and where exposed rock formations are rarely seen. Bear Creek comes down from the Alabama hills and is forced into a narrow valley with sandstone escarpments on one or both sides and large blocks of the stone tumbled about on the slopes. The park incorporates this rugged and wilder portion which is heavily wooded, while the wider and older valleys above and below are well cultivated. The elevation ranges from 460 feet to 600 or more feet above sea level.

The park as constituted at present consists of approximately 2,000 acres with about 93% wooded. The original growth was reported to be shortleaf pine. Between 1909 and 1914 large saw mills operated at Golden and at Iuka and most of the pine was cut off. However, loblolly and scrub pines are in most locations here as common as the oaks and hickories, the three groups forming the predominant forest types. On the higher ground on the west side the undergrowth is not as luxuriant as on the valley slope proper. Although the species of trees and shrubs vary considerably I was impressed by the abundance of small black gums on this slope. The oakleaf hydrangea was conspicuous at the time of my visit and the abundance of *Azalea nudiflorum* thruout the park will necessitate a return trip earlier in the spring in order to see such a large mass in bloom. Along Bear Creek cypress trees were noted.

The open areas consist of a large, gently sloping field of 35 acres across Bear Creek from and northwest of the Lodge, a 10-acre meadow below the Lodge with temporary standing water due to heavy rains, and smaller clearings aggregating about 55 acres. Clearing for almost six miles of gravelled road accounts for about 35 acres. Improvements consist of a C.C.C. Camp established in 1935, a 'Lodge' with small cleared area of approach, two cabin areas and a picnic area, all completed in 1939, and the road built in 1938 and 1939. Most of the trees remain but the areas have been cleared of undergrowth. The only influence of these on bird life to date seems to have been the appearance of the Indigo Bunting at the larger road clearings and indications of a Phoebe's nest under a wooden bridge over Maudlin's Creek. Future plans such as the Natchez Trace parkway across the north side, an artificial lake, or a waterway dam on Bear Creek should influence the bird life here.

Maudlin's Creek (Gardner Branch) is the only watercourse of consequence besides Bear Creek. It is a small branch entering the park near its northwest entrance and crossed several times by the road (thru a small wooded bottom), then it partly circles what is referred to below as the 'High

Point' before entering Bear Creek.

We visited the park in May, 1935 and 1936 (for a few hours each time) and camped with the Scouts here July 3 and 4, 1938. The list, however, is based almost entirely on the seven-day period of June 12-19, 1939. It was then decided that with a little extra effort a census could be made of the birds present and would give a more exact idea of their relative abundance. By using maps and compass and working a portion at a time we covered all of the park except the southeastern (due to threatening weather and no convenient bridges over the creek), or approximately 1,750 acres of the 2,000. In securing full coverage we depended greatly, of course, on hearing the birds, a method I consider 95% reliable at that season. During the census I recorded only three instances where a bird was seen but not heard at the time. Less than 10% were seen before they gave a call-note or song. The count as given is in terms of units,—a singing male, a pair, or a family group at one location counting equally as one. Care was taken not to duplicate. However, the density of birds recorded (44 units per 100 acres) is so low compared to more thorough censuses of much smaller areas as published in *Bird-Lore* and elsewhere that the present count can only be considered in a relative sense.

The writer recorded 56 species in the park during the week's stay. If we subtract 5 species seen passing over the park and add 2 species adequately vouched for by others we have a total of 53 summer residents for the park. If more open and varied topography adjacent is ever added to the park we can expect a list of possibly 60 species.

I am indebted to Park Supt. Frank Berry, Messrs. Cassell and Bunten and others of the staff for most courteous cooperation and to Mr. Jim Gray and 'the boys' at the Lodge. The published "Geologic History" of the park by Morse and "Botany" by Brown contributed to a fuller appreciation of the park.

TURKEY VULTURE.—The maximum number seen in the air at one time was nine on June 13. Two or more were recorded every day but the 15th. Evidences of a nest of the past season were noted under a ledge in the escarpment across Bear Creek and southeast of 'Bearded Falls'. An afternoon roost was noted across the creek from this point.

BLACK VULTURE.—One was seen the afternoon of June 13, at the south end of the park.

EASTERN RED-TAILED HAWK.—A pair of adult birds of this species were seen June 14 over the road, south of the 'High Point'. Presumably the same pair were seen on the 16th high over the open fields across Bear Creek.

EASTERN BOB-WHITE.—Not common. The unit count was eight including two pair (as 2) seen in the vicinity of the cabin. As many more were heard outside the park.

SPOTTED SANDPIPER.—If this species nests in Mississippi, along Bear Creek in the park would be a logical place to find it. Due to heavy rains the creek was out of its banks during the entire week in 1939. The only record is of a pair seen May 10, 1936, seemingly at home here. However, this species is a late arrival on its northern nesting grounds and these two may have been transients.

EASTERN MOURNING DOVE.—Recorded seven times and from the 12th to the 15th.

YELLOW-BILLED CUCKOO.—Recorded eleven times and in the same period as above.

FLORIDA BARRED OWL.—An immature bird was seen June 17 in a heavily wooded spot just off the road and southwest of the 'High Point'. None were heard calling during my stay but were reported by Messrs. Berry and Cassell as being present.

CHUCK-WILL'S-WIDOW.—May have been more common than recorded by listening for the call-notes each evening. Four were heard along the creek in the southern part of the park, three in the cabin area, three at the north end and three in between. The birds started calling about 7:10 P.M. and ceased about 7:30 P.M., rarely calling after that. This necessitated separate trips to each part at dusk. Altogether thirteen were heard calling.

FLORIDA NIGHTHAWK.—A pair were seen over the cabin area the evening of June 13 and it is probable that they were nesting in the large field across the creek. Another pair was seen apparently nesting in a field near the road in the north end as one bird was diving repeatedly over a small bare field there on June 17. It was also seen June 15.

CHIMNEY SWIFT.—Four were seen. Several chimneys are available in the park but we did not investigate them or other possible nesting sites.

RUBY-THROATED HUMMINGBIRD.—There are six scattered records for this species.

SOUTHERN FLICKER.—Rare. Two recorded in the cabin area and one northeast of same and across the river.

SOUTHERN PILEATED WOODPECKER.—One was heard on most trips south of the picnic area. On the 15th a very tame male was noted on the far side of the 'High Point'. What was possibly a third individual was heard in the wooded section northwest of camp.

RED-BELLIED WOODPECKER.—Four records—one near the 'High Point' and three southward from the picnic grounds, two being on the east side of Bear Creek.

RED-HEADED WOODPECKER.—One was heard June 13 in a heavily wooded hollow in the southwest corner.

SOUTHERN DOWNY WOODPECKER.—Twelve scattered records. A cavity full of noisy young was found June 13 about 15 feet up in a broken-off tree-trunk in the rear of the C.C.C. camp; the young were still there four days later. Only one adult was seen at this location.

NORTHERN CRESTED FLYCATCHER.—Nineteen records thruout the park; can be said to be common along the wooded slopes down to Bear Creek. Records include several noisy groups, each listed as one family unit.

PHOEBE.—This is a very rare summer resident in Mississippi. Allison (1907) recorded a nest with young in a 'silica' tunnel, April 27, 1904, near Eastport, about 20 miles north of the park. We have watched especially for this species in the northern part of the state and in spring have made some special trips to suitable localities northwest and northeast of Iuka, but without success. Because of lack of time I failed to find Phoebes on my first visits to the park but the first few minutes here were sufficient to convince me that the Phoebe would be found here if it nested in the state. At the

Scout Jamboree in Washington, 1937, Scout leaders of Tupelo and Corinth, told me of finding a nest here that May, which was obviously a Phoebe's nest. On July 3, 1938, I was shown the location and an old nest of the year was found, also the remains of an older one. No birds were seen.

During my week's stay this year I made a special search for nests of the Phoebe. The species evidently nests early and then leaves the vicinity. Returning to the 1938 location which is on the escarpment just below the new picnic pavilion, I found an old nest, evidently of the season, and traces of others there and nearby. The next afternoon I heard and saw an adult bird there. No other Phoebes were seen until June 16, when I found a pair and a nest containing 2 eggs and 2 young newly hatched. The nest was located above the north (east) side of Bear Creek, back under 'Bearded Falls' a ten-foot drop with strands of moss carrying the water from a branchlet above. An older nest of the season was 20 feet east and also a trace of a third nest. Trace of another nest was found 20 yards southeast. In all about 75% of the escarpment on the west side of the creek and 40% on the east side was searched for Phoebe nests and traces of same. Three nesting localities were found on the west side and eight on the east side. Four, and probably a fifth, had nests of the season. Traces of from one to three older nests was found at all locations.

This is the only species listed for the park and this area which would typify a difference between the Tennessee Valley Hills and other topographical subdivisions of the state.

ACADIAN FLYCATCHER.—Fairly common, especially in the woods along Bear Creek. Of the 21 records a few were for the dryer upland woods, situations similar to where this species is usually found in the Iuka area, twenty miles northward.

EASTERN WOOD PEWEE.—Not common.—15 records and all of single individuals.

FLORIDA BLUE JAY.—Not common,—20 records. Five records at the northern end embraced 10 individuals.

SOUTHERN CROW.—Three or more crows were heard and seen across the river on June 13, from the bluff south of the picnic area.

CAROLINA CHICKADEE.—Fairly common. Of 19 records at least 3 were of family groups. Fairly well distributed except across the river.

TUFTED TITMOUSE.—More common than the preceding species, listing it thruout the park for a total of 27 occasions.

WHITE-BREASTED NUTHATCH.—There were several records in the picnic-cabin area, probably of the same individual, and one record on June 14 in the northwest section.

CAROLINA WREN.—Fairly common; 22 records.

WOOD THRUSH.—Not nearly as common as might be expected in a place apparently so suitable for this species which is a very common one in the Mid-South. The 24 records were nearly all of singing birds.

EASTERN BLUEBIRD.—Three pairs were noted as follows: near the Lodge, at the C.C.C. Camp, and across the river in the large field with a few scattered pines. An immature bird was seen on the western edge on June 14.

BLUE-GRAY GNATCATCHER.—Common and well-distributed except across Bear Creek. Recorded on 32 occasions.

WHITE-EYED VIREO.—Common, especially along Bear Creek and Maudlin's Creek (Gardner Branch). Recorded 55 times.

YELLOW-THROATED VIREO.—Common as evidenced by 30 records which were well distributed.

RED-EYED VIREO.—The most abundant breeding species in the park and as usual, a persistent singer. Rarely was I out of hearing of one of these vireos. 80 records.

BLACK AND WHITE WARBLER.—Fairly common in the immediate valley and slope above Bear Creek and a few records in the north and northwest sections. 17 records include 5 groups consisting of adults feeding immature birds out of the nest.

NORTHERN PARULA WARBLER.—Two singers were separately heard and seen June 17 in the tall trees near the site of the 1938 Boy Scout camp where we recorded the species also July 3, 1938.

SYCAMORE WARBLER.—Fairly common in the immediate valley while several were recorded singing and immature ones seen in an upland oak-hickory-pine woods about two-thirds of a mile from Bear Creek. The individuals near the picnic area were conspicuous in song and there I also was able to see the white lores of this subspecies. There were 15 records.

NORTHERN PINE WARBLER.—Uncommon. The ten records were well scattered, chiefly along the ridge from the cabin area to the camp and northwest of the latter in the wooded area mentioned under the preceding species. None were listed from the north side of the park.

NORTHERN PRAIRIE WARBLER.—The Prairie's penetrating song was heard often and in almost all sections of this predominantly wooded territory. It was not, however, a creek side species. Records total 27.

LOUISIANA WATER-THRUSH.—Uncommon. From the new footbridge south along the west side of Bear Creek the Water-thrush was recorded at three locations. Three records for the east side trips may possibly be of the same individuals. Due to the frequent and heavy rains in spring and early summer this species may not have successfully nested.

KENTUCKY WARBLER.—Very common and well distributed although partial to the valley slopes with their heavy shrub growth. 64 records would place this species as possibly the next in abundance to the Red-eyed Vireo. Six records include groups of adults and immature birds.

MARYLAND YELLOW-THROAT.—Uncommon as thickets bordering open fields were rarely encountered in the park proper. The five records were all on the north side.

YELLOW-BREASTED CHAT.—Fairly common as evidenced by 22 records.

HOODED WARBLER.—Six records on the heavily wooded slope,—one at the south end, two below the cabin area, and three from the camp pump house to the 'High Point'.

AMERICAN REDSTART.—One was heard singing on June 15, along Bear Creek near the 'High Point'. This was the only park record altho three Redstarts were recorded the day previously near the highway bridge downstream and $1\frac{1}{2}$ miles east northeast.

ENGLISH SPARROW.—One was seen June 18 at a two-cell martin house (evidently taken over by the sparrows) near a farm house back from the

top of the bluff and across the river from the Lodge. The location is in a tract acquired since my visit but gone over at the time. No sparrows have been recorded on the C.C.C. Camp premises.

SUMMER Tanager.—Fairly common, less so removed from Bear Creek. 24 records.

EASTERN CARDINAL.—Only fairly common; 24 well-distributed records.

INDIGO BUNTING.—At small clearings, principally along the road which has been constructed within the past two years, this bunting was usually found. Because of its localized distribution I did not expect the records to be as high as 25 until I actually totaled them.

EASTERN GOLDFINCH.—One recorded overhead in the cabin area June 12, and two on the west side June 14, where we also saw three resting in nearby pines. On June 16, two groups of six and four, respectively, were noted at the edges of the large open field across Bear Creek and these ten probably constitute the Goldfinch population of the park at this time of year.

BACHMAN'S SPARROW.—There were 15 records of this beautiful singer, well distributed, and usually along the edges of mixed stands of pines.

EASTERN CHIPPING SPARROW.—Common and in type localities frequented by the Indigo Bunting and also those by the Bachman's Sparrow. 29 records.

EASTERN FIELD SPARROW.—Only fairly common in the park itself (21 records) but common in the more open country outside park boundaries. In only one case did I definitely see adults feeding immature birds.

The following two species are listed for the park on what we consider reliable information.

A.M. WOODCOCK.—Lieut. S. N. Netherly reported that in early May he saw an adult Woodcock lead young ones across the road in the northwest section where Mauldin's Creek (Gardner Branch) crosses and recrosses the road. This species is a very rare summer resident of northeast Mississippi.

SOUTHERN SCREECH OWL.—Both this owl and the Barred Owl are reported as present in the park by Messrs. Berry and Cassell but I failed to see or hear this species during my stay.

The following species were recorded in the park, chiefly passing overhead and are not to be considered as true residents of the park proper.

GREAT BLUE HERON.—One was heard and seen the evening of June 12 as it passed westward, overhead near the water tank (cabin area).

KILLDEER.—One was heard and seen overhead at the same area but on the evening of June 13. I failed to hear or see this species in the large cultivated fields (outside the park) stretching westward from the C.C.C. camp.

PURPLE MARTIN.—A couple of females were seen June 14 just outside the park boundary at nesting cans suspended from a pole in a back lot. None were seen over the park. Until the present year this species was common in this section, many gourds and cans being provided for it. Two martins were seen overhead on July 4, 1938.

EASTERN RED-WING.—A flock of eight or ten of these blackbirds passed overhead the evening of June 12. This species is uncommon in eastern Mississippi.

ORCHARD ORIOLE.—Two of this species were heard calling and then seen, in the woods southwest of camp on June 17. Although in the park, their presence was regarded as accidental. Another was recorded outside near

the northwest entrance and the species is fairly common in more open country.

Notes on additional species are also given herewith. Bewick's Wren—one in yard on highway No. 25, corner of the old entrance to the park. Eastern Mockingbird—one just outside the park, west side and others along the highway. Catbird and Brown Thrasher—in fields outside northwest park entrance and fairly common along highway. Several Catbirds heard in the town of Tishomingo and a pair of Thrashers seen in yard at southwest edge of the park. Southern Robin—three or more in town. Starling—At each of two churches with wood shingle roofs I found a Starling at a hole in the roof at the gable eaves. At one place the bird regularly brought back food and entered the opening. Red-eyed Towhee—A circuit of the surrounding countryside was made the afternoon of June 14. At Old Mingo, three-fourths of a mile northeast of the park, I found a male Towhee in thickets along a small branch. This is a very rare species in North Mississippi in summer.

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THE SEASON

THE SEASON AT MEMPHIS:—During the past four weeks, the chief interest of Memphis bird students has centered around the muddy shores of Mud Lake, situated on the state line about nine miles south of the city. Observations have been plentiful, the writer together with Jim Vardaman making a total of sixteen trips to this shorebird haven during the month of August alone. Approximately a hundred species were reported in this period. During periods of high water Mud Lake extends into the trees and undergrowth bordering it but dries up toward late summer, becoming a mecca for herons and shorebirds. On Aug. 12, the writer recorded approximately 1,000 American Egrets, 200 Little Blue Herons, and 100 Wood Ibises congregated in this narrow stretch of water and occupying the entire lake. Shorebirds were lacking at this early date but this absence was made up entirely when a Willet alighted near us. This bird, the first collected here and the third for Tennessee (see *The Migrant*, 1936, p.67), is very gray in color and is undoubtedly of the western subspecies (*Catoptrophorus semipalmatus inornatus*). The following day Coffey and party recorded practically the same birds. Several Snowy Egrets were also seen and Wood Ibises had increased to 250. Eight Red-shouldered Hawks and two Red-taileds were seen soaring overhead. As our visits continued the water level of Mud Lake

became lower, the heron population dwindled and shorebirds became increasingly numerous. American Egrets dwindled to as low as 15 on Aug. 30, but then increased and numbered 400 on Sept. 6. Little Blues did not exceed 25 in number from Aug. 20 to 30, and increased only slightly afterwards. Only a few Wood Ibises were seen Aug. 19 to 27 and none Aug. 28 to Sept. 3; a flock of 80 appeared Sept. 6, the date of our last visit.—Pectoral Sandpipers were as usual the most abundant, 20 on Aug. 15, and from 100 on Aug. 19 to 600 on Sept. 3. Lesser Yellowlegs increased from 25 to 150 over the same period. The maximum reached by the 'peeps' were Least Sandpiper, 200, and Semipalmated Sandpiper, 150. A few Western Sandpipers were recorded from Aug. 27 to Sept. 6, at least eight being seen Sept. 3. The relatively long bills of these birds were easily distinguishable and one was collected Aug. 27. Semipalmated Plovers averaged 15 to 30 between Aug. 19 and Sept. 3.—Aside from these common species quite a few uncommon ones were recorded. Another Willet was observed on Aug. 24 feeding with a flock of Yellowlegs. When flushed he uttered his alarm in loud and penetrating notes. Six Dowitchers, rare in this locality, also were found among the numerous shorebirds. Apparently the same Willet and 10 Dowitchers were observed the following day. Since then Dowitchers have been observed on each trip and 2 collected on Aug. 27 proved to be of the Eastern subspecies. On Aug. 28, a new visitor appeared in the form of a Wilson's Phalarope. The bird was feeding among a flock of Yellowlegs and its white plumage was most conspicuous when seen among the gray forms of the Yellowlegs. The bird was difficult to approach and it was not until Aug. 30 that it was collected. This is the fifth record for this area.—Stilt Sandpipers were noted only as solitary individuals until Sept. 3, when 20 were noted among Yellowlegs. The birds seemed to prefer deeper water than the Yellowlegs and this fact usually placed them apart from the other shorebirds with only a few Yellowlegs venturing out to the greater depth. A habit of swinging its often submerged bill from side to side was often characteristic of the Stilt and produced an interesting effect. Fifteen of these birds were again observed on Sept. 6, our last visit to the lake.—Black Terns were seen on several occasions and usually with Least Terns which ranged in number from 2 to 10. Caspian Terns were recorded on Aug. 25, when 4 were seen and later on Sept. 2, when 2 were observed flying leisurely over the lake.—Swallows were present in ever-increasing numbers along the levee and on Sept. 3, Ganier and party saw nearly a thousand, the majority being Tree Swallows. A Cliff Swallow seen on Mud Lake, Sept. 2, was our only seasonal record for this species.—Blue-winged Teal put in their first appearance on Aug. 25, when a flock of over forty settled among the shorebirds on Mud Lake.—On Sept. 3, numerous warblers were observed at the lake, among them several rare ones. A Worm-eating Warbler was seen by Burdick and immediately afterwards we approached a small plainly-marked bird which proved to be an immature male Wilson's Warbler. Again on Sept. 6, we visited the same locality and found 6 Wilson's Warblers feeding with 2 Canada Warblers. Only two of the Wilson's Warblers were in adult male plumage, the others were immatures with only a trace of black on the head.—As usual, Overton Park furnished its share of records, with most of them being in the form of warblers. On Aug. 26,

Welch recorded 7 Black and White Warblers and one Canada Warbler. On the same date he also observed 3 Mississippi Kites soaring above the trees in the park. On Sept. 5, 20 Magnolia Warblers and 8 Black and White Warblers were seen there by Welch and Walker. Parula Warblers were present in numbers all thru August.—EUGENE WALLACE, Memphis.

KNOXVILLE AREA:—A flock of 25 Wood Ducks was reported to have been at a large pond near Louisville, Tenn. from Apr. 15 to 20. A check-up by Johnson on Apr. 23, showed these birds had paired off and only 2 or 3 pair were seen.—The Spring Field Day at Island Home was a success from several viewpoints and Mr. Ijams was well pleased after all reports were in. 23 nests representing 19 species were listed during the day. There was no way of determining the nests of the Purple Martin but Mr. Ijams thought that 16 pair at the three gourd-poles was a safe estimate of the number of Martins present at that time.—A Blackburnian Warbler was a late straggler at Island Home on June 5 (Reed) and the next day an unusual warbler song was investigated and proved to be that of a Parula. A pair of these birds was seen in the same group of trees on June 16 by Miss Reed and the writer. Another Parula, in song, was observed on July 8 at Lake Andrew Jackson.—On Aug. 12, Mrs. Walker and the writer found what we decided was a female Wilson's Warbler, which if correctly identified, ushers in the fall migration. The small size, the yellow cheek and beady black eye, and the complete absence of wing bars and tail markings apparently eliminates the female Hooded Warbler which is a summer resident here.—Water birds at Lake Andrew Jackson are not easily checked on because of the willow-growths that present excellent hiding places. The last spring visit to the lake was on Apr. 16, at which time the Coot and a Pintail Duck were recorded. No other visit was made to the Lake until June 17. On July 14, a wounded (or molting) male Pintail was flushed in the woods about 25 feet from a small pond, one end of which is connected with the lake by a marshy strip of ground. The bird could not fly; however it did make its way thru the rank grass very rapidly. On the next visit to the lake we failed to flush the Pintail; by chance I came upon the dead bird in a bad state of decay. A Coot was recorded on July 8 and 29.

Other water birds found were a Least Bittern on July 8 and a Pied-bill Grebe on Aug. 12. The immature Little Blue Herons arrived as usual about the first of July and have been present at intervals until the present writing, i.e. Aug. 12. Red-wings, which were plentiful on July 22, were gone from the lake one week later. About 5 of the estimated 7 adult Green Herons had left by the same time.—We undertook another summer census at the lake with trips on June 25, July 1, 8, 14, 21, 29, August 6 and 12 and recorded 48, 33, 53, 44, 21, 34, 49 and 48 species respectively, with an eight trip total of 70 species. The area and types of territory are the same as listed in *The Migrant* for September, 1938. The ten most common species for the lake for this summer were: Starling, Song Sparrow, Purple Grackle, Carolina Chickadee, Crow, Purple Martin, Red-wing, Field Sparrow, Bluebird, and Mourning Dove.—Late nest notes are seldom mentioned in this type of report but on Aug. 6, the writer found young birds of three species in the yard around the house. They were Field Sparrow, Robin and Mockingbird.—The mention of young birds brings back the memories of an incident at

our feeding shelf about May 20. We had just put out a supply of bread crumbs in order to take advantage of the feeding activity while we ourselves were at breakfast. The first flurry of activity was over, all the larger crumbs were gone when a Song Sparrow alighted and began to eat. It had been busy pecking at the crumbs for about a minute when another Song Sparrow perched on the opposite edge of the board some 18 inches away. Immediately the first bird quit eating and hopped across the board to the late arrival where it sat with its mouth gaping awaiting to be fed. And it continued to sit until the mother bird (I presume) gathered some crumbs from the board and fed it. Then they both flew back to the brier patch.—
W. M. WALKER, JR., Knoxville.

JOHNSON CITY REGION:—Two items worthy of notice have interested us during this season. The first was the observation of the Hermit Thrush in song on April 16. The birds were migrating and perhaps mating as they traveled. This is the first record that we have of the song of this species. The Wood Thrush, the Gray-cheeked Thrush and the Veery all sing for us but the Hermit Thrush and Olive-backed Thrushes sing not at all in our vicinity.—The second incident was the observation of a pair of Least Bitterns at Cox's Lake on Aug. 27. These very rare birds were migrating and stopped over enroute, long enough to give us a very interesting and spectacular observation. They should be classed as a very rare migrant in this section. This is probably due to the very limited extent of our marsh land.—
BRUCE P. TYLER AND ROBERT B. LYLE, Johnson City.

THE ROUND TABLE

REELFOOT HERONRY NOTES:—A party composed of Miss Edna Norton, Miss Dorothy Arnold, Franklin McCamey and the writer, spent the day of June 15, 1939, in the 'Cranetown' located at the north end of Big Ronaldson Slough at Reelfoot Lake. Observations were made from a platform in the top of a tall cypress tree near the center of the colony (built by Karl Maslowski in 1937), and from the ground which was under water, one to five feet deep.

Considerable time was used to take photographs and to band some of the young birds which had fallen below. If large enough, these birds apparently are able to care for themselves. One of these, an American Egret, was noted to be feeding on dead fish, many of which were greatly macerated, and which were evidently disgorged by the nestlings above or dropped during feeding maneuvers. Nesting activities were in full progress. The juvenile birds varied from those apparently just ready to leave the nest to others apparently just hatched. No accurate count of the adult birds was attempted as their number was in a state of flux thruout the day. The following are the estimated number of nests: American Egret, 600; Double-crested Cormorant, 250; Ward's Heron, 150; Black-crowned Night Heron, 50; Anhinga, 40. These numbers compare favorably with those of Miss Eva O. Gersbacher who made a comprehensive study of the colony in 1938 (*Journal Tenn. Acad. Sci.*, Vol. XIV, No. 1, pp. 162-180). The number of nesting Cormorants seems

to vary from year to year. Observations as to the distribution of the five species throughout the colony corresponded to those of Miss Gersbacher. The Anhingas and Black-crowned Night Herons tended to congregate in more or less isolated groups at the south end of the heronry, the latter nesting lower, in the maples and smaller cypress trees. While exploring the south end of the colony, McCamey and the writer flushed five Little Blue Herons—3 adults, 1 immature, and 1 mottled. These are interesting records for this time of the year. No evidence of their nesting could be found. As yet, there are no records of this species nesting at the Reelfoot colonies. Also, in this vicinity, a Wood Duck's nest was discovered by McCamey. One adult was seen and heard.—The following are other species seen in and around the colony: Turkey Vulture, 4; Black Vulture, 20; Pileated Woodpecker, 1; Downy Woodpecker, 1; Crested Flycatcher, 1; Acadian Flycatcher, 6; Crow, 5; Carolina Chickadee, 12; Wood Thrush, 3; Red-eyed Vireo, 5; Prothonotary Warbler, 30; Parula Warbler, 2; Cerulean Warbler, 6; Sycamore Warbler, 2; Kentucky Warbler, 6; Hooded Warbler, 5; Redstart, 12; Bronzed Grackle, 40; Dickcissels were abundant along the highways west and south of Reelfoot Lake itself.

WENDELL L. WHITEMORE, Univ. of Tenn. Medical School, Memphis.

A CAPTIVE GREEN HERON:—Last June 30th, William Simpson, Conrad Jamison, 'Tot' Lawrence, and I, happened upon and caught an adult Green Heron (*Butorides virescens virescens*) at the Radnor Lake 'Sanctuary'. Upon examination we found he had a freshly broken wing and was unable to fly. We took him to my house where he was banded and the wing put in a splint. We found that he was perfectly contented in his new home,—a small flying cage. The Heron ate eagerly as many minnows as were offered,—he accepted three hundred one day. In accordance with his greediness we promptly named him 'Glutton'. Every four or five days a tub-full of minnows had to be seined from a creek eight miles away. Whether they were dead or alive, Glutton gobbled up minnows. He refused to eat minnow-sized chunks of store-bought fish, but at intervals we forced him to eat some of it to take the place of part of his minnow diet.—After two weeks of captivity Glutton's wing had mended and we removed the splint. He was taken to Mill Creek in hopes of releasing him if he could fly. Before turning our long-necked friend free we treated him to a farewell feast of nearly his weight in minnows,—at least one hundred and fifty of them. Glutton's belly was full and tight; his pouch was half full of minnows—he had not been able to resist that last hundred. Needless to say, he couldn't get off the ground.—Glutton was taken back home and kept a week longer. On July 29, only 22 days after he was first found, we took him again to Mill Creek. This time he was given a farewell feast of only fifty minnows. When released he flew across the creek in true heron style and landed in a nearby tree. Thus a Green Heron recovered from a badly broken wing and lived to fly again unimpaired in flight.—The impression that Green Herons are almost exclusively fish-eaters must not be inferred. After observing Glutton's habits when he was given the liberty of our fish pool and Mill Creek, I am convinced that fish are a minor part of their regular diet. Green Herons are unable to catch fish in water deeper than 3" to 4"—they find water spiders, water bugs, crayfish, flies, dragonflies, moths, mosquitoes, and

toads much more easily obtained. Any insect that flies within a foot of a Green Heron is as good as dead.—ARTHUR McMURRAY, Nashville.

NOTES ON A CROW NEST:—On May 7, 1939, while walking through a field near my home, east of Memphis, I found a nest which contained six young Crows about two days old. This nest was located in a tall cedar near a small patch of woods. On inquiring about the neighborhood, I was told that the Crows had nested here for about four or five years. On the ground surrounding the nest I counted about sixty field mice skulls and numerous small bones. The appearance of these bones indicated that they were the remains of meals of last year (1938 nesting season). Assuming that these rodents had been a part of the Crow's food supply, I decided to investigate further. In a large field near the nest I found countless numbers of holes which were probably inlets to the network of tunnels made by field mice and shrews. On May 27, I banded the six young birds which were to help keep these rodents, as well as injurious insects in check in years to come.—AUSTIN BURDICK, JR., Memphis.

NOTE: The U. S. Biological Survey's pamphlet, "The Crow in Relation to Agriculture" by E. R. Kalmbach, includes the following statement with regard to food habits: "In feeding on mammals, the Crow supplements the good work of the hawks and owls by tending to hold in check rodent pests. Such food forms 1.6 percent of the diet of adult Crows and 8.8 percent of nestlings. The favorite mammal food of the young is young cottontail rabbits." The Survey now has under way an even more complete investigation of this much maligned bird.—EDITOR.

TENNESSEE-KENTUCKY NOTES:—Mating reactions of soaring hawks, probably Broad-wingeds, were observed near Springfield, Tenn., Jan. 27, of this year and on Mar. 3, Sparrow Hawks were seen mating near Cedar Hill, Tenn. At this date Mourning Doves has been observed showing mating reactions for some time in this locality.—On June 12, a Mourning Dove was disturbed from her nest near Paducah, Ky. The nest which was built on the sloping side of a gully bank against the base of a Lespedeza bicolor bush contained one young bird apparently about two days old. One egg had been washed or knocked from the nest and lay in the bottom of the gully below it. The writer returned to the area on June 22. At this time the young bird had left the nest, but both it and the adult were nearby. In attempting to distract attention from her young the adult exhibited Quail-like actions, fluttering about, dragging her wing, etc.—Near Morganfield, Ky., on June 14, a large flock of Black and Turkey Vultures were disturbed from a hog carcass. After getting into the air they separated into two flocks by species.

On the same date a Great Blue Heron rookery containing about 50 nests was observed near Morganfield. The nests were in the tops of tall Cypress trees. No young birds could be seen but about 100 adults were counted in the vicinity.—On July 8, approximately 300 Wood Ducks were counted on Swan Pond near Wickliffe, Ky. All were adults.—FORREST V. DURAND, Springfield.

ROBIN INCIDENTS:—In late April of this year, at the 'Elmwood' bird banding station at Nashville, I noticed a pair of banded Robins hunting nesting material. So I proceeded to supply a goodly mount of string, paper napkins, and small bits of cut-up silk undies. They very happily gathered up

every bit I placed on the lawn, and built in a small tree between our sidewalk and the curb. When the nest was about completed some one poked it down (while I was busy in the back part of the house) and so we began again from scratch. That nest was completed and two eggs deposited. Then two English Sparrows literally 'rooted' those eggs to the ground. I got the nest down while the female Robin sat in a nearby tree watching. While there she dropped an egg to the ground. The sparrows immediately began building in the coveted crotch. The next day the Robin came to the same limb on which she had perched the first time and at the same hour, and dropped the second egg—making a clutch of four that were lost.—The Robins then began on a third nest in an arbor covered with honeysuckle in my back yard, and brought off a successful family of four. I banded them all and now have three baby Robins and the parents in the yard. Needless to say I am disposing of all the English Sparrows I trap,—sometimes as many as fifteen at once.—Mrs. MILLER DISMUKES, Nashville.

PULASKI NOTES:—Immature Brown Thrashers, Catbirds, Bronzed Grackles and Cardinals have been abundant on our street this summer. The first three species have entered my traps and those of my neighbor, the Rev. Mr. Johnson, very readily, although the traps have not been set more than two or three days each week. Cardinals, as usual, have paid little attention to my offerings which often included cantaloupe seed. I have been particularly interested in finding so many Grackles nesting both in town and in the country as I, alone of the T.O.S. members in this section, listed the Bronzed Grackle as one of our most common summer residents. As I had not been at home for several summers I feared I might have been mistaken, but now I am convinced that it is near the top of the list in Pulaski.—At the Alfred Claggetts' home the porch with its vines and ferns always attracts their friends but no one has enjoyed it this summer more than the Carolina Wren who reared her family in the beautiful stand of ivy beside the door and who sat unafraid as all callers inspected and admired her artistic home.—Mrs. SAM ROGERS, Pulaski.

NESTING OF SYCAMORE AND PINE WARBLERS AT KNOXVILLE:—On April 30, 1939, while attending the Field Day of the Knoxville Chapter, I located a nest of each of these species, in process of construction in pine trees in the Island Home area. One of the Sycamore Warblers had been seen during the morning by Mrs. Frank Leonhard, on the ground with nest material in its bill. On hearing of this later in the day, I took a position on the hill above, so as to keep the nearby scattered pine trees under surveillance. After a few minutes wait, one of the birds was seen to dart thru the air and disappear in the top of a pine. By watching subsequent trips the nest was located, tho almost completely hidden, about 60 feet up and 8 feet below the top of the large shortleaf pine. It was 3 feet from the end of the branch on which it was saddled and well hidden by foliage from above. Tho late in the afternoon, trips with material were being made about every ten minutes.

On May 10, I was again in Knoxville and arranged to visit the two nests above mentioned. That of the Sycamore had been completed meanwhile and now held 4 eggs, incubated about one day. The bird remained upon the nest as I approached and I looked her over carefully, at three feet distant, noting

plainly that the lores were white instead of yellow and thereby determining that it was the westerly subspecies, *Dendroica dominica albilora*. The bird moved off the nest when nearly touched, taking a position just below it. She flew away when I affixed my rope to the limb in order to draw it closer, so as to photograph the nest in situ. The nest was similar to a number I have found near Nashville, all built in sycamore trees. It was a neatly woven cup, 3" wide by 2" high, with inside width of 1.7" and inside depth of 1.4" Its light grey color externally was caused by cobwebs and cottony substances woven in among the shreds of light grey as well as brown fibres and bristles. Four tan willow catkins were fixed to the exterior as tho for ornament. The inside lining was nearly white, of long and short hairs, and a few soft feathers were woven just inside the rim. A few hundred yards away there were many sycamores along the Tennessee River, trees which this species usually favors for its habitat.

The nest of the Northern Pine Warbler, *Dendroica pinus pinus*, had been found by watching the bird as it gathered material from dead weed stalks and then flying into a nearby pine. This nest was located at the edge of the H. P. Ijams pine grove, 35 feet from the ground, near the top of the tree and near the extremity of a limb. The bird made numerous trips to the nest on the April date. When I climbed the tree on May 1, I was disappointed to find that it had been robbed, probably by Blue Jays. There were tiny bits of shell in the nest and the soft lining had been disarranged and some material removed. The exterior of this nest differed considerably from that of the Sycamore Warbler, in that its exterior had a reddish appearance due to its composition,—largely of red inner fibres of pine bark.—ALBERT F. GANIER, Nashville.

NOTES ON THE PILEATED WOODPECKER:—During the past three years, I have had the pleasure of having a pair of Pileated Woodpeckers present in the vicinity of my home. I had searched for their nest each year and until this year I had been unsuccessful. This spring I discovered their nest on April 1. It was located in a dead sweet gum about 40 feet from the ground. I was unable to count the eggs or see the interior of the nest because the tree was too rotten to climb. When first discovered, the female was flushed from the nest and I was able to approach within fifteen feet of her. Every other time that I went to the nest, I saw the male's head protruding from the nesting cavity. These birds which are usually so very wild, showed no fear of me when I was near their nest. On May 11, I was unable to find the old birds, so I presume that the young had left the nest. The parents must have taken the young to a less inhabited area for safety in rearing them.—AUSTIN BURDICK, JR., Yates Avenue, Memphis.

THE MIGRANT

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

ENDOWMENT FUND STARTED

Definite plans for providing an endowment fund for the work of the Society were discussed at the annual meeting of the directors, following the Spring Field Day at Nashville, May 14. A report was given by Mr. George Woodring, chairman of the endowment committee. Since members of the affiliated Tennessee Audubon Society thought it desirable that educational and conservational objectives be sought thru the framework of the state-wide organization of the Tennessee Ornithological Society, it was their opinion that a fund of \$500, held by them, be made available to the T. O. S. provided the latter shows that it can raise a similar amount. The directors of the T. O. S. decided that while an appeal will be made to all persons who may be interested in the aims and ideals of the Society, the time was opportune to match the proposed gift by a direct appeal to our members. We hope to have fifty members pledge \$10 each and thus start our fund. At the May meeting the campaign was off to a good start with many pledging to do their part. A list of the pledges to date will be published in a later issue.

All funds will be kept intact so that the income from same will be available for projects of the Society while the principal can continue to grow.

Here is our chance to put our Tennessee organization on a parity with other state and local clubs and to extend its usefulness. Our country and our state are becoming more conservation-minded than ever before and the T. O. S. should be one of the leaders in encouraging an appreciation of our wildlife and the proper use of our natural resources. Pledges or contributions should be sent to Mr. George B. Woodring, Hillsboro Branch, American National Bank, Nashville.

The Blue Grass Chapter cordially invites all members to attend its Fall Field Day, October 29. It will be held at Osceola, the farm of Dr. O. J. Porter, the chapter president. To reach Osceola, turn east two miles north of Columbia (Jackson Highway) at Foster's filling station. After driving one mile on Bear Creek Pike, pass into Osceola thru a rock-arched gateway.

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AN ANNOTATED BIBLIOGRAPHY OF THE ZOOLOGY OF TENNESSEE AND THE TENNESSEE VALLEY REGION' by Charles S. Shoup. Reprinted from *The American Midland Naturalist*, Vol. 21, No. 3, May, 1939, pp. 583-635. Price 50 cents; order from Vanderbilt University Bookstore, Nashville.

This is a successor to 'A Bibliography of The Zoology of Tennessee' by the same author in *The Journal of The Tennessee Academy of Science* (Vol. XI, No. 1, pp. 53-67) which contained 273 titles. The present list is a compilation of approximately 1,000 titles of papers which contain descriptions of species or lists of species collected in the region covered. Areas in Kentucky near the headwaters of the Cumberland River are also included. An index for the 216 localities covered by the list is a convenient aid. Slightly over 200 titles are given in the section on 'Birds'. A large number of these are from *The Migrant* but references to most short notes are omitted. The Xmas Census lists published in *Bird-Lore* are also omitted. In passing I might state that the reference to Memphis, (1928) Anderson, is of a short article in *Bird-Lore* under caption of 'From Young Observers' and too limited to be correct on the status of certain species. Also Mrs. Coffey should have been credited with 'A Trip to Mud Lake' (1932). The writer has done a great service to those interested in the zoology of our state and the list fills a long felt want.—B. C.

This advertising space is available. For details write Vernon Sharp, Jr., 225 Capitol Blvd., Nashville, Tenn. "The Migrant" goes to about \$75 individuals, libraries, and schools. Mr. Sharp would appreciate your assistance.

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