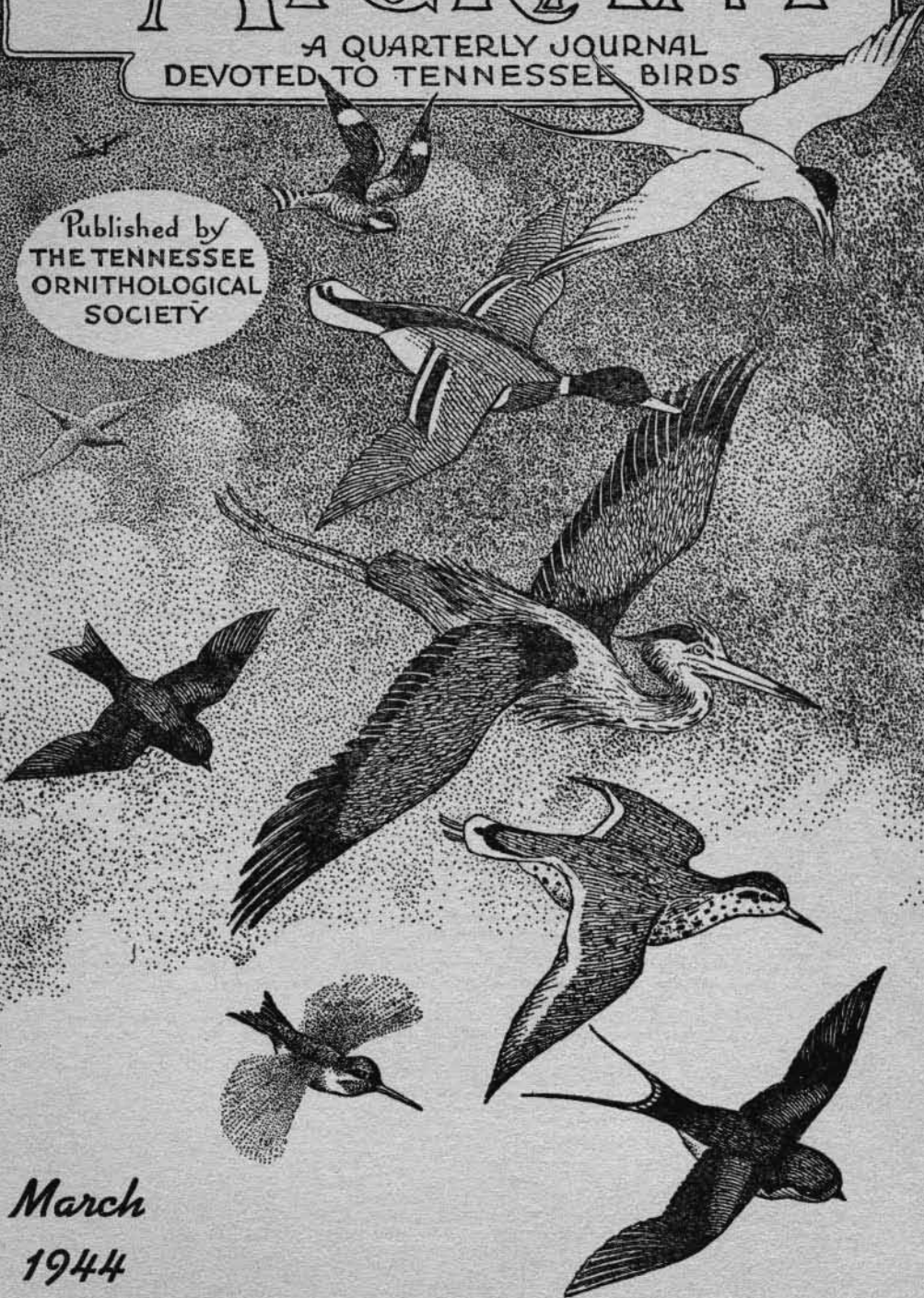


THE MIGRANT

A QUARTERLY JOURNAL
DEVOTED TO TENNESSEE BIRDS

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36

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BIRDS AND THE WEST TENNESSEE RIVER LAKE

BY CLARENCE COTTAM

The Gilbertsville or Kentucky Reservoir,¹ soon to be formed, will create a tremendous inland lake extending north and south across practically all of western Tennessee and Kentucky for a distance of more than 180 miles. This "Great Lake of the South" will vary in width from 1 to 3 miles; and because of its very irregular margins and numerous indentations, it will have a shore line of approximately 2,000 miles—nearly 2½ times the air-line distance from Chicago to New Orleans, or somewhat less than the distance from Nashville, Tennessee, to Seattle, Washington!

Though there will be plenty of deep water, the lake will contain an enormous acreage of shallows, which will certainly be conducive to the growth of emergent vegetation. Submerged aquatic growth (an important source of food for waterfowl and fish) will be produced only if water fluctuation is held within reasonable limits, especially during the critical growing season. Coppice or sprout and willow growth from the extensive timber cuttings will surely appear in shallow water unless continuous effort is made to control it.

Numerous shallow bays and fingerlike projections extend into the adjacent upland, some of which is well timbered or contains much shrubby growth, while other tracts represent good agricultural land. The best agricultural land in the Tennessee Valley will be inundated or will border upon the impoundment. A number of extensive agricultural areas will be dewatered. These areas will include some 6,000 acres near the mouth of the Duck River, slightly smaller units near Camden along U. S. Highway 70, and tracts near the mouth of Big Sandy River. These units will be diked off, and large pumps will keep them dry so that the land can be farmed during the summer yet be flooded shallowly during the late fall and winter.

As a consequence of this treatment and of the diversified nature of the entire area, many types of environments attractive to bird life will inevitably be produced. Unquestionably, this in turn will result in a marked increase in bird populations and particularly in a much greater variety of species than now regularly visit the area.

Water birds, which now are relatively little known in Tennessee, should become common at least during migration. Grebes, cormorants, herons, egrets, bitterns, rails, coots, gulls, terns, plovers, sandpipers, and other shore birds

¹As most of this reservoir will be in Tennessee, it might be more appropriately called the Tennessee Reservoir, but apparently this name has not been suggested.

NOTE: For maps to illustrate this article, see pages 11 and 12.—Ed.

will certainly increase in abundance. Management of lands adjacent to the impoundment, along with more effective protection, will also result in an increase in many species of upland birds.

If the area or sizeable units of it are properly managed to encourage wildlife, we may perhaps effect the most startling and favorable increase in bird population, particularly of waterfowl, including both ducks and geese. For evidence of this, we may refer to the record on Wheeler Reservoir of Tennessee River in northern Alabama. The record here is the more significant and encouraging when we remember that the area is well off the normal migratory flight lanes of ducks and geese. Through cooperative agreement in 1938 by the Tennessee Valley Authority, the State of Alabama, and the Fish and Wildlife Service, a Federal refuge or sanctuary was established on but 40,000 acres of this reservoir and adjacent T.V.A. holdings. In this same area the T.V.A. was obligated to carry on necessary mosquito control and to manage the river for the promotion of navigation and flood control and the production of the needed electric power; also, normal agricultural practices were followed on the larger blocks of agricultural land within this refuge. The area was used as a proving ground to harmonize these varied and often conflicting interests, and the results have been startling. Cooperative studies have shown not only that the interests of wildlife conservationists and mosquito-control workers are compatible, but also that these two groups have many problems in common. Water levels can be regulated for the benefit of both interests, and burning practices and larvicidal control can be so regulated as to serve one purpose without noticeably injuring the other. It is possible to grow certain marsh and aquatic plant species that will furnish essential food and shelter for waterfowl and other wildlife and, at the same time, serve the mosquito-control interests by keeping out vegetation that would encourage mosquito production. Agricultural practices on these wildlife lands can readily be adjusted to serve wildlife and benefit the local farm people. This is accomplished by "share-cropping," that is, the farmer grows corn, beans, peas, or various grain crops and then, instead of paying the Government rent for the use of the land, he leaves the equivalent—say a third or fourth of the crop—in the field as food for the birds. Very few birds frequented this area before the refuge was established. Now, five years after the establishment of the refuge, 1,000 to 7,000 Canada geese and 10,000 to 20,000 ducks find attractive wintering habitat on the area, and many more birds find attractive food and shelter during protracted periods of migration. The development and management of the refuge have resulted in a marked increase in quail populations and in the supply of native furbearers, which add considerably to the local interest and economy. Under Federal law, 25 percent of all income derived from the sale of surplus products, such as furs, grazing or crops, is returned to the counties in which the areas are located. Unfortunately, on most adjacent T.V.A. holdings where wildlife development had not been practiced by the Fish and Wildlife Service, there was relatively little utilization of the area by wildlife.

Similar development could readily be made throughout most of the extensive T.V.A. holdings. Gilbertsville Reservoir is ideally suited to such development. The area would be a boon not only to the people of the States of Tennessee and Kentucky but to the Nation as a whole. The reservoir is directly

within the Mississippi flyway (see map); furthermore, this flyway has very few wintering and resting areas where food and protection can be afforded the birds between the northern breeding grounds and the Gulf coast marshes.

Surely it would be in the best public interest if the States of Tennessee and Kentucky and the two Federal agencies, the Fish and Wildlife Service and the Tennessee Valley Authority, would promptly form cooperative agreements to develop and manage appropriately suitable tracts of this land that is now under Federal ownership. Such development and utilization of the area need not interfere to any noticeable extent with power development, navigation, and flood control—the primary purposes of the reservoir.

Immediate action is necessary to conserve and utilize this important national resource, to prevent deterioration of the habitat through growth of obnoxious vegetation, and to keep development costs at a minimum. If such action is taken, this section of the country will undoubtedly become one of the Nation's most important recreational areas. Plans for development of the area are already formulated (see map) by the respective States and the Fish and Wildlife Service.

U. S. FISH AND WILDLIFE SERVICE, CHICAGO 54, ILL.

LOWERY: PROBABLE MIGRATION ROUTES OF CHIMNEY SWIFTS

A REVIEW, BY BEN B. COFFEY, JR.

The author made good use of the opportunity to band large numbers of Chimney Swifts at Baton Rouge, La., a strategic location for such studies. Analysis of banding results indicate that this species migrates chiefly across the Gulf of Mexico rather than along the coast in either direction, and considerable field work is reported¹ to support this hypothesis.

A total of 21,414 Swifts were trapped and banded,—115 in April, 1939, the remainder during the autumns of 1937, 1938, and 1939, constituting nine flocks, varying in size from 500 (number banded) to 4,699. As elsewhere in the South the Swift population is large and there is apparently a rapid turnover. For example on Sept. 24 and Sept. 27, 1938, 5,699 Swifts were banded, yet only 218 (3.8 per cent) of these were "repeats" on Oct. 1, 1938. A week later, with 9,499 banded birds of the season as possibilities, only 46 (.5 per cent) were taken. There are 5 "recoveries" of the season which support evidence presented by other banders of random movements. These range from a bird recovered the same day at Clinton, La. (30 mi. NNE) to one retrapped at Clarksville, Tenn. (475 mi. NNE) five days later.

The total number of "returns" were 340, from the 16,000 individuals banded one and two years previously. Three of these were "Returns-2": viz, two originally banded Oct. 1, 1937, retaken Sept. 27, 1938, and Oct. 7, 1939; one banded Oct. 12, 1937, retaken Sept. 24, 1938, and April 2, 1939.

To the returns can be added two originally banded at Nashville in August, 1938, retrapped at Baton Rouge the same season and retaken there Oct. 14, 1939.

¹Lowery, George H., Jr. 1943. The Dispersal of 21,414 Chimney Swifts Banded at Baton Rouge, Louisiana, with Notes on Probable Migration Routes. *Proceedings of the Louisiana Academy of Sciences*, Vol. VII, pp. 56-74.

Apparently the latest reports of recoveries available to the author were for 1941, four years after the original banding and two years after the final banding. Of his 21,414 birds, 126 were recovered at distances varying from 15 to 1,900 miles; 93 were chance single recoveries, while 33 were retrapped by 13 other banders. "Foreign returns," that is, birds banded by another station operator and retrapped at Baton Rouge, numbered 62 (with local returns on 2). These were from 14 other Swift banding stations which are shown on figure 2 reproduced here. (Blind River, Ont., should also have been shown as a point of banding.) Individuals of interest: 39-34177 banded, Lexington, Mo., Sept. 23, 1938; retrapped at Baton Rouge, Sept. 27. Having entered the chimney Sept. 26, it covered an airline distance of 600 miles in 3 days. 38-152845 banded, Baton Rouge, Sept. 24, 1938; recaptured and released at Campbellton, N. B., June 11, 1939; recaptured Aug. 22, 1940, 15 miles southwest at Upsalquitch, New Brunswick.

Altogether there was an interchange of banded Swifts with 20 other banding stations. Results can be summarized thus: Tennessee area, 49; Lexington, Mo., 2; Iowa-Ill., 5; Blind River, Ont., 3; Kingston, Ont., 10; Charlottesville, Va., 12; Atlanta-Opelika, 13; Hattiesburg, Miss., 1; Total, 95.

From these data, as shown on the map, Lowery considers the Lower Mississippi Valley as an area of convergence for most of our Chimney Swifts. This fits in with or is an extension of migration routes advanced by other Swift banders. All cooperators have in common a paucity of records below the Baton Rouge area so the author endeavors to throw light on possible routes by which the Chimney Swifts leave the country each fall and return each spring. Migration records for Texas and Florida were examined and a special watch was kept during field trips into those states. According to the evidence at hand the bulk of the birds are postulated to move across the Gulf of Mexico. The possibility is considered that in the spring some may use flank routes to reach central Florida and eastern Texas, respectively, but in the fall all birds, including Texas and Florida residents, apparently concentrate in the lower Mississippi Valley.

Lowery eliminates Florida as a major flyway in the spring and, moreover, suggests that Florida residents may form part of the fall concentrations on the central Gulf Coast. In the Spring Chimney Swifts arrive about March 19 in an area from Baton Rouge to Pensacola. A few March records in Florida might be accidentals from this movement. Most appear much later. Based on field data and records from Florida and from Hispaniola (Haiti), the author states that this species reaches central and northern Florida before it does southern Florida where it is rare, and surmises that these individuals use an Hispaniola-Bahaman flyway at that season. In the fall the species is apparently absent from the Antilles and rare in the Florida keys. From Bent (1940) he cites a Swift banded in August at Sanford, in central Florida, that was found with a broken wing the next month near Tallulah, in Northeast Louisiana. Howell (1932) mentions "large flocks in the fall" in Florida but makes no mention as to actual size; these are considered to be local gatherings. Their banding would certainly indicate whether they move to the northwest like the Sanford bird or simply move westward and there fall into the great trans-Gulf flyway. Conversely, of the large numbers of Swifts banded at Baton Rouge and Memphis, only one has been recovered in Florida:

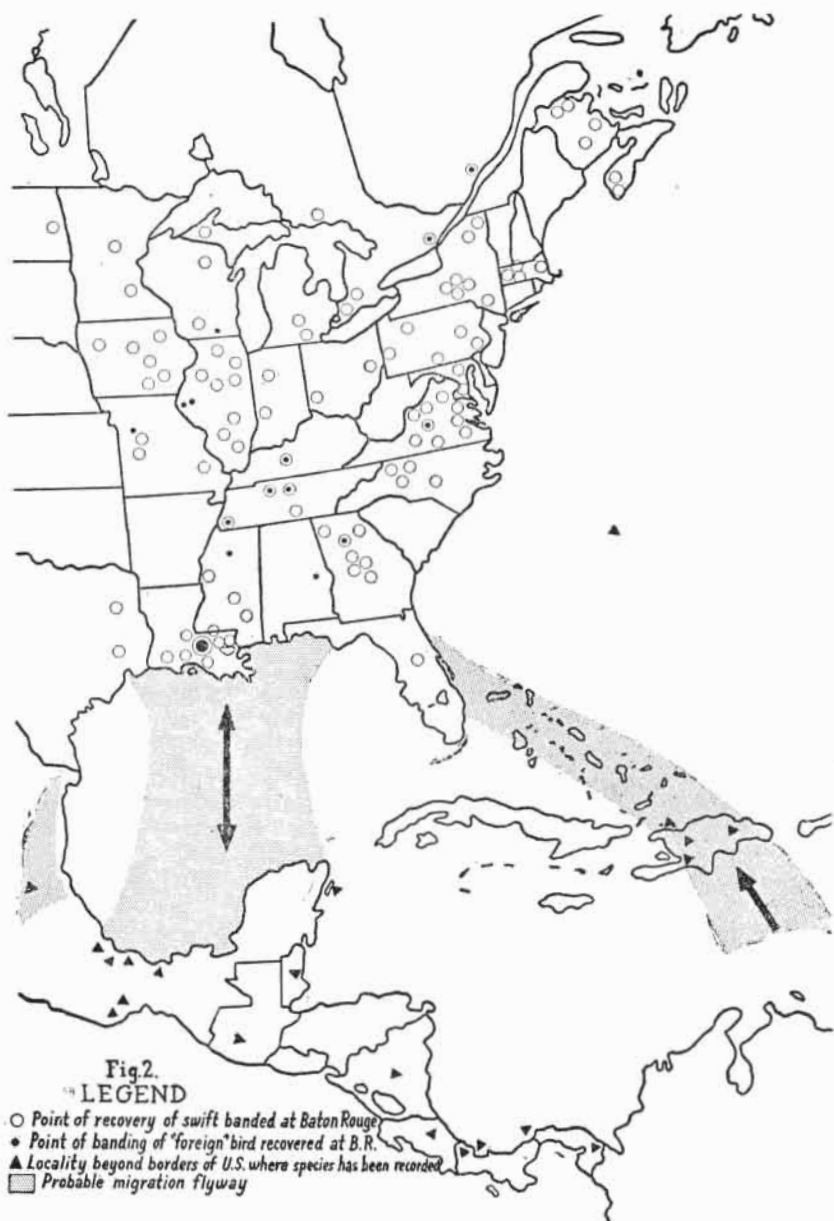


PLATE I. Dispersal and convergence map for Chimney Swifts banded at Baton Rouge, Louisiana. (By courtesy of La. Academy of Sciences.)

Similar maps for Memphis, Chattanooga, Atlanta, Ga.-Opelika, Ala., and for the Charlottesville, Va., areas, may be found respectively in *THE MIGRANT* for Dec. 1936, V. 7, p. 78; Dec. 1938, V. 9, p. 86; and, June, 1940, V. 10, p. 43 (taken from *Bird Banding*, V. 11, p. 37); *Bird Banding*, 1937, V. 8, p. 21; and *Bird Banding*, 1942, V. 13, p. 62.

34-40620, banded Oct. 8, 1938, at Baton Rouge, found dead, May 2, 1939, at Umatilla, Fla.²

In Texas, flights of Swifts have been recorded at Brownsville, during March and April and again in September, and the species has also been noted in eastern Mexico. However, Lowery and Burleigh saw none between Oct. 21 and 28, 1937, in east Texas (including three days at Brownsville) although they were abundant at Baton Rouge, Oct. 21. Only two birds banded at Baton Rouge have been recorded in Texas, both in the spring of some later year (April 17 and May —), indicating birds at or enroute to their nesting localities.³ If nesting, their trapping at Baton Rouge in the fall substantiates the theory of a concentration there.

Confirmation awaits data from Florida and Texas banded birds. However, the author has made a logical deduction and has supported it well with data. As he concludes, "A thorough understanding of the flyways traveled by Chimney Swifts in leaving and returning to the United States, is of considerable significance for therein may lie the solution to the enigma of the bird's winter home."

FORT SILL, OKLAHOMA, March, 1944.

²The author might have pointed to the lack of Florida records by Green at Chattanooga (*Bird-Banding*, 1940:37-57) and by Calhoun and Dickerson at Charlottesville (*Bird-Banding*, 1942:57-69.) The last two banded 20851 Swifts at the Virginia location and reported that their birds apparently migrated to the east of the Appalachians, except that in the fall a portion evidently used a secondary route to the west of the mountains, some being retrapped at Memphis and at Nashville. Those retrapped at Baton Rouge might be of the latter group but the numerous recoveries of Baton Rouge birds in the East indicates that the bulk of the eastern residents converge in the Baton Rouge area regardless of whether they use a hypothetical route east or west of the mountains.

³That some Swifts are only passing through East Texas in the spring is evident from the following 14 recoveries in that area gleaned by the reviewer. Chattanooga (from 17,165 banded), 3 records; April 29, 30, May 1 (Green, 1940). Memphis (35,113), 6 records; April —, May 4, 5, 6, 9, 12. Clarksville, Tenn. (7,765), 1 on April 18 (Hutchison, *in litt.*). Nashville, 3 records; April 24, 25, May 4 (Laskey, *in litt.*). Charlottesville (20,851), 1 on April 30 (Calhoun and Dickerson, 1942). The Memphis bird recovered May 9 was one of a flock of 50 trapped in a stove. The late spring migration in Florida and in Texas might be connected with the late migrants reported at Memphis (THE MIGRANT, 1942, p. 68)—over 700 on May 14, 1942, of which 450 remained at least two days later.

THE SWAMP NEAR CEDAR HILL

BY ALFRED CLEBSCH

When the bird-watcher leaves the city, he is delighted by the first habitat where he can always count on a group of birds. He may even know of some rare bird that is to be found in its shelter. But one day he finds the scene changed; the place has been cleared for some project, a street is laid out and houses are going up. With helpless regret he sees the city expand and must console himself that there are similar habitats farther out. A feeling of irreplaceable loss, however, overtakes him when he learns that progress has seized some remote haunt, a deep woods, a marsh or a swamp that was the goal of his journeys. The cross-cut saw and the drainage ditch do quick work and soon a cultivated field replaces the wildlife habitat that had no more claim to be preserved than the fancy of some bird-lover and nature-student. Since such places are getting scarcer as the years pass, it seems fitting to record their existence and pay tribute to them while they can still be visited by our fellow bird-students. With this in mind I want to write of the swamp near Cedar Hill.

On account of its topography and land development swamps are scarce in the northern part of Middle Tennessee. Their number is made up mainly by the few Cumberland River sloughs that have not yet been drained. In contrast to them there is in the northwestern part of Robertson County on the drainage divide between Red River and Sulphur Fork an upland swamp that can well demand the attention of the bird-watcher in search of unusual habitats. It lies about a mile southeast of Cedar Hill, a small town on highway 41E and on the Nashville-Hopkinsville line of the Louisville & Nashville Railroad. There are about thirty acres of fine woods, bisected by the railroad track. During spring and early summer the northern section is well inundated, but in the drier seasons the water recedes to a buttonbush area only a few acres in extent. Still, the abundance of mosses and lichens on the tree trunks as well as the sponginess of the ground underfoot attest the moisture of the site. The place began to fascinate me 30 years ago when I used to see it from the train, but only in recent years has it been my good fortune to visit it in company with other T. O. S. members. Mr. Albert F. Ganier, who possesses an intimate knowledge of the geography of our State, tells me that this swamp is unmatched in this section of the country. While so far I have been in it only on winter days, Jack Calhoun has written of interesting May experiences there in the September, 1935, issue of this magazine. He speaks of it as a highland marsh, but most of it is now properly a swamp; only in the buttonbush area do grasses and sedges typical of marshes grow. Ten years ago two pairs of King Rail were found nesting there and a Least Bittern was seen, and so it appears that a transition from marsh to swamp is nearing completion. The stand of timber shows judicious use by the owner and one is reminded of a park. The trees are mainly varieties of oak with a preponderance of southern red oak, pin oak and willow oak. They are well spaced and well shaped, reaching a height of upward of 60 feet, and are of greater age than one would guess by their size. Those on the drier part south of the railroad are larger. The place is fairly free from tangled undergrowth. Peat moss is

growing throughout the swamp and in spots large green cushions of "tree" moss seem scattered on the ground in order to form a pleasing contrast with the delicate pattern of willow oak leaves that lay a carpet of brown on the forest floor.

At the end of the years 1938, 1939 and 1940 a winter census of birds was taken here and published in the Christmas census tabulation. The following two years we had to forego these trips and this season it was already the middle of February before a visit could be arranged. However a cold wave that was sweeping the country at the time made it wintry enough. It seems that one can count on an average of 40 species of winter birds in the swamp and its immediate surroundings. The composite list for the four trips comes to 56 species and shows mostly our common land birds. Carolina Wrens, Cardinals, Towhees, Juncos and White-throated Sparrows are the typical inhabitants of what undergrowth there is. The companionable Chickadees and Titmice are about us constantly on our search through the swamp. One daily list showed 66 Titmice, another 75 of them. But the main features of the birdlife are the Woodpeckers and the Blue Jays, their presence easily explained by the oversupply of acorns the place produces. Flickers reached a high of 37 one day, Downy Woodpeckers of 31, and Blue Jays of 51. An interesting encounter this year was finding 9 Red-headed Woodpeckers, a species not seen at all on other winter visits here. We watched them particularly and found them ranging in the upper parts of the trees where we believe they were feeding. One of them ducked into a hole about 25 feet up in a snag as we came near. We "pounded" him out again and stayed behind him while he made a wide circle to get back into his hiding place. Examination of the stomach contents of a collected specimen showed it full of macerated acorns of the willow oak. Either these birds come down to the plentiful supply still on the ground or they find stores hidden up high. Hairy and Pileated Woodpeckers are also present, though in small numbers. One of the latter had been excavating for grubs at the base of a rotten willow stump. The hole started at the roots only a few inches above ground level and actually went six or eight inches below the surface. One species that is closely connected with swamp habitat in winter is the Rusty Blackbird, and on the census made January 1, 1939, 130 of them were listed. They were in two flocks, the smaller one at the water's edge of a small buttonbush pond a mile east of the large swamp and the larger one had temporarily repaired to a barn lot where hogs were being fed on corn. This year we listed only two individuals near the water-filled part of the swamp.

The clearest proof that we are in an exceptional place comes from the two birds of prey that rule the domain, the Red-shouldered Hawk by day and the Barred Owl by night. Ordinarily we look for them in lowlands and river bottoms. Here, in this upland swamp, they are found on every visit, in fact, the Red-shouldered Hawk's loud "singing" is heard as soon as we leave the highway and it isn't long before their nest is located. One year it was proven that two pairs of these hawks occupy this territory when on April 14, 1940, two nests with eggs were found. To the Barred Owl we are led by the noise the Crows are making as they give the victim of their play no rest. The mate of this owl we found lying dead beside the railroad tracks. Evidently it had been hit by a train at night and was killed by the impact. Barred Owls cling

so much to their realm that it is reasonable to assume the other owl will stay on and find another mate. Emphasis on the strangeness of these two swamp rulers in an upland region was given by a pair of Red-tailed Hawks we found in a woods beyond the buttonbush pond. Dr. Spofford discovered their well-built nest high up in a large chestnut-oak. It is indeed remarkable that these two species of hawks are such close neighbors.

The land surrounding the swamp consists of stockfarms in high state of cultivation, yet it is not devoid of ornithological attractions. Among others there are Killdeer, Meadowlarks and Horned Larks in the fields, Tree Sparrows and Fox Sparrows among the thicket-loving species in the gullies and the ever-entertaining Sparrow Hawk on the telephone lines along the highway.

CLARKSVILLE, TENN., February, 1944.

HOW BIRDS SPEND THEIR WINTER NIGHTS—II

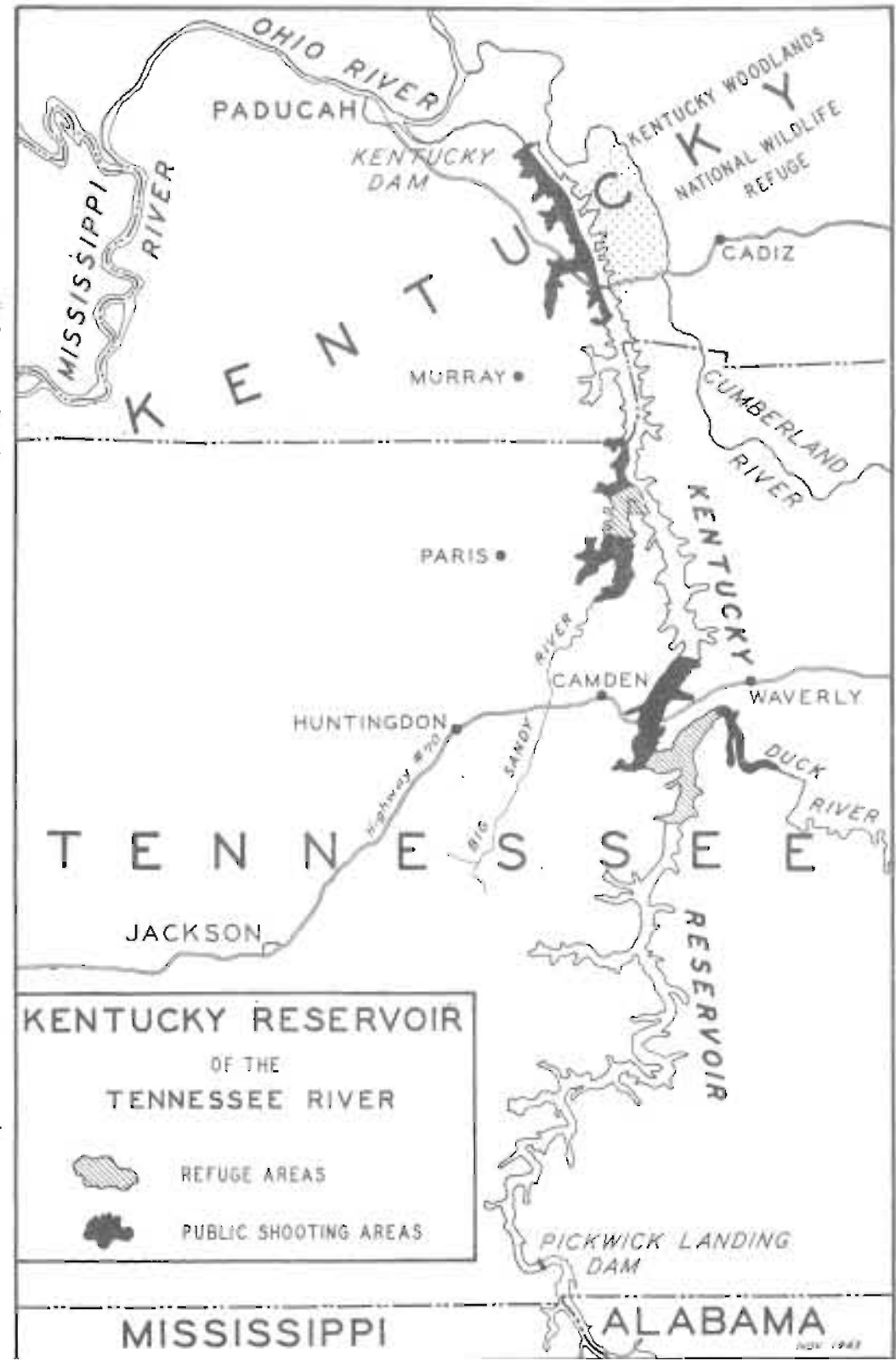
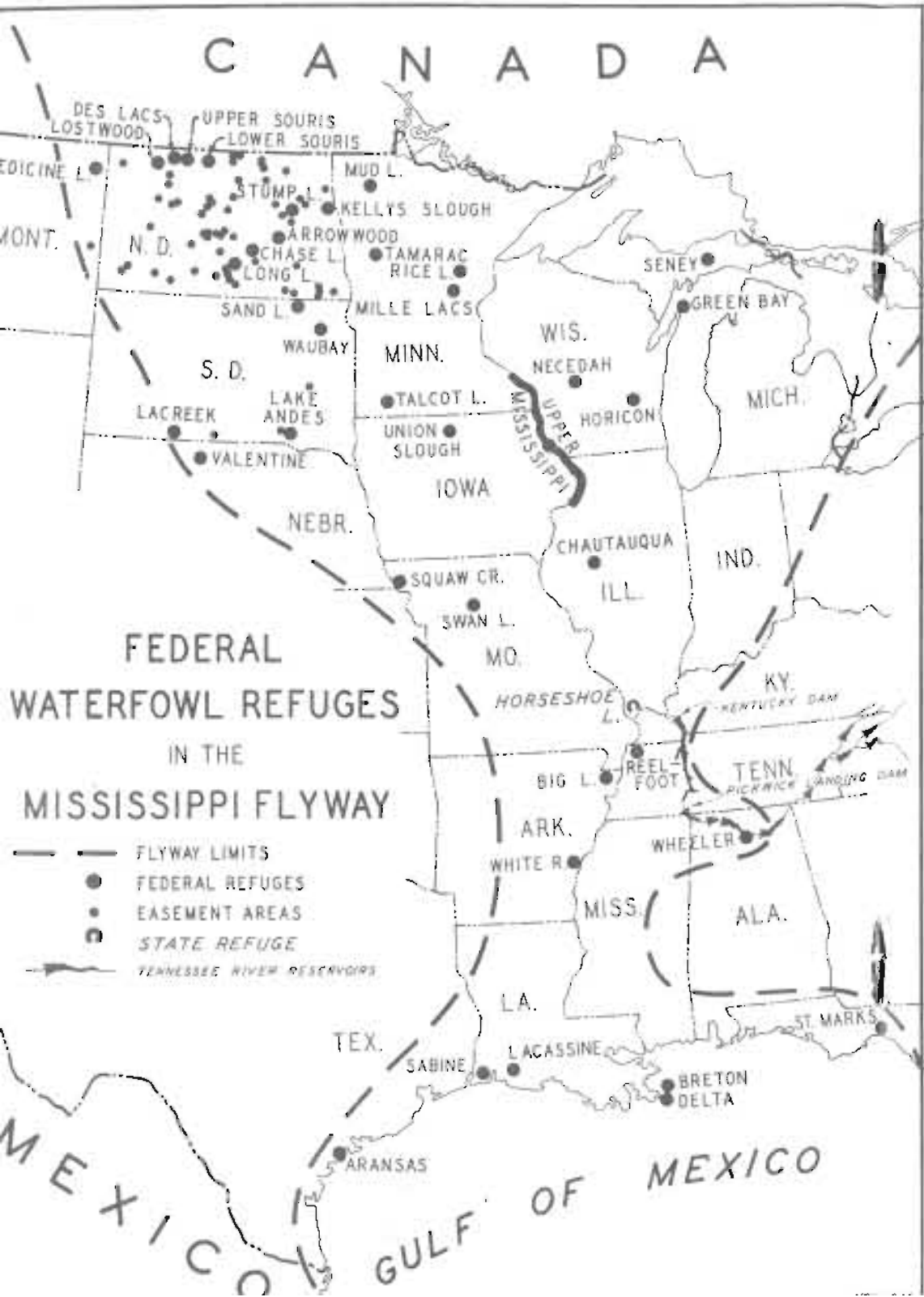
A SYMPOSIUM, BY T. O. S. MEMBERS

In THE MIGRANT for March, 1943, there appeared the first installment of observations under the above title. We requested our members to be on the lookout for further data on this interesting subject and now give these additional observations. Probably another installment will appear next year if enough reports are received meanwhile.—EDITOR.

By G. R. MAYFIELD, Nashville, Tenn.—One of the largest winter bird roosts ever seen in Middle Tennessee has recently been in use in West Nashville, within the city limits. It is bounded roughly by Centennial Boulevard on the north, by 35th Avenue on the east and by 40th on the west. The whole area is about a half mile square and includes a deep, broad valley surrounded on all sides by steep slopes which are covered with a dense, almost impenetrable growth of haws, mock oranges, greenbriers, stunted hackberries and various shrubs. Large elms, hackberries, and other trees grow on the tops of the slopes and furnish a gathering place for the hundred of thousands of birds which spend a noisy night in this area. The fact that hardly a trail, much less a street, passes through this section makes it an ideal spot for the roost. In fact, the place was not definitely located until January, 1944, although it had been in use in 1942-1943 according to the testimony of some people living on the hills near by. One imaginative person declared that these "ricebirds" (Starlings, he meant) had fled from European battlefields to enjoy peace and quiet in Tennessee. He declared that they were so numerous and hardy that crossing the ocean was an easy task for such birds.

As is usual with such roosts few birds are found there by day—only English Sparrows, a few White-throats and White-crowns, Towhees, Doves, Cardinals and some Flickers can be heard in late afternoons before sunset. But about sunset the clans begin to come in from all points of the compass; small flocks at first, then myriads of birds which cover the sky as they mill around before settling in the large bare trees. Then in groups of fifty to one hundred they drop down in the tangled thickets where they spend the night.

It was estimated that approximately a million birds were roosting there during the middle of winter. The writer's estimate of numbers in late February, was 700,000 Starlings, 150,000 Robins, 100,000 Grackles and some 50,000 Cowbirds, Redwings, Rusty Blackbirds and English Sparrows. Others



estimated the numbers as low as 750,000 with some variation in the above proportion. One can make a fair approximation of a flock up to 5,000 birds. Multiplying the approximate number of flocks by the average number of birds per flock gave the figures above quoted.

Among other winter roosts that have existed in Nashville, beginning in 1912, were those on the Vanderbilt campus, Centennial Park, Mount Olivet Cemetery, David Lipscomb campus and vicinity, Woodlawn Avenue at Ensworth, and the West Nashville roost above described. An article on some of the former roosts, by H. C. Monk, may be found in *Journal, Tenn. Acad. of Science*, for Dec. 1933, pp. 362-370.

By LAWRENCE KENT, Memphis, Tenn.—Each evening, during March and for some weeks earlier, "blackbirds" numbering hundreds of thousands converge on Elmwood Cemetery from all directions to roost in the magnolia and holly trees that abound in this eighty acre tract two miles southeast of the business district of Memphis. Observations made of flocks flying toward the roost indicated a high percentage of both Bronzed Grackles and Starlings, small groups of Robins and some unidentified species. At the roosting site, both male and female Redwings were positively identified and probably Cowbirds and Rusty Blackbirds were present, too. At dusk, the birds would dart into the leafy shelter of the evergreen hollies and magnolias from the bare branches of the nearby oaks where they first congregate. Excrement beneath the roosts covers the ground, causing damage to the lots in the area, and numbers of dead birds litter the ground as well. Flocks of Cedar Waxwings were also noted using the roost as well as Myrtle Warblers, Mourning Doves, White-throated Sparrows, Blue Jays and Mockingbirds. The severe hail-storm which struck the city the night of March 26 was not heavy enough in the vicinity of the roost to cause mortality among the birds. (On another page, Mr. Hutcheson describes the severity of the hail-storm referred to above.—Ed.)

By AMELIA R. LASKEY, Nashville, Tenn.—In looking over my notes, I find some further data on roosting to add to my notes printed in the first installment. Flickers have been choosing to roost high up in the peaked gables of our home where they cling to the rough brick and are sheltered by the projecting eaves of the roof overhead. On occasions, one has been in each the north, east and west gables. They go to roost early; a typical December record being four p.m., becoming later as the days lengthen, but always early. One Flicker also has regularly used the Martin house for its roost. In all seasons of the year, thick growths of rose vines on trellis and fence posts have been used by Mockingbirds and Cardinals. A male Red-eyed Towhee spent an entire winter season roosting in a thick mound of bramble vines that had grown several feet high. He always announced his coming with the "chewink" whistle and was among the late-to-roost group at dusk. Juncos regularly used corn shocks as winter sleeping quarters. Purple Finches used the bushes in a dense mixed shrub border, a group of four or five roosting together. In summer, a compact group of five young hackberry trees was very popular with many birds. As there was usually considerable contention among several species, one could not be sure until deep dusk which birds finally succeeded in securing lodging for the night. But even when light was

too dim to see them, the final occupants during one season were identifiable by their "good nights." The sputter of two Brown Thrashers, a soft little song from a Mockingbird, and the distinctive gurgling of a Wood Thrush showed these three species often occupied the clump simultaneously. In *Nature Magazine* of October, 1936 (28:147-148), S. F. Aaron published another article on "Where Do Birds Sleep?"

By SARAH L. WALTON, Rugby, Tenn.—To Symposium No. 1, on roosting, I want to add my observations on how a pair of Carolina Wrens have been sleeping on our front porch since December. The day before Christmas, while on a hunt for a Christmas tree, we discovered a huge hornet's nest which we brought home and hung among evergreens in a corner of the porch. Later, when the 'greens were removed the hornet's nest was left and soon afterward we noted that the opening, or "door," had been enlarged. I thought some bird had been examining the inside to see if there were anybody home. Later, I saw fragments of the nest material scattered on the floor underneath the nest, and discovered that a second hole had been made toward the top of the nest. Then before long one evening on arriving home at dusk, I saw two wrens fly from the hornet's nest and realized that the pair had evidently taken lodgings for the season. This proved to be true and ever since they have spent their nights, snug and warm in that upper and lower room, hung close to the front entrance where people pass in and out, without causing them any inconvenience. We often flash a light quickly to see if all is well and there they are, heads hidden and feathers fluffed to keep out the cold, as happy little wrens as one could wish to see.

By HENRY O. TODD, Murfreesboro, Tenn.—We know that Purple Martins on their southward migration roost in flocks in leafy tree-tops, usually roosts that have been begun earlier by Grackles. No such leafy retreats, however, are available on their spring migration and little is known as to where these early returning migrants spend the chilly nights at that season. In my yard, I have a large 24-room Martin house, erected on a pole fifteen feet above the ground, where these birds nest each summer. The first birds arrived in 1943 on March 17 and on the 23rd a group came in the afternoon and flew in and out of the house, inspecting the various compartments. At dusk, the flock had grown to between one hundred and fifty and two hundred and these gradually entered the house until all were in. So closely did they pack themselves together that finally no more could enter and the tails of the last to go in were protruding from most of the holes. There was good reason, for the thermometer had dropped from 57 degrees at mid-day to 27 during the night. On cleaning out the house a few days later, I found several dead Martins within that had apparently smothered to death.

By ALBERT F. GANIER, Nashville, Tenn.—On a cold rainy afternoon in early February, a female Cardinal entered my garage for shelter and as darkness came on, climbed to a perch on an insulated electric wire, fourteen feet above the floor and a few inches below the peak of the roof. I locked the doors as usual that night when I drove in and next morning found that my guest had gotten out through a small opening above the door. So well was she pleased with her snug, sheltered roost that all through February and to

date (late March) no nights there have been missed, except four when the doors were not open. Throughout that period, this bird had consorted during the daylight hours with a male who with her visited the feeding shelf regularly. He had been "roosting out" but on another cold wet evening in late February he was found to have followed her good example and sought a perch on the wire, a yard away. Not having "learned the ropes" he was found next morning fluttering against the glass before being released. His acceptance of the roost became rather sporadic for ten days, after which he became a confirmed addict and no longer shows nervousness when the electric light is turned on. The two birds, though now about ready to begin a nest, never roost close together but usually from one to three yards apart.

THE ROUND TABLE

EUROPEAN WIDGEONS IN WEST TENNESSEE: On February 21, I observed three European Widgeons (*Mareca penelope*) on Lake La Joie in Chickasaw State Park near Henderson. I observed these birds with a 20-power telescope in good light. The creamy-white crown and rufous-brown neck showed an excellent contrast. This was the first time I have ever observed this bird in any region of the State. There were two males and one female of this species. I had ample opportunity to observe them on the water for some thirty minutes and also in flight. About a week later, I found three Baldpates (*Mareca americana*) east of Henderson on the backwater from the Forked Deer River. This afforded me good opportunity to make a comparison between this somewhat similar species and the European Widgeon above referred to.

On February 21, I heard a Pine Warbler, in full song. I located this bird in the top of a pine tree near Lake La Joie. His song, resembling that of the Chipping Sparrow, was quite spring-like.—ROBERT L. WITT, Freed-Hardeman College, Henderson, Tenn.

EDITOR'S NOTE: This is the first record that has been reported for Tennessee of this species. Chapman's Handbook states that the European Widgeon is of rare but regular occurrence in eastern North America, including the upper Mississippi valley. There is considerable difference in plumage of this species and the Baldpate or "American Widgeon."

A CONCENTRATION OF PIPITS: The American Pipit (*Anthus spinoletta rubescens*) is often a rather common winter visitant here and is at times a plentiful transient during early spring. On March 14, 1944, some three miles southeast of Rosedale, I noticed a flock of Pipits feeding in an unplowed field that had been planted in cotton the year previous. Upon close examination of the field, upward of 5,000 of these birds were flushed, all of them re-lighting in an alfalfa field on the east side of the road—a field of some forty acres. This is the largest concentrated flight of this species I have seen to date. A few Savannah Sparrows were feeding with the Pipits.—M. GORDON VAIDEN, Rosedale, Miss.

A LONG-EARED OWL NEAR DYERSBURG: One of these handsome little owls (*Asio wilsonianus*) was found dead in the grounds of the Air Base a few miles south of Dyersburg, on January 21, 1944. The specimen, a male, was brought to me by friends and finding it fresh I prepared a study skin of it which I have presented to Mr. Ganier. He tells me that this is the first record for the State west of the Tennessee river and that there are only four or five records eastward.—CAPT. BURT L. MONROE, Dyersburg Army Air Base, Dyersburg, Tenn.

A REMARKABLE HAIL-STORM AT MEMPHIS: On Sunday night, March 26, 1944, a severe and devastating hail-storm swept through Memphis. The storm moved from southwest toward northeast in the manner of a tornado. At about 8:15 p. m. I heard a rumble outside above the noise of my radio and begun to feel worried. As there was no great amount of wind blowing, I could not imagine what was happening. Within a minute or so after hearing the first rumble, I began hearing objects striking my house and the volume of noise kept increasing as well as the number of objects striking. Suddenly, there was such a roar of rattling on the roof and breaking out of window lights that I thought an aeroplane must have exploded and was falling in bits all about me. A large hail-stone over 3 inches in diameter and shaped like a lemon, came through the window glass by my radio and rolled across the floor like a ball. The noise was deafening and the house seemed to tremble under the hammering blows. After about ten minutes of this, the storm passed on as quickly as it had arrived. I ran into the yard and gathered up a few large ones and brought them in for examination. They were so cold I could scarcely hold them. Some were as clear as glass, some frosty like a light bulb and some had sharp spikes or "horns" sticking out all around. They averaged 2½ inches in diameter and the large ones were 3½ and weighed about half a pound. The Memphis paper, which printed pictures of some, stated they were found as large as 5 inches and that many auto windshields and show-windows had been broken. My roof suffered a number of bad leaks and a heavy plate-glass table top that could support several hundred pounds was shattered in the back yard by the icy missiles.

One can readily assume that many birds, roosting in exposed locations in the path of the storm, must have been killed. For example, a flock of Horned Larks roosting openly as they do in a meadow, would surely have been decimated.—W. SCOTT HUTCHISON, 2109 Harbert Ave., Memphis, Tenn.

BIRDS KILLED AT NIGHT BY STORMS: The ability of small birds to survive the night, during severe storms when roosting in exposed situations, is always a matter of wonder. In the park on the public square at Bowling Green, Ky., for many years English Sparrows roosted in the leafless trees during the winter where they could be seen by the brilliant illumination of electric lights all about. Of this roost Dr. Gordon Wilson wrote me several years ago: "In the winter of 1933-34, hundreds of the sparrows died in a cold rain that froze on the trees. Professor Lancaster picked up a bushel or more for use in the biological laboratory."

During the later summer of 1936, the writer clipped two Associated Press reports of similar fatalities. Dated Tuscola, Ill., July 25, the first stated that following a two-inch downpour on the farm of L. L. Smith, he had picked up

412 dead Starlings and English Sparrows under a tree where they had gone to roost the night before. The storm had broken a long, hot dry spell. Dated Oxford, Miss., August 13, the second dispatch stated that 300 English Sparrows were picked up dead under their roosting tree on the courthouse lawn following a night electrical and hail storm. "Kenyon Fuller, caretaker at the courthouse, counted the dead birds," the dispatch continued. "Some thought lightning had struck the tree, but there was no mark upon it. Others thought hail killed the birds, but there were no dead birds under other trees nearby. The storm broke a heat wave."—ALBERT F. GANIER, Nashville, Tenn.

RED-BREASTED NUTHATCH NOTES: To Mr. Stevenson's notes on this species at Oxford, Miss., in the last issue, I would like to add two records at Hickory Flat, 30 miles northeast. They were first observed on Feb. 6 and again on Feb. 13. in pine woods. The two of them were almost constantly giving their little call. I was searching at the time for Brown-headed Nuthatches, occasionally found here, but none of these were found. The other birds on my list were commoner ones and among them were Red-shouldered Hawk 1, Coopers Hawk 1, Sparrow Hawk 2, Turkey Vulture 2, Pileated Woodpecker 1, Hermit Thrush 1, Bronzed Grackle 50, and Blue Jay 14.—FLOY BAREFIELD, Memphis, Tenn.

THE SEASON AT OXFORD, MISS.: The period from Jan. 1 to March 15 has been featured by mild temperature except for the first half of January and one cold snap in February. Although a low temperature of 12 degrees was recorded about Jan. 12, followed by a 6-inch snow on the 15th, no new northerly birds were found to have moved in. Of interest however on the latter date, was the finding of a Pine Warbler among some evergreen shrubbery and the unusual number of 18 Flickers during an hour's trip afield. Single Pine Siskins and Red-breasted Nuthatches were found on Jan. 30 and Feb. 19, respectively.

Species wintering around Oxford began migrating early in the period. Robins and Cedar Waxwings began to appear on the Ole Miss campus around Jan. 18, soon followed by Grackles, Mourning Doves, Meadowlarks, and Killdeer. At about the same time Cardinals, Mockingbirds, Bewick's Wrens, and Field Sparrows (Feb. 19) began to sing. Brown Thrashers were heard first on March 7. Three non-wintering species have arrived to date: Vesper Sparrow, Feb. 29; Purple Martin, March 2; Black-throated Green Warbler, March 10. The last of these records is extremely early. The individual, a female, was viewed through 8X field glasses by the writer and all members of the ornithology class. It was associating with several Myrtle Warblers in a clump of red cedars in the Oxford Cemetery. As I had not previously visited the spot, I had no way of ascertaining whether this individual had wintered. On the same date a flock of 12 Brewer's Blackbirds was discovered; whether this species winters here is also uncertain at the present time.—HENRY M. STEVENSON, Dept. of Biology, Univ. of Mississippi.

NOTES FROM CLARKSVILLE: Our Leconte's Sparrows in the river bend above Clarksville were beset by trials. First their territory was burnt over and then the river flooded for a while the thinner stands of old grass they had to take. Yet they stayed on. We called on them March 13 and also

saw the Short-eared Owl that had winter quarters there. The field between Lock B and Marks' Slough was looked over on March 26 and there were as many Leconte's Sparrows on hand as before. We estimated a dozen of them. The Short-eared Owl had roosted some more in that field, but the pellets we found were much rain-beaten and the owl was not seen that day.—In the marsh near Dunbar's Cave the Short-billed Marsh Wren was still full of curiosity on January 23. The next time we looked for him was a month later, but we had to mark him absent.—Robins returning in early February could have enjoyed the rest of an abundant crop of hackberries, had it not been for the hordes of Starlings that cleaned up all that was left.—Dr. Pickering reported the arrival of the Purple Martin on March 7. The same day he saw a single Chimney Swift, fully three weeks ahead of schedule. So far spring has been mild and early.—On March 26, 2 Lesser Yellowlegs, 4 Blue-gray Gnatcatchers and 7 La. Water-thrushes were recorded, the latter in such numbers that they must have arrived some days prior to this date.—ALFRED CLEBSCH, Clarksville, Tenn.

COWBIRD DATA FROM A BANDING STATION: Since 1935, I have kept records of nests found with Cowbird eggs and foster parents feeding Cowbird young. I have now 20 instances of parasitism, involving 7 species as hosts. There is one case each for Warbling Vireo, Yellow Warbler, and Brown Thrasher; two cases each for White-eyed Vireo and Towhee; three instances for Northern Yellowthroats; ten instances for Cardinals. In addition, William Simpson removed a Cowbird egg from a White-eyed Vireo nest in late June 1936 and found a Cowbird egg on the ground in 1937. All observations were made within two miles of my home, excepting one in Centennial Park and one in Edwin Warner Park. Seven of the juvenile Cowbirds have been banded (the Centennial Park individual in 1939 through courtesy of H. C. Monk). To date none of these has been found in later seasons.

At my home station, from 1935 to 1943, I have trapped, for banding, 30 Cowbirds: 10 adult males, 11 adult females, and 9 immatures. Of these, 4 females and 1 male have been trapped in subsequent years during March, April, or May as returns. Three of these females returned the year following banding; the other female, which had been banded in immature plumage in June of 1940, was not retaken again until May 1943, repeating in June. The history of the male, now about five years old, is significant for it indicates this male has occupied territory near the banding station for several years. He was banded as an adult in June 1940, retaken March 31, 1942, April 25, 1943, and March 16, 1944, with some repeat recaptures and sight records during breeding seasons.

Herbert Friedman (1929, *The Cowbirds*, pp. 175-177), observing unbanded Cowbirds, presents evidence to show that not only do males establish territory boundaries, but females also may occupy restricted areas during their breeding season. He states (p. 171), "... there is more or less definite pairing among the birds. My experience has been that if the birds are not strictly monogamous, at least the tendency toward monogamy is very strong." He cites Alexander Wetmore's corroborating experience.

Since last year, the Cowbirds frequenting my banding station have been color banded. It is hoped that by means of sight identification, as well as

trapping, enough data may be accumulated to understand territorial behavior and mating habits of this species in Tennessee. Do they pair, will a pair remate in other seasons, are they polygynous, polyandrous, or promiscuous?—AMELIA R. LASKEY, Graybar Lane, Nashville 4, Tenn.

GREAT-HORNED OWL KILLS DUCKS: On June 15 last, Dr. Thomas Butler, who lives in the Lealand section near the writer, told me that eight of his young ducks had been killed, but not eaten by the unknown predator. A few days later, three more were killed. The ducks had been enclosed in a covered pen and in a loose opening above, some feathers of an owl were found caught in the wire. We set a snare and that night Dr. Butler caught in it an adult female Great Horned Owl, which incidentally, smelled strongly of skunk. The owl was disposed of as one which had learned bad habits. Two weeks later, owls were reported in the open woods not far away. Investigation showed these to be two adult-sized young of the above species. As evening became dark we could hear first one, then the other, calling as they flew from tree to tree. The note is a peculiar *Keee-ent!* and I was at a loss to identify it until I saw the two birds fly into a dead tree where I could see their ear-tufts outlined against the sky. These owls nest regularly in the Overton hills forest, a half mile south.—WALTER R. SPOFFORD, Nashville, Tenn.

NOTES FROM MURFREESBORO: A Barn Owl, perhaps a pair, are still making their home in a big hollow oak tree in the yard of Prof. George Davis at the edge of town. During a freezing night, the last of January, one evidently got very wet and the cold which followed froze the water on its feathers so that when it attempted to fly next morning it fell from the tree.—A Cooper's Hawk nest, visited last summer on July 11, was found to have grown to very large size due to additions made through a period of 6 or 7 years usage. Two young birds nearly ready to fly were found dead on the ground and partly eaten while two more were found dead in the nest. Probably some farmer had shot them.—A Florida Gallinule was forced down by a hard rain on the night of April 10, 1942, along with 5 Pied-billed Grebes. The latter were found helpless on the paved highways, which they had evidently mistaken for a waterway in the semi-darkness. They were banded and released on a pond.—A Blue Goose, which had been wounded and then captured from a small flock, on April 25, 1928, is still in possession of the farmer who captured it. When seen last month, it was still in good condition and is now at least 15 years old.—HENRY O. TODD, Murfreesboro, Tenn.

FOX CAPTURES PILEATED WOODPECKER: Mr. M. B. Sheppard, of Hartsville, Tenn., recently related to me an interesting occurrence where a grey fox captured an adult Pileated Woodpecker, in a tract of his "new ground." The bird it seems was digging into the base of a rotten stump for grubs, as they frequently do. At the time, the excavation was being made at about ground level. From the edge of the wood some paces distant, Mr. Sheppard saw the fox stealthily approaching his quarry. Whenever the woodpecker stopped to look about, the fox would stop also, partly hidden by grass and the old stump. Finally, after one such pause, the fox having approached to within a few yards, rushed swiftly forward, seized his prey and bore him off before Mr. Sheppard could come to the rescue.—HENRY O. TODD, Murfreesboro, Tenn.

CHAPTER MEETING DATES, OFFICERS, ETC.

NASHVILLE: Evening meetings are held the 2nd and 4th Mondays in each month, at 7:30 p. m., in the West Parlor of the Social-Religious Building of Peabody College. A spring field day will be held on Sunday, May 14, at some location close to Nashville. Prof. Robert Hawkins is president, Conrad Jamison is vice-president, and Dr. Katherine Anderson is secretary-treasurer.

MEMPHIS: Evening meetings are held on the 3rd Thursday of each month in the National Bank of Commerce Bldg. The spring field day has been set for Sunday, May 7th, probably at Raleigh Springs. Chapter officers are Mrs. Irene R. Daniel, president, Miss Mary Davant, vice-president, Miss Pauline James, secretary, and Lawrence Kent, treasurer.

Our **KNOXVILLE** chapter is having monthly outings at various nearby points of interest and is scheduled to take the usual spring bird census at the Island Home reservation on April 30th.

State officers for the T. O. S. will be elected by representatives from the various chapter at the Nashville field day of May 16. These officers will take office as of July 1, 1944.

NOTES, HERE AND THERE

Tennessee is to be entertained by two of our best lecturers on bird life during April and May, thanks to the Tennessee Department of Conservation and the National Audubon Society. The speakers will make addresses at Memphis, Jackson, Nashville, Chattanooga and Knoxville. On Monday, April 3, Edna (Mrs. Karl) Maslowski, is scheduled to make her Nashville address, entitled "A Naturalists Diary," in the War Memorial Auditorium at 8 p. m. Her talk will be illustrated by reels of the splendid color movies she has helped her husband to make. On Monday, May 15, Alexander Sprunt of Charleston, S. C., will deliver his Nashville talk, at the same time and place, and will bring with him some of the fine color films of bird life that have been taken for the National Audubon Society in its many refuges. Both speakers have been invited to arrive in Nashville a day early (on Sunday) so that local T. O. S. members may be able to take them afield.

The Starling is again the cause of complaints. Members seeing these black, sharp-winged birds, flying into their bird houses in early spring are apt to be recording them as Martins by mistake. Also, hearing and not seeing a spring arrival from the south is no longer a valid record until one has viewed the suspect and thus made sure it was not mimicry by a Starling.

While checking on the arrival of spring migrants, readers will find it of interest to compare their dates with the tabulation "Arrival of Spring Migrants at Nashville," for which see *THE MIGRANT* for March, 1936, page 6.

More than thirty sets of *THE MIGRANT* (1941-1943) have been received for binding, as per announcement in our last issue. There is still time to get in a few more sets under the contract price.

We have recently completed several files of this journal and would advise those who have been intending to do so to secure copies while they may still be had. That the price asked is reasonable may be realized by noting that some early volumes of our contemporary, *THE CONDOR* sell at ten and twelve dollars.

To our Knoxville chapter, we acknowledge with thanks a gift of ten dollars toward our publication fund.

THE MIGRANT

A QUARTERLY JOURNAL DEVOTED TO THE STUDY OF TENNESSEE BIRDS
PUBLISHED BY THE TENNESSEE ORNITHOLOGICAL SOCIETY

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

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EDITORIAL

The war wears on and those of our young members who are in the armed services of our country, find the months growing into years. If spring finds them yearning to be back again in the green hills of Tennessee, we can assure them that those who remain behind are wishing them an early and safe return, to again take up the American way of life they left behind. Meanwhile however, there is an earnest task ahead and there can be no turning back short of victory. This applies also to those of us left at home who must do without many of the things that made life pleasant. The writer is tempted to mention the names of many of our active workers who are already overseas or nearly ready to go but lest he leave out some well deserving name, personal mention will be deferred until an accurate listing can be made.

In our next issue it would be timely to have notes covering the nesting season for by then, this interesting period will be well along. The finds described need not necessarily be rare ones, for the facts about all our birds and their nesting habits are ever new and varied. Round-the-year studies of some of our permanent residents is also an interesting and little worked field that some of our members could profitably take up. Such a study, for the Cardinal was published in our issue of March, 1941.

Lieut. Coffey was invited to review Mr. Lowery's report on Swift migration, in view of the fact that he has been our most assiduous student of this subject in Tennessee. His banding of this species at Memphis has extended over a period of ten years, during which time over 35,000 bands were placed there and numerous other birds trapped and examined. His work was interrupted by his entry into the armed service in June, 1942.

Many of our members, in the armed service and elsewhere, are "on the move" so much that their copies of THE MIGRANT are coming back to us undelivered. Please therefore keep our secretary, Mr. Clebsch, advised of any new address.

A new lot of 2000 T. O. S. bird listing cards has come from the printer and are now available for members. Since these were first gotten out, in 1916, more than 25,000 have been printed and used.

An author's index has been prepared for the 1941-1943 volumes and shows that there were 57 contributors to these issues. Copies may be had gratis, from the editor. Contributions for our June issue should be on hand by June 1.

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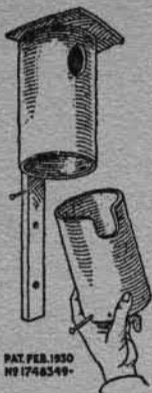
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