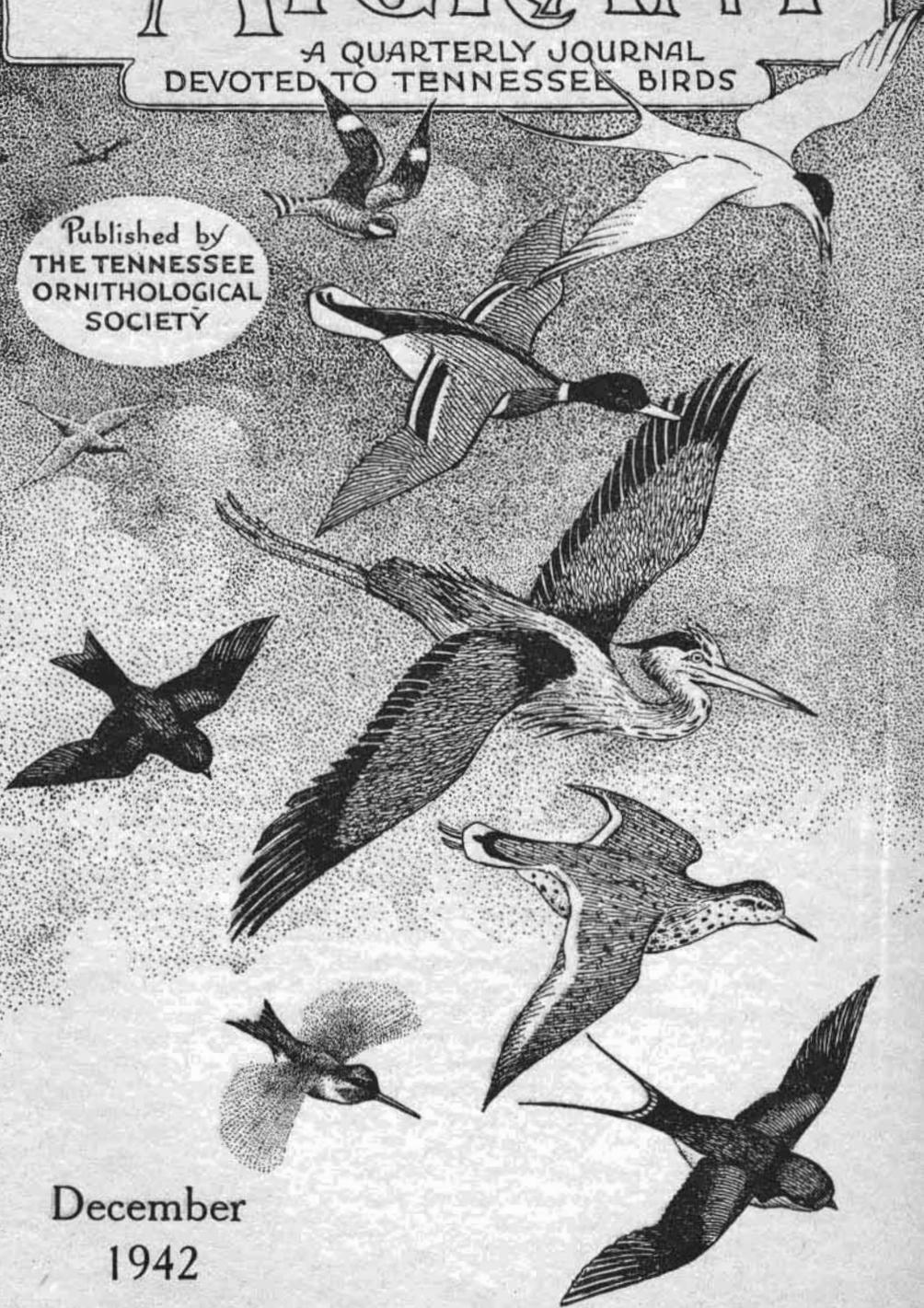


THE MIGRANT

A QUARTERLY JOURNAL
DEVOTED TO TENNESSEE BIRDS

Published by
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A NOVEMBER WEEK WITH REELFOOT LAKE BIRDS

By CHAS. F. PICKERING

Much has been written of the summer birdlife of Tennessee's extensive earthquake lake but few have elected to go in with the gunners on the opening week of the hunting season to indulge in the more peaceful pursuit of bird study with field glasses and camera. The practicability of such a venture this year however was made possible by the establishment of large waterfowl refuge areas on portions of the lake and the prohibition of hunting in these areas by Federal wardens assigned to their protection.

Along with fellow-members I arrived at our hunters clubhouse on the west shore of the lake, on Nov. 1, 1942, and spent the next six days enjoying my avocation. While my friends were blasting away at the waterfowl with guns and a vast battery of ammunition, I spent my time in the refuge areas with nothing more deadly in my boat than a battery of cameras. It was necessary of course to have permission for this and a permit was secured from the Fish and Wildlife Service of the Department of the Interior. The permit having been shown to and graciously approved by Mr. Harry Adams of Samburg, officer in charge of refuges, I was then free to roam the lake at will.

The refuge areas, most of which are shown on Federal maps of the lake, include Brewer's Bar, Burnt Woods, Black-jack Hollow, Campbell Gap, Buzzard Slough, etc.—an area about three miles wide and six to eight miles long—between Samburg and Blue Basin which is near the north end of the lake. The area between Blue Basin and Walnut Log is also a refuge. These areas are studded with both live and dead cypress trees, situated where the water stands from two to six feet deep, and include considerable areas thickly grown with aquatic vegetation, much of which affords food for waterfowl.

A great number of hunters were on hand to "open the season" at 7:21 a. m., Nov. 2, and after the shooting had been in progress a bit, most of the ducks began to leave the basins and seek the refuges. They soon learned in what areas they were safe. I followed them on in and had a most interesting time watching their habits and making photographs. These were both stills and motion pictures, the latter mostly in color and taken with a six inch telephoto lens. One reel was made in slow-motion and is quite interesting in that it shows the wing-beats of the ducks in detail. I spent six hours that day in the Brewer's Bar area and ducks were everywhere, flying close to me frequently, so I had no trouble in getting all the pictures I wanted. The species of ducks chiefly seen were Mallard, Gadwall, Pintail, Ring-neck, Lesser Scaup, Redhead, Canvasback, Shoveller, Blue-wing and Green-winged Teals, Bufflehead, Ruddy, and a few Wood Ducks.

My permit allowed me to be accompanied by a guide, so on Tuesday I spent the entire day with a "pusher" in several of the refuges. We covered practically all of the closed areas and ducks were everywhere. These guides ordinarily go with hunters in search of ducks to kill and many of them are not sold on the refuge plan. However, on this day I think I convinced the guide who went with me that this protection was for the ultimate good of the hunters as well as the ducks.

Geese were also moving across the lake and on Wednesday I kept count and noted twenty twenty flocks of them. The great majority were Blue Geese but there were usually fifteen or twenty Snow Geese in each of the flocks. The flocks had from one to three hundred and my estimate of the twenty flocks seen that day would be between three and four thousand. These Blue and Lesser Snow Geese do not remain on or about the Lake any great length of time for nearly all of them move on down to the Gulf Coast in Louisiana, where there are thousands of acres of refuge marsh lands. In these refuges they find food and safety until the urge of spring migration starts them back on their long flight to Hudson Bay.

Most years, a feature of the autumn birdlife of the lake is the immense number of blackbirds going to their roosts in the sawgrass flats each evening. These flocks are of Grackles, Starlings, Cowbirds, Rusty and Redwing Blackbirds. In years past I have seen them in flocks that would darken the sky in passing. During the present visit however, they were notably scarce, the flocks being fewer and smaller numbers in each flock. It is probable that they were concentrated in greater than usual numbers in the rice fields west of Memphis, where a very large crop of that cereal was planted this year.

The prettiest sight I saw was that of thousands of Tree Swallows over Blue Basin. Thousands would be in the air and then suddenly sail down and many alight among the branches of one of the old dead cypress trees and literally cover its branches. Their white breasts made it look as though the tree had been suddenly visited by a snow storm. (See illustration.) In order to get pictures, I would paddle the boat to windward and then let the breeze gradually drift the boat toward the tree, thus keeping myself very still. By this technique I was able to drift as close as ten feet to them, then suddenly, all the "snow" would instantly disappear. It was interesting to watch them feed. They would hover close to the surface of the thick floating moss and pick insects, worms, etc., from its carpetlike surface, reminding me much of Least Terns in the air. At times, they would indulge in play in the air. For example, one would be seen flying about with a feather in its beak, then flying above the flock it would release the feather, upon which hundreds would dart to catch it. The lucky one would fly up again to repeat the procedure and this would be continued for a long time.

The six days I stayed at the lake were spent entirely in boats, and as I did no walking I saw and listed very few land birds. Some flew over the water, however, or lit on the snags, such as Bluebirds, Flickers, Crows and the "blackbirds" mentioned. Two summer birds that are a feature of the lake—the Least Tern and the Prothonotary Warbler—had already left to seek a warmer climate.

CLARKSVILLE, TENN., November 15, 1942.

IMITATION OF OTHER BIRDS BY THE STARLING

By GEORGE R. MAYFIELD

The first known record of the European Starling (*Sturnas vulgaris*) in Middle Tennessee was of 300 birds roosting on Centennial Hill at Nashville, on Dec. 9, 1921, they having been identified by H. C. Monk who continued to observe them there. The first nesting pair in the Mid-Tennessee Basin was seen about 2 miles east of Woodbury, in Congressman Houston's yard, by Vernon Sharp, Jr., and the writer on June 9, 1927. The following year, our Nashville group found several pairs nesting in telegraph poles along the Murfreesboro road three miles southeast of Nashville. In 1929 a pair of these foreigners (possibly two) was suspected of nesting on the Vanderbilt Campus, as they spent the spring and early summer there. By 1930 several immature birds were observed as they chased the parents and squawked for food.

That same year in the early spring, my attention was directed to the song of a White-throated Sparrow in the top of an elm tree near the Barnard Observatory. Such an unusual procedure for that area caused me to look for the wandering Whitethroat. To my surprise it turned out to be a Starling whistling, chattering and clucking by turns. The sweet whistle of this northern sparrow seemed to intrigue him for he came back to this melody again and again as if pleased with his rehearsal. The Meadowlark and the Wood Pewee were next in frequency in his repertory. Then it dawned upon me that some stray calls of the Meadowlark in 1929 and in earlier 1930 were what they seemed to me at the time—nature faking. And then and many times since then I have mourned the fact that my beloved Vanderbilt Campus had ceased to be a dependable auditorium for recognizing the presence of any given species. Listeners from now on must become observers if they would be sure of the identification.

Since 1930 I have added thirty or more species to the list of birds heard imitated by the Starlings and these imitations are generally accurate enough to deceive the most experienced bird students. Individual Starlings vary greatly in the extent and variety of imitations even more than do the Mockingbirds themselves. In March, 1941, a male Starling with a nest in the making nearby was heard to imitate fifteen different species in a short space of time. From my notes of the past twelve years the following tabulation has been made to give the readers of THE MIGRANT some idea of the species imitated and comparative frequency.

I.—Species first imitated and today most commonly mimicked (5) are the Meadowlark, Cowbird, Bronzed Grackle, Redwing Blackbird and White-throated Sparrow. It will be noted that the first four are in the same general family and their voices are noisy, highpitched, and distinctive.

II.—Species commonly imitated by many Starlings (11) are the Bluebird, Bobwhite (female call), Cardinal, Carolina Chickadee, Flicker, Mockingbird (he mocks the Mocker), Wood Pewee, Robin, English Sparrow, Downy Woodpecker and Hairy Woodpecker.

III.—Species whose notes are infrequently imitated or seemingly preferred only by certain individual Starlings (18) are the Bobwhite (male), Goldfinch, Sparrow Hawk, Blue Jay, Junco, Kildeer, Prairie Horned Lark

(flight call), Nighthawk, Solitary Sandpiper, Yellow-bellied Sapsucker (or the Red-shouldered Hawk), Summer Tanager, Tufted Titmouse, Brown Thrasher, Towhee, Myrtle Warbler (chip), Cedar Waxwing, Carolina Wren and Red-bellied Woodpecker.

NASHVILLE, TENN.

SANDHILL CRANES NEAR KNOXVILLE

By HARRY P. IJAMS

The most important record made here in recent years was the observation of a flock of Sandhill Cranes (*Grus canadensis*—suhsp.) near Seymour, Sevier County, by Theodore Blair, a farmer of that vicinity. This point is fifteen miles east of Knoxville. Mr. Blair estimated that there were fifty of the birds and stated that they had fed in his wheat field for three days, Oct. 22-24, 1942. He shot one of them and very wisely brought it to Knoxville for identification. It proved to be a mature female in beautiful plumage. Its length was 45½ inches and its wing-spread was 73 inches. A striking field mark—a bright red featherless pate extending down to a line through the eye—was very conspicuous. The bird was turned over to S. A. Ogden who made a splendid mounted specimen of it. Eventually, it will be placed in the University of Tennessee collection or in the prospective Smoky Mountains National Park Museum.

Mr. Blair's estimate of fifty birds sounds like a lot to me. I had the idea that there were not many more than that in existence, to the north of us at least, and had observed only two or three individuals (the Florida subspecies) in the Everglades. A farmer's estimate however is generally conservative and when he says there were fifty of these big, conspicuous birds, you can put it down that there were a lot of them.

Natural History Magazine for November, contains an article about Sandhill Cranes, in which it is stated that they are staging a come-back. I am glad to make a report of Mr. Blair's observation since it helps to confirm that statement. A. C. Bent in his *Life History of N. Amer. Birds* records observers as saying that these cranes often feed in wheat fields in the autumn and become quite fat on the fallen grain they are able to glean. They are said to eat considerable green food too as well as grasshoppers and other insects. They therefore differ from the herons in their food habits in that small fish and aquatic animals play only a minor part.

This is the fourth recent Tennessee record for this species. Previous records are of one shot near Chattanooga, June 1, 1936, and now mounted at the University of Chattanooga (*MIGRANT*, 1936:24); a flock of thirteen observed near Crab Orchard, March 13, 1939, (*MIGRANT* 1939:16); and a record by J. M. Edney, of a mounted specimen in the State Normal College at Murfreesboro (*Journal, Tenn. Acad. of Science*, 1940, 15:401), who states that it was shot from a flock of four, in Bedford County near Shelbyville, in August, 1936. Whether these specimens are the northerly Sandhill Crane or the slightly smaller and darker subspecies, the Florida Crane, cannot be determined until critical examination has been made of the three mounted specimens above mentioned.

KNOXVILLE, TENN., Dec. 1942.

FURTHER NOTES ON BARN OWLS

By WILLIAM SIMPSON AND CONRAD JAMISON

In this journal, for 1939, p. 76, and 1940, p. 97, the writers described nestings of this species on Woodmont Boulevard and in Bellemeade, in the outskirts of Nashville. In late December, 1941, the above nesting trees were again visited and climbed but the cavities were not in use. A dwelling had been built 25 feet from the Woodmont tree. During the last week in December, 1942, we again visited the above sites with the following results.

Passing the Woodmont site, at 3:00 a. m. on the morning of Dec. 28, the owls were heard giving out their rasping notes, and this they kept up almost continuously. Later in the day, we returned with ropes and climbed the big living oak tree to the cavity. An adult bird flew out and in the cavity were found two nearly grown young and another that had died. The two were banded, after which one of them flew from the nest. The people who lived in the newly-built house adjacent to the tree, objected to the noise given off by the birds saying that it kept them awake. They had shot one of the adult birds the previous week. Since they threatened those remaining, we decided to remove the small family and reestablish them elsewhere. On the 29th, we found two owls in the hollow, one of which escaped and the other, an adult female, was removed. In the large cavity where the young were, as well as on the ground below, there were numerous pellets in which the skulls of small rodents could be seen. On the 30th, we again returned and found the two young which we had previously banded and these also were removed. In the nest this time was found a freshly killed, half grown cotton rat, from which it would appear the young had already begun to hunt for themselves. The people who had come to live in the new house claimed that the owls had been seen to carry small rabbits to the nest during the summer months. All owls found using this tree in 1939 and 1940 were banded but the 1942 adult wore no band.

The Bellemeade site was visited on Dec. 29 and a Barn Owl was flushed from the cavity before the tree was climbed. This nest was also in a large living oak tree. Examination showed that no eggs or young were in the nest.

At Franklin, Tenn., 20 miles south of Nashville, on the night of Dec. 29, accompanied by Arthur McMurray, we located another nest, by hearing the young make their characteristic calls. It so happened that we were taking our "dates" home when we heard the birds as we walked by. Much to the young ladies' (I fear) disgust, we hurried them on home and immediately came back and located the two young, sitting in the entrance cavity and begging for food. The two adults were feeding them and all could be seen each time a passing auto illumined the tree. The following morning the tree was climbed by Simpson who banded the nearly fledged young. This nest was in a high living white oak tree, 8 feet in diameter, which grew on the lawn of an old home a block from the business district. The elderly lady who owned the place was much interested in their welfare and told us that Barn Owls had nested in this tree all during the 55 years she had lived there. During the Civil War, soldiers were said to have used this hollow, at the very top of the trunk and 60 feet above the ground, as a lookout station. Only pellets were in the cavity with the two young but

on the ground below were found a meadow mouse and a rat, probably dropped by the young the night before.

These, and our previous records, would seem to establish the fact that fall nesting of this species in Tennessee were of regular occurrence. It is probably caused by the fact that rodents are numerous at this season and more easily seen and captured when the grass is dead.

NASHVILLE, TENN. (C. J.) AND MEMPHIS, TENN.. (W. S.)

OBSERVATIONS ON THE MOULT OF A GRYFALCON IN TENNESSEE

By WALTER R. SPOFFORD

In January, 1942, Col. Luff Meredith sent the writer a young Gyrfalcon from southern Greenland. Although far to the south of her normal range, the falcon thrived and went through her first moult uneventfully while here in Nashville. This is the farthest south of any such record except for a Russian Gyr flown for several years by Mirza (prince in persia) in the 1850's. Probably the Gyr can stand hot weather as long as the climate is dry. Iceland Gyrs brought over to England in the middle of the last century contracted a form of asthma and most of them died in less than two years, but the older literature attests the great success there of the old falconers not only with the Norway (Gray) Gyrfalcon, but with the Iceland and white Greenland falcons as well.

During fine weather, my falcon "Narsa" sits on a block perch on the lawn, and at night on a "screen" porch in the hawk house or "mews." Under favorable circumstances, she is flown free to the lure, but she has not been entered to live "game." During the hottest days of summer, even though in the shade, she lays on the ground in the deep grass and can not be seen from ten feet away. When hot, she pants much like a dog, (as also did a "passage" caught Peregrine believed to be arctic in origin, while a local Peregrine showed no distress whatever). In spite of the heat, she remained in excellent condition in a climate more than 1500 miles south of her normal range. In January her plumage (immature) was predominantly light brown above, and white, fairly heavily streaked with dark brown, below. (There were two or three adult or gray feathers between her shoulders.) From April through September she dropped all of her flight feathers and most of her contour feathers as well. She was plentifully fed throughout the moult period, mostly on fresh beef, beef heart and pigeon. The meat was occasionally supplemented with dicalcium phosphate and haliver oil. Her weight during this period was about 54 oz., and her present flying weight is 51 oz.

In order to readily follow the moult described below, reference may be made to the plumage and wing diagrams shown on another page. The old primaries dropped and were replaced in regular sequence, beginning with number 7 (the "moult center") and proceeding outward towards number 1 and inward toward number 10 from this point. The actual sequence was numbers 7-6-5-8-4-9-3-2-10-1, which can be broken down into two series, an inner number 8-9-10 and an outer number 6-5-4-3-2-1 both proceeding from number 7 at the same time. Most variations in the order of

feather replacement can be explained by relative differences in the rates of the two series. Usually the outer series drops two, to one of the inner series, and hence the last to fall out, number 10 and then number 1, may be close together, or even reversed. Differences within either series, however, are very rare, but Stabler (1942) has recorded a Peregrine with a moult center at number 8 one year and number 6 the next, in the former case the sequence being numbers 8—6—7, a true reversal.

On April 11, Narsa dropped number 7 and a few hours later, number 6, on the right wing, and number 7 on the left. Within ten days she had lost four (7—6—5—8) on each side, and by May 12 she had also dropped number 4 and number 9. In early June number 3, and in middle July, number 2 and number 10 dropped. The outermost (number 1) dropped on August 10, was the last to go. Both right and left feathers dropped out on the same day in the cases of number 7 and number 1, and there was never more than five days between members of a like pair. Two weeks after each feather was dropped, the new feather sheath was nearly two inches long, and the tip of the developing feather was unfolding from the sheath. Primary number 7 was complete in six weeks, but number 2, a longer feather, took nearly ten weeks. It is difficult to be sure just when the feather is full in, because the growth, rapid for the main part of the feather (over an inch a week), falls off during the last week or more, the base or quill being formed very slowly. The primary coverts were replaced along with the primaries, and seemed to follow similar sequence, but in a careful study, Stabler ('42) has found that the coverts in both Peregrine and Gyr drop in a different order (8—7—9—6—5—4—10—3—1—2). The feathers of the false wing (allulae) fall out in the order 3—2—4—1, the moult center hence being at number 3.

Records of the secondary remiges (flight feathers) were not complete, but the first moult center is at number 5 and spreads inward and outward from there, the initial order being number 5—6—7—4—8. The later sequence was not kept and the presence of another center in the innermost feathers (numbers 10—11—12) was not observed. "Narsa" dropped numbers 5—6—7—4 in the latter half of April, but more slowly after that; number 11 dropped in late August, and both number 1's on September 18.

The "train" or tail began with the "deck" feathers (middle, or number 1's), on May 9, and the last pairs to go, 4's and then 5's, in the middle of August. The replacement order was numbers 1—2—6—3—4—5. In this tail series, the number 6 (the outermost pair) is an additional moult center, and perhaps in birds with a large number of tail feathers, number 6 may be the beginning of a second series, (such as the three moult centers in the secondaries of accipiters, according to Miller, 1941). Tail feathers numbers 1, 2, 6, and 3 dropped (each pair) about three weeks apart, but the 4's and 5's fell out in four days, only two weeks after the 3's.

Complete data of the contour feather moult was not kept, but numbers of these small feathers dropped from the head, back, breast, panel and flank in April and by August her plumage was more than half renewed. Several new gray feathers appeared early in the moult symmetrically placed in the dorsal mantle (shoulder) region and in general the moult was symmetrical. Small feathers seemed to drop in "showers" lasting for several days, followed by very few for the next week or ten days. Each shower was brought about by the falcon working all over her plumage with her beak, dressing down

and pulling at the feathers, which dropped out by the dozen. The explanation of the showers lies not in any internal rhythm, but probably in the fact that the feathers loosening in their follicles irritate the falcon. Her response, in working over them, results in not only the loose but also all potentially loose feathers dropping out and hence there is some time before a new "irritation" develops.

Although many small feathers are still unmoulted, the only prominent patch of these at the time of writing (Dec. 1, '42) is the lesser wing coverts, they forming a conspicuous brown patch on an otherwise ash-gray and white bird. At present the contour feathers of her upper parts are light gray, her flight feathers gray barred with lighter gray or white, and her underparts white with numerous drop-shaped black markings. Her much whiter head at once distinguishes her from the also gray (but more bluish) Scandinavian Gyr. In general, her whole appearance is much lighter after her moult. Although the Gyr has a bare unfeathered tarsus and toes, there are two or three minute feathers on the medial side of the hind toe, and the same on the lateral side of the middle toe. Those of the hind toe disappeared in August, and have not been replaced. The middle toe group is still present and no moulting has occurred there yet.

Narsa is apparently a fine example of the Iceland Gyr (*Falso rusticolus islandus*), but those breeding in south Greenland are probably not as genetically pure a stock as those breeding in Iceland (where it is the national emblem!), as the following data show. The following records, from eight young falcons (seven females and one male) brought from Greenland during the last six years by Col. Meredith, show the influence of the light colored Polar Gyr (*F. r. candicans*) in northern Greenland and the dark, continental or "Labrador" Gyr (*F. r. obsoletus*). Thus while the young from two eyries were typical Iceland birds, three young from another nest had the pure white head and underparts of the polar type, but the more heavily marked Iceland wing. A fourth nest held one very dark Labrador type, and one very light bird with obvious Polar characters. Unfortunately, there is apparently no record of any of the parent birds, as the young were all brought in by Esquimaux.

In conclusion, it is a pleasure to acknowledge the kindness of Mr. R. G. Turner of the Tennessee Division of Game and Fish in granting permission to keep a falcon and to the National Geographic for use of the diagrams.

NASHVILLE, TENN., Dec. 1, 1942.

References cited.—MILLER, 1941, *Condor*, v. 43, pp 113-115, and STABLER, 1942, *American Falconer*, v. 1 (3) pp 6-12.

ANNUAL CHRISTMAS CENSUS

By OUR MEMBERS

The MIGRANT presents its 14th annual census of mid-winter birds which, in spite of handicaps incident to the war effort, is one of the best we have had. The success of this list comes from the accumulating experience of our observers who, regardless of weather conditions, go afield and by their cooperative effort build up a surprisingly large total. This year's list shows that 107 different species of birds were found within Tennessee, which number may be compared with 94 in 1941, 93 in 1940 and 96 in 1939. A King Rail taken near Nashville on Jan. 2, would raise the total to 108. The list is for full species; subspecies, or races, having been disregarded. Certain species are well known to be represented by two or more subspecies, such as the Migrant Shrike and Loggerhead Shrike (Memphis), Slate-colored and Carolina Junco (east Tenn. mountains), Bronzed Grackle and Purple Grackle (east Tenn.), and a number of others, unrecognizable except with specimens in hand. Groups who selected Dec. 27 for their census were severely handicapped by general rains on that date. A careful study of this list will prove of interest, presenting as it does a composite picture of our winter bird life.

	Memphis Dec. 20	Clarksville Jan. 2	Nashville Dec. 20	Nashville Dec. 27	White Bluff Jan. 3	Murfreesboro Dec. 23	Gt. Smokies Dec. 20	Knoxville Jan. 3	Norris Dec. 23	Johnson City Dec. 27
Number of Species.....	75	49	67	68	46	45	48	47	54	40
Number or Individuals.....	21,726	1,064	2,642	3,503	1,271	4,045	1,178	2,211	1,374	942
Number of Observers.....	20	2	10	25	5	2	20	13	6	4
Common Loon .....	..	..	1	..	..	..	..	..	..	..
Horned Grebe .....	..	..	2	..	..	..	..	..	..	..
Pied-billed Grebe	3	1	..	2	1	..	..	..	..	..
Double-cr. Cormorant	20	..	..	..	..	..	..	..	..	..
Great Blue Heron	2	..	3	..	..	..	..	4	1	1
Canada Goose	9	..	..	..	..	..	*8	..	1	..
Lesser Snow Goose	4	..	*8	..	..	..	..	..	..	..
Blue Goose	15	..	..	..	..	..	..	..	..	..
Common Mallard	25	9	43	24	19	..	..	..	70	..
Black Duck	5	7	45	21	..	..	..	..	263	..
Gadwall .....	..	..	3	..	..	..	..	..	..	..
Baldpate .....	..	..	3	2	..	..	..	..	5	..
Amer. Pintail .....	..	2	..	..	..	..	..	..	2	..
Blue-wing Teal	3	..	..	..	..	..	..	..	..	..
Shoveller .....	..	..	..	..	..	..	..	..	6	..
Wood Duck	8	..	..	..	..	..	..	..	..	..
Rehead .....	..	..	..	..	..	..	..	..	5	..
Ring-neck Duck .....	..	20	112	52	..	..	..	..	..	..
Canvasback .....	..	..	4	..	..	..	..	..	..	..
Lesser Scaup	35	..	6	36	..	..	..	2	20	1
Amer. Goldeneye .....	..	..	1	1	..	..	..	..	..	..
Bufflehead	6	..	13	5	..	..	..	..	..	..
Ruddy Duck .....	..	..	..	..	..	..	..	..	5	..
Hooded Merganser .....	..	..	8	..	..	..	..	..	..	..
Amer. Merganser .....	..	8	..	1	..	..	..	..	9	..
Turkey Vulture	3	29	6	2	9	..	..	..	1	10
Black Vulture .....	..	44	4	38	20	7	..	3	..	2
Sharp-shinned Hawk .....	..	..	..	1	..	..	..	..	..	..
Cooper's Hawk	3	..	2	..	1	..	1	1	..	..
Red-tailed Hawk	9	3	8	7	3	1	1	..	..	..
Red-shouldered Hawk	7	2	7	1	..	..	..	..	..	..
Marsh Hawk	5	..	..	2	1	2	..	..	..	..
Sparrow Hawk	20	2	6	19	1	1	2	3	1	6
Ruffed Grouse .....	..	..	..	..	..	..	7	..	..	..
Bob-white	40	21	24	40	28	..	..	5	..	8

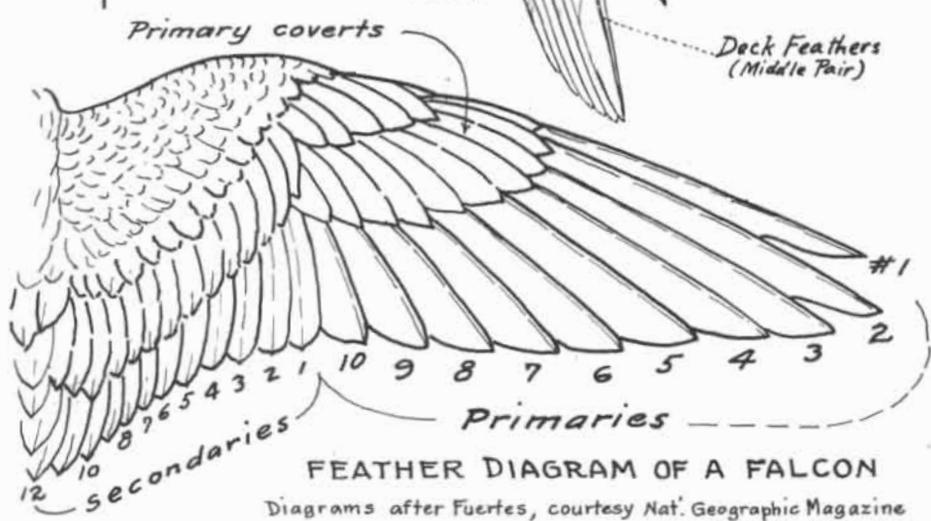
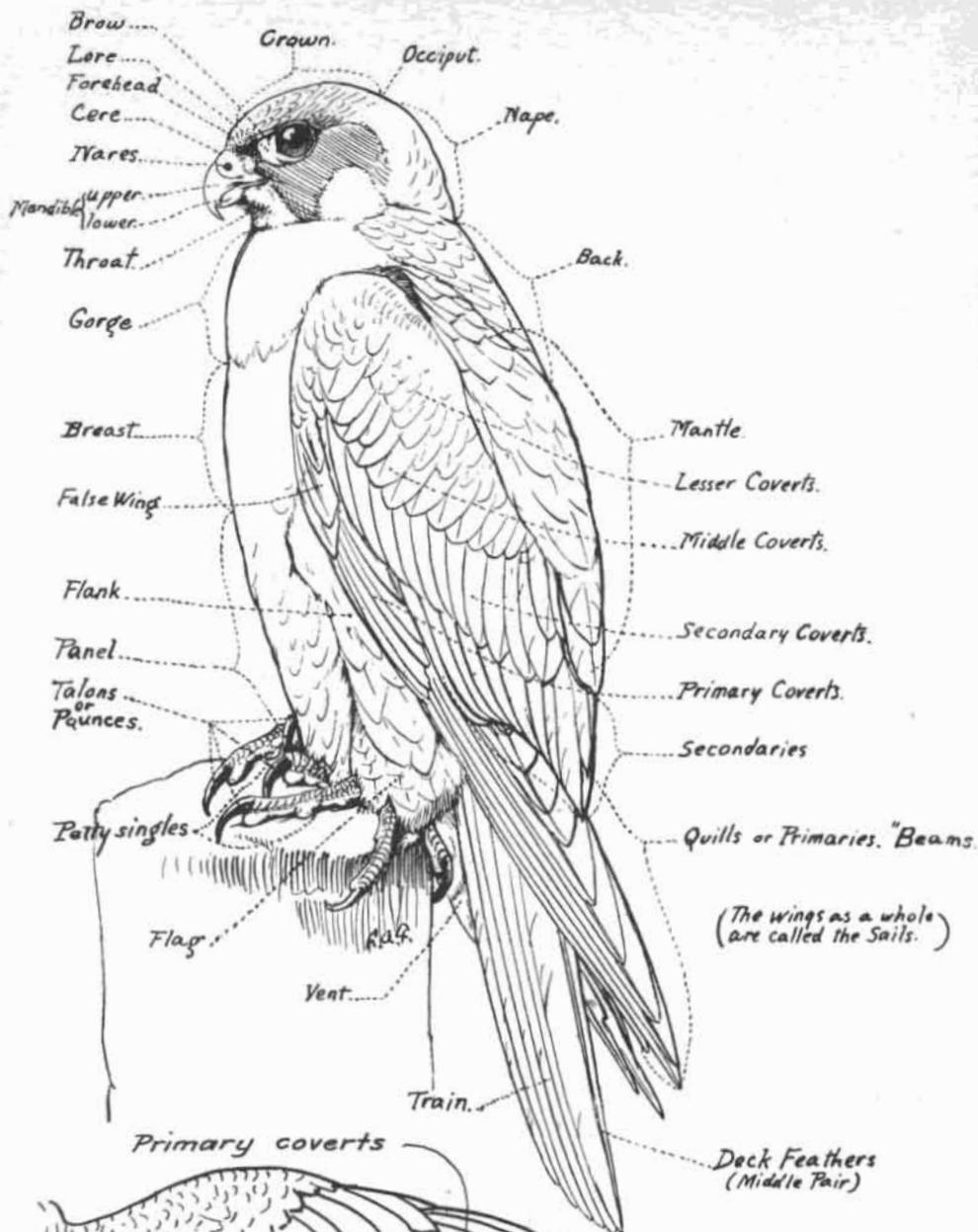
	Memphis Dec. 20	Clarksville Jan. 2	Nashville Dec. 20	Nashville Dec. 27	White Bluff Jan. 3	Murfreesboro Dec. 23	Gr. Smokies Dec. 20	Knoxville Jan. 3	Norris Dec. 23	Johnson City Dec. 27
Wild Turkey							3			
Amer. Coot			8	26						
Killdeer	46		34	33		2		2	1	1
Wilson's Snipe	2		1	2						3
Herring Gull			*4							
Ring-billed Gull	40									
Mourning Dove	27	14	53	90	56	14	7	79	1	15
Barn Owl	*1			*2		2				
Screech Owl			1	3		2				
Great-Horned Owl				4			1	1		
Barred Owl	2			4						
Belted Kingfisher	1	1	2	2	2		2	1	2	1
Flicker		11	9	33	7	4		15	11	11
Pileated Woodpecker	1	10	7	7	1	1	3		3	
Red-bellied Woodpecker	34	4	13	21	10	4		3	2	2
Red-headed Woodpecker	33		16	*2	2					
Yellow-bellied Sapsucker	12	3	2	5	3	3		2	1	1
Hairy Woodpecker	10	5	1	8	6	1	3	1	2	
Downy Woodpecker	35	7	18	42	21	3	11	15	9	9
Phoebe	2						2		2	1
Prairie Horned Lark	65	40	33	94		50		7	2	
Blue Jay	233	14	27	29	30	5	2	30	9	19
Northern Raven							2			
Crow	78	77	506	183	78	400	89	70	11	83
Chickadee	87	23	85	107	42	8	*50	73	32	20
Tufted Titmouse	54	26	51	64	38	4	3	54	6	36
White-breasted Nuthatch	10		1	1	5				4	2
Red-breasted Nuthatch							2	*9		
Brown Creeper	35	3	6	22	1	2	1	5	1	3
House Wren							*1			
Winter Wren	15	5	2	3			8		2	
Bewick's Wren	3	1	2	6	1	8		2		
Carolina Wren	61	28	29	107	13	5	7	40	7	18
Mockingbird	59	7	45	74	7	10	1	33	18	14
Brown Thrasher	15				1					
Robin	1,283	4	50	24	28	65	27	32	14	1
Hermit Thrush	18		2	2			29		7	
Bluebird	52	26	67	88	19	16	27	68	65	17
Golden-cr. Kinglet	62	3	15	16	4	11	156	*120	33	35
Ruby-crowned Kinglet	17			1			3	5	2	5
Amer. Pipet	3									
Cedar Waxwing	112			*					43	
Shrike	19		1			2		1		3
Starling	1,325	205	28	690	5	4,000	29	206	52	85
Myrtle Warbler	206	8	7	50		25	1	36	40	24
Pine Warbler	*1							*1		
Palm Warbler						*1		*4		
English Sparrow	com.	5	65	190	16	100	65	130	40	85
Meadowlark	181	12	34	51	25	54	2	32	2	45
Red-wing Blackbird	5							*1		
Rusty Blackbird	2									
Bronzed Grackle	1,300		20	3		2				
Unidentified blackbirds	12,700									
Cowbird	189	1		1	*	24				
Cardinal	290	64	330	220	78	16	58	64	43	24
Purple Finch	22			15	26	12	5		16	
Pine Siskin							*10			
Goldfinch	108	42	67	77	67	4	86	76	50	54
Red-eyed Towhee	58	13	21	52	42	3	7	61	23	
Savannah Sparrow	9		1	4				10		6
Grasshopper Sparrow	*1									
LeConte's Sparrow	2						1			
Vesper Sparrow										
Junco	1,233	64	400	448	255	28	175	130	166	104
Tree Sparrow	*5	24		2			134			
Chipping Sparrow	*1									
Field Sparrow	440	46	30	105	80	75		226	157	35
White-crown Sparrow	41	6	21	31	3	16		15		18
White-throat Sparrow	560	56	118	110	130	27	86	600	150	49
Fox Sparrow	87	18	8	6	12		3		1	
Lincolns Sparrow								*3		
Swamp Sparrow	41	11	2	11	11		1		4	
Song Sparrow	109	29	91	135	72	28	58	83	58	75

*NOTES ON THE CENSUS.—MEMPHIS: Most of the waterfowl were seen on the Mississippi river; Pine Warbler was observed at 15 feet with 6x binoculars by Mrs. Barefield; Barn Owl was first Memphis Christmas record, found by Simpson; the Grasshopper Sparrow, Chipping Sparrow and Tree Sparrow were found 12/23 and 12/24 by Burdick (see Round Table). —NASHVILLE; see notes in Round Table on Barn Owls and Red-head-Woodpeckers, by Jamison and Simpson; Brown Creepers more common than usual, note that it was reported on all lists; a flock of Cedar Waxings were seen 12/26; Juncos were the most abundant bird as usual; the Snow Geese and Herring Gulls, listed 12/20, were on Cumberland River; birds more numerous about Nashville than in several years.—WHITE BLUFF; a flock of 75 Cowbirds were seen a few miles east of the census area.—MURFREESBORO; the Palm Warbler was identified by Prof. Davis by it's color and size, continual jerking of tail, outer tail feathers showing white and it's habit of feeding near the ground. —GREAT SMOKY MTNS; the Canada Geese, flying low in Greenbrier area and seen by 7 observers, was a first X-mas census record there; Chickadees both of Carolina and Black-capped varieties were seen; the House Wren was observed at close range with 8x binoculars by Stupka who found it again next day and observed it in full sunlight. The bird's alarm note was distinctly unlike Winter and larger Wrens, it lacked any form of facial striping, tail appreciably longer than Winter Wren but shorter than Bewick's or Carolina, more grayish than other wrens, this is our first winter record of a bird that is a rare transient here at best; the Pine Siskins were listed by Goddard. —KNOXVILLE; these wintering Red-brested Nuthatches and Golden-crowned Kinglets are probably those which breed commonly atop the nearby Smokies; the Red-winged Blackbird, Pine Warbler and Palm Warbler were identified by Messrs Walker, Goddard and Broome and Miss Williams; the Lincoln's Sparrows by H. P. Ijams at 50-75 feet with 8x binoculars.—NORRIS; the waterfowl were on Cove Creek Lake and were observed with binoculars and 20x telescope.

LOCALITIES, WEATHER AND PERSONNEL

Memphis: Dec. 20, 1942, 8 to 5:30; cloudy, fresh wind; temp. 32-36. Same areas as last year, coverage of Wolf River bottoms not so complete, By auto, afoot and Dr. Leroy on Miss. River in motor boat 5 hours. Total, 60 party hours, 20 observers in 10 parties. Austin W. Burdick, Jr., Mrs. C. A. Barefield, Mrs. Ben B. Coffey, Jr. (compiler), Mary Davant, Newton Hanson, Pauline James, Lawrance Kent, Luther Keton, Billy Laurenzi, Dr. Louis Leroy, Joe Mason, Dr. Ollie Matthews, Allen Phillips, Wm. Simpson, Demett Smith, Mrs. M. L. and Maurice Torti, Robt. Tucker, Brother I. Vincent and Dr. Wendell Whittemore.—Clarksville: Jan. 2; 7:45 to 4:30; mostly fair; temp. 40-60. Clarksville thru golf links, along Cumberland river bottoms 6.5 miles to Marx slough. River, 45 ft. near flood stage, bottoms partly flooded. Alfred and Edward Clebsch.—Clarksville (earlier list, not tabulated above): Dec. 27; 46 species; 8 to 12 (steady rain thereafter stopped field work). A. and E. Clebsch (covering same area as on 1/2) and Dr. C. F. Pickering and Pvt. Vincent McLaughlin covering Red River bottoms, Dunbar Cave lake and Warfield pond. Species seen on this date and not on January 3rd, were Mallard Duck, Red-breasted Merganser 2, Kildeer 1,

Barred Owl 1, Red-headed Woodpecker 1, White-breasted Nuthatch 2, Hermit Thrush 1, Cedar Waxwing 15, Shrike 1, Purple Finch 6 and Vesper Sparrow 1. —Nashville: Dec. 27; 8 to 2 (steady rain thereafter stopped field work); mostly cloudy in a. m., unseasonably warm, temp. 60-70. Radnor Lake, Overton Hills, Hillsboro Road, Hobbs Road, Percy Warner Park, Bellemeade, Westmeade, Hillwood, Halls Lane, Cumberland River bottoms at 8th Ave. and above Shelby Park, Knapp Farm and Mill Creek. 27 observers in 8 parties, 42 party-hours, mostly afoot. B. H. and Mrs. Abernathy, Katherine Anderson, Sam Clark, Jr., A. F. Ganier (compiler), R. M. and Mrs. Hawkins, Wayland Hayes, Helen M. Howell, Conrad Jamison, Mrs. Amelia R. Laskey, Vera McElween, Arthur McMurray, E. M. McNish, G. R. and Mrs. Mayfield, Geo Mayfield, Jr., C. E. Pearson, J. A. Robins, J. M. Shaver, Ed. Shrieber, Wm. Simpson, W. R. Spofford, H. S. Vaughn, G. B. Woodring and G. M. Yarbrough.—Nashville (earlier reconnaissance list): Dec. 20; 8 to 3; cold, cloudy and windy, temp. 30-35. Most of areas covered 12/27, but one partly (Albert Marsh) on river in motor boat. 10 observers in 8 parties. Messrs. Ganier, Hawkins, Jamison, Mayfield, Marsh, McMurray, Shaver, Spofford, Woodring and Mrs. Jamie Tippens.—White Bluff (Montgomery Bell State Park exclusively, 35 m. west of Nashville): Jan 3; 9 to 4; mostly cloudy, light wind, temp. 40-50; same 3 routes as on 5 previous listings; 5 observers, in 3 parties, each covering 6 miles a foot. 2 small lakes included. A. F. Ganier, Conrad Jamison, G. R. Mayfield, Ed Shreiber and H. S. Vaughn. —Murfreesboro: Dec. 23, 8 to 4; Suburbs of town and eastward. Fair and warm. (List includes several species listed on Dec. 24 and 25). George Davis and Henry O. Todd.—Great Smoky Mountains National Park: Dec. 20; area in Tenn., same as in past 5 years; circle of 7½ miles radius centering on Bull Head of Mt. LeConte and including a section of the Tenn.-North Carolina divide from Newfound Gap to the Saw-teeth; also the towns of Gatlingburg and Pigeon Forge, Tenn. Altitude range 1200 to 6100 ft. Intermittent rain in a. m., becoming heavy at times and later changing to sleet, with rain, sleet and occasional driving snow at high altitudes where maximum snow depth reached 12 inches in sheltered areas. Temp. 25 (in mtns.) to 45. 20 observers in 7 parties. Total party-hours 43, party-miles 147 (42 on foot). Mrs. Ben Blackwell, Mr. and Mrs. Harvey Broome, Albert Chambers, E. W. Dougherty, Frelan Goddard, Elizibeth B. Johnson, W. M. and Robert Johnson, Henry Meyer, Elise Morrell, Walter and Mrs. Rohbock, Wm. M. and Mrs. Walker, Jr., Dorothy E. Williams, D. W. Yambert, Jr., Paul Yambert (members T. O. S.). Mary Ruth Chiles and Arthur Stupka (National Park Service). —Knoxville: Jan. 3, 9 to 5; foggy till 10 a. m., clear during middle of day, cloudy after 2 p. m.; temp. 38-60; wind light. Ground wet, stream swollen. Island Home sanctuary and vicinity, Mt. Olive, Cherokee Bluffs, U. T. farm, Lake Andrew Jackson, Sanders Ridge and First Creek. 13 observers in 7 groups; 25 group-hours. Mrs. Ben Blackwell, Harvey and Mrs. Broome, Frelan Goddard, H. P. Ijams, W. M. Johnson, Mrs. Henry Meyer, Elise Morrell, Mary Louise Ogden, S. A. Ogden, Mrs. W. M. Walker, W. M. Walker, Jr. (compiler) and Dr. Dorothy Williams.—Norris: Dec. 23. Norris to Careyville (Cove Creek Lake State Park) and return. 9:30 to 5; temp. 45-50; misty rain in a. m., cloudy in p. m.; 6 observers in 2 groups; 14 group-hours, 5 group miles afoot, balance in car. One group on lake in p. m., 17 miles in car. Ducks studied with 20x telescope. Mrs. Ben Blackwell, Henry Meyer, W. M.



FEATHER DIAGRAM OF A FALCON

Diagrams after Fuytes, courtesy Nat. Geographic Magazine



TREE SWALLOWS RESTING
OVER REELFOOT LAKE.

and Mrs. Walker, Paul and Dale W. Yambert, Jr.—Johnson City: Dec. 27; 8:30 to 6. Fields, woods and small lake 7 miles south and west and 7 miles north. Ground bare, partly cloudy in a. m., clearing in p. m., temp. 42-54. 4 observers in 2 parties. First party, Bill Pearson and Albert Hydes; 2nd party, R. B. Lyle and Bruce P. Tyler (compiler).—Greeneville: Dec. 23; 34 species, by Ruth Reed Nevins (printed in Round Table; arrived too late for tabulation).

THE ROUND TABLE

NOTES FROM MEMPHIS: Field trips have been less frequent this Fall since Mr. Coffey has joined the Army, and several other observers have also left our midst, but we are trying to carry on our bird work as much as possible.—Mr. A. F. Ganier, Robert Tucker and the writer visited Mud Lake on Sept. 13. The water level was fine for wading birds and 700 American Egrets, 300 Little Blue Herons, and 35 Great Blue Herons were seen. With the exception of Killdeers there were few Shorebirds. Those seen were: Lesser Yellowlegs, 1; Greater Yellowlegs, 1 (collected); Least Sandpiper, 50; Western and Semipalmated Sandpipers, 100; and Semipalmated Plover, 1. Four Northern Water Thrushes were found at their typical haunts. Of the 4 Empidonax flycatchers seen, one was collected which proved to be the Least Flycatcher. A flock of 25 Blue-winged Teal, feeding in the shallow water, permitted close approach. Fish Crows, 8 or 10 in number were seen thru the day as they flew about among the cypress trees along the lake's edge. A trip to the same locality on Sept. 9 showed a decrease in all birds on the lake and mud flats, however, 125 Blue-winged Teal and 8 Pintail were seen in the shallow pools of water. On Oct. 10, our last trip there, very few herons and sandpipers were noted at all. In the nearby woods we found our first White-throated Sparrows, Golden-crowned Kinglets and Phoebe of the season.—The Annual Field Day of the Memphis Chapter was held October 11 at Shelby Forest. About 45 members and guests participated. The high spots of the day were 3 Bay-Breasted Warblers (McCamey), 2,000 Tree Swallows and 1 Short-billed Marsh Wren.—Huge flocks of Blackbirds flying northwest over the city in the afternoon and back again in the morning have attracted a number of residents. Miss Pauline James visited their roost on Oct. 23 which is located on Redman and Middle Bars about 6 miles up the river. The birds roost in small willows from 5-20 feet high. She reported they simply "poured" into the trees at dusk. It was impossible to estimate their numbers but the roost certainly must have consisted of several hundred thousand birds—Bronzed Grackles, Rustys, Redwings, and Cowbirds.—The migration of Geese at night was especially noticed around Nov. 1-6. McCamey reported 500 Geese, probably Blue and Snow, over his home in the city at 11 a. m. on Nov. 4. A flock of 55 Snow Geese flew over "Coffee Grounds" on Nov. 7, they were quite low and their black wing tips showed prominently.—Our Christmas census was taken on Dec. 20 and though a raw, cold day, we listed 75 species or within 3 of our best record. This list, with notes covering unusual species, will be found on another page.—MRS. BEN B. COFFEY, Memphis, Tenn.

NOTES ON UNUSUAL WINTER SPARROWS IN THE MEMPHIS REGION: Two species of sparrows, the Chipping and the Grasshopper, were collected on a brief visit to Germantown, Tenn., during late December. Each proved to be the first winter record for that area.

The Chipping Sparrow (*spizella passerina*) was taken on Dec. 23, 1942, from a flock of Field Sparrows and Juncos. It was a male in first year winter plumage.

On December 24, 1942, while pursuing a Leconte Sparrow, a Grasshopper Sparrow (*Ammodramus savaannarum*) was flushed from a heavy patch of broomsedge growing by a ravine. The bird was immediately collected and proved to be a male in fresh winter plumage.

During my brief stay at Germantown, near Memphis, several flocks of Tree Sparrows (*spizella arborea*) were also encountered. This species is an uncommon winter visitor in the Memphis region. Specimens were collected for the purpose of making subspecific determinations.

All of the specimens mentioned above are deposited in the Louisiana State University Museum of Zoology.—AUSTIN W. BURDICK, Box 6785, La. State Univ., Baton Rouge, La.

CHIMNEY SWIFT NOTES: Spring flocks of these birds are usually few and scattered. On May 14, 1942, Ben Welch reported that a flock of 700 to 1,000 Swifts had gone down a chimney at the Idlewild Presbyterian Church. The next evening we drove towards town, noting a larger than usual number of them in the air, from home a mile westward (the Sears Area). In the downtown area there were practically none. On the 16th we watched about 450 at Idlewild. While we have never checked this species this late in the spring, this seems to be an unusually late date. Miss Merriman at Kingston, Ontario, Canada, bands many each May on about the 24th. These birds were evidently those individuals which nest at the northernmost limits of their range, having left some area to the south at the latest possible day and were moving northward at a fair speed. Such a flock would be a bander's delight but this chimney was inaccessible and our old stand-bys were not in use. Miss Merriman several years ago suggested we try to get a spring flock but we have never been able to do so. At Kingston the birds flock only when they arrive in the spring. This August a group of about 60 at Southwestern University held interesting possibilities of banded birds but repeated rains and our departure on the 29th prevented us from taking them. Flocks of several hundred were gathering at other points. On Aug. 26 we were approaching Collierville when we noticed a few Swifts around a tall chimney on the high school. Others were coming out and from 11:40 to 11:45 a. m. we made a quick-count of 700 birds emerging. About 10 stragglers came out in the next few minutes and that was all. How many emerged before I saw them is, of course, unknown. There was no fire in the boiler. It was almost threatening rain at 8 a. m. (C. W. T.) but shortly afterwards the sky improved considerably. The sun was out in full force when I saw the birds. Temperatures were moderate. Swifts usually stay within 5 to 6 feet of the top and then should have, under above conditions, emerged about 9 a. m.—BEN B. COFFEY, JR., Memphis, Tenn.

HUMMING BIRD TAKES A SHOWER BATH: On Sunday morning, Oct. 5., 1942, at eleven o'clock, I was ascending the back steps to my apartment when I noticed a very small object sitting on a light wire that leads from the apartment to the garage. As it was beginning to rain, I hastened to cover but after reaching shelter I turned and saw that the object was a female Ruby-throated Hummingbird. The rain began to increase steadily and the bird remained on the wire apparently having the time of her life, for she vibrated her wings so rapidly, at intervals of 2 or 3 minutes, that she almost fell off the wire. Fascinated by this unusual demonstration, I remained on the back porch for more of it. The rain increased until it became quite a hard shower before the hummingbird flew to a dead branch of a pear tree about fifteen feet away. Here the bird resumed her antics again at about the same intervals. I saw that the bird wiped her bill on the branch just as any other bird would do, but not once did I see her preen her feathers. At 11:30, the rained ceased and the hummer flew gaily away to a blooming shrub in the rear of the garden and began to flit from blossom to blossom as if there had been no shower.—SCOTT HUTCHISON, 2109 Herbert Ave., Memphis, Tenn.

EDITOR'S NOTE.—Some years ago, Mr. Gordon Hicks, of Tullahoma, Tenn. told me of a Hummer that was in the habit of taking its bath by flying repeatedly thru the spray thrown from a revolving lawn sprinkler. At the St. Louis Zoo, there is a small hummingbird room occupied by a number of live birds and in this compartment there are growing plants, feeding devices and water-mist sprays. The birds delight in flying thru or sitting in the mist thrown off by the sprays. A hummer's feet are so close to its belly that they are practically without legs so they cannot bathe in shallow water as other birds do.—A. F. G.

A BLACK VULTURE'S NEST AT REELFOOT LAKE: Most observers at "Cranetown" on the west side of Reelfoot Lake have seen Black Vultures flying overhead, but nests have not been reported from this region. On May 15, '42, Dr. Mayfield, Roger T. Peterson, and myself found a nest with two eggs, apparently newly laid, only a few inches above water level, in a hollow log lying in the marshy swamp not far from Cranetown. This very late nesting is apparently correlated with the high water earlier in the spring, as on a trip a month earlier that same log was almost submerged. Other nests of interest found on the two trips into the swamps included those of Yellow-crowned Night Heron, Great-horned Owl, Peregrine Falcon and Red-shouldered Hawk. Although several Barred Owls and one Red-tailed Hawk were seen, no nests were found. The high water at the time of the first trip (April 20) had greatly restricted the area of the few low islands in the swamp. Rabbits were frequently seen and there was much evidence that deer used these restricted land areas extensively. On one occasion at least twelve deer were surprised into headlong flight, their surging leaps through the knee-high water making an astonishing roar.—WALTER R. SPOFFORD, Nashville, Tenn.

ROOSTING OF PURPLE MARTINS AND BRONZED GRACKLES: Late one afternoon in late August of this year I noticed from my backyard, in a crowded residential area here in Corinth, numbers of Purple Martins flying from the southwest toward the northeast. There were enough of them to attract attention, so soon I realized that every one of the many that were

in the air was flying in exactly the same way; that is to say, each came from and went the same directions followed by all the others. It was evident that the Martins had some method in their flight. They were cavorting along leisurely, just before the hour of dusk, but headed for a fixed goal. To check up a bit more on the birds, at the same hour the next afternoon I went to the west side of town to a large vacant lot where my vision would be unobstructed. The performance of the day before was repeated to the last detail. My curiosity being aroused, I decided to follow the Martins to find where they were going. I went as straight to the big American Elm where they were roosting as I would have gone had I known where it was in the beginning. The Martins were there in such large numbers I could hardly estimate them. A thousand would be an understatement. I watched the tree for several afternoons, then the Martins disappeared and came back to the tree no more. The point of interest in all this, as I saw it, was that the birds evidently spent the daylight hours some distance from their roost, all being generally in the same part of the country. So far as I could tell none came into the roost from any direction except from the southwest. And while on the subject of the purple Martin, there is a bit of real music in one or two of his notes—a soft, mellow kind of whistle. I do not recall a similar note in any other bird.

While driving from Memphis to Selmer, Tenn., late in the afternoon of Nov. 27, just before reaching Selmer I saw a veritable dark cloud of birds fly across the road a few hundred yards ahead. Of course I knew they were Bronzed Grackles. It was almost dark, and I thought that every bird in the country had gone to roost, but not so with the Grackles. As I came to a small swamp, through which the paved highway ran, the birds increased in numbers—so much so that if I were to make a guess no one would believe me. Of course every observer of birds in this general section of the country has seen the common blackbirds literally in droves of thousands. But I do believe in the present case that it was not simply a big drove of blackbirds, but rather a drove in which all the other droves from far and near had come to join forces with all the others. They dropped down into the tall reeds, grasses, and willow shrubs like—well, like blackbirds. There were other thousands in tall trees nearby; vast patches of solid black. Then farther down the small bottom I could see others in numbers impossible to calculate. The particular swamp where they were going to roost was not a large one. Only a few acres along the side of the highway. They were nestling down into the thick cover that grew there. I have known of course that such a spot is the home of the Red-wing, and that the Grackles range in such places to considerable degree, but I had not known before that the latter would roost close to the ground. The temperature was near freezing; so apparently the birds were finding protection against the weather as well as against enemies that could get at them better in places less easy of access.—BENJ. R. WARRINER, Corinth, Miss.

A LECONTE'S SPARROW AT CLARKSVILLE: For some years we have been on the lookout for a LeConte's Sparrow, but it was not until Nov. 26, 1942, that we finally succeeded in adding it to our Montgomery County list. On that day, while looking for Savannah Sparrows with my son Edward, we kicked up a small bird near a little puddle in short green meadow grass.

It flew to the edge of a cornfield and would not flush again but kept running ahead trying to keep hidden behind thin, dry grass. Perceiving that its tactics were unusual, we collected the specimen and found it to be a LeConte's, in the rich buffy plumage of fall.—ALFRED CLEBSCH, Clarksville, Tenn.

NOTES FROM THE NASHVILLE AREA: The season up to the present writing has been one of comparatively mild weather throughout the fall. Birds in general appear to be much more common than usual, especially Juncos and Song Sparrows. Other species that seem to be here in greater numbers are the Brown Creeper, Golden-crowned Kinglet, and the Carolina Wren which has come back remarkably well after the disastrous winter of 1940. Kildeers have also recovered from the extreme cold of that winter, and are nearly back up to their normal numbers. Song Sparrows outnumber the White-throats, while Field Sparrows seem somewhat scarcer than usual. Two unusual records for the King Rail have come to light during the period, one a bird that apparently had flown into a building was picked up in front of the Vanderbilt University library on Nov. 3, and the other specimen was shot by a hunter on Jan. 2, 7 miles east of town. These two birds, which constitute a late migration record and a first winter record for Tennessee, are now in Mr. Ganier's collection.—A Lesser Yellowlegs found Nov. 8 on Radnor Lake by Dr. Spofford was a very late transient.—A number of visits to Radnor Lake by Messrs. Ganier, Jamison, Spofford, Mayfield and Mrs. Laskey and the following waterfowl were listed there: Common Loon, 1 each on Nov. 2 and 8; Horned Grebe, 12 on Oct. 18; Pied-billed Grebe, 1 on Nov. 2 and 2 on Nov. 29; Geese, local papers reported many flocks passing over on Nov. 8, a flock of 8 Canadas spent several days on the Lake after Nov. 28. (Note also the Snow Geese listed on Dec. 20 census on Cumberland River); Common Mallard, 45 on Nov. 8, 30 on Nov. 21, and 11 on Nov. 29; Baldpate, 6 on Nov. 29; Ringneck, 40 on Nov. 8, 20 on Nov. 29; Canvasback, 1 on Nov. 21; Lesser Scaup, 3 on Nov. 21, 20 on Nov. 29; Hooded Merganser, 5 on Nov. 21, 6 on Nov. 29; and Red-breasted Merganser, 1 on Nov. 29. Additional wild-fowl listed there, on Dec. 20 and Dec. 27 by George Woodring, will be found in the Christmas census.—An immature Bald Eagle was captured near Lebanon on Nov. 16 and further details are given in the item which follows.—A Sharp-shinned Hawk was seen by Dr. Spofford on Dec. 26 and another on our Fall Field Day of Oct. 18.—There has been one Chimney Swift banding this fall. On Oct. 11, near 16th and Broad, approximately 3,000 birds were banded of which about 300 were returns and recoveries.—A flock of about 5,000 Grackles, that had been about for several days, flew over Mrs. Laskey's home on Nov. 23, enroute to their roost. This is a rather late date for such a flock.—Robins, by Dec. 26, seemed to be returning as the writer saw numerous flocks on that date in Westmeade.—CONRAD JAMISON, JR., Nashville, Tenn.

WHERE EAGLES ROOST: The capture of a fully grown Bald Eagle, in immature plumage, near Lebanon, Tenn., on the night of Nov. 17 last, shed some interesting light on this subject. Two youths accompanied by their dogs were possum hunting and while traversing a woods, startled a huge bird that had been roosting on the limb of a large tree about 20 feet overhead. In attempting flight, the bird struck branches in the darkness and came to the ground. After some little time, during which the dogs were

badly scratched by the bird's talons the eagle, as it proved to be, was caught and taken home. Dr. W. R. Spofford made an investigation on Nov. 28, gathered further information, identified the bird and advised the holders of the illegality of keeping it a captive. He found that it had abstained from eating a dead chicken that had been put in the cage but readily ate rabbits, showing that these were its normal prey. An attache of the State Division of Fish and Game confiscated the eagle on Dec. 5 and released it, still in excellent condition, on Short Mountain.—A. F. GANIER, Nashville, Tenn.

COOPER'S HAWK MAKES AIR ATTACK ON THE BLACK VULTURE: This observation was made October 18 on the edge west of Edwin Warner Park from the road leading towards and about a mile from the covered bridge. A lone Cooper's Hawk was seen circling about as if locating prey at about three times the height of the nearby tallest oaks. Within a few minutes a Black Vulture approached and lingered in the vicinity. The hawk with apparent indignation soared higher and made a nose dive at the new comer. It was evident that the vulture was on the defensive and dodged. Several such attacks were made with a seemingly hesitancy on the part of the hawk to make direct attack with his victim. Then two other Black Vultures and another Cooper's Hawk approached. The second vulture to come on the scene of action showed a contrasting eagerness to enter in this battle of the air. The hawk first mentioned seemed to sense this and made a dive from above at the new intruder. Here he met retaliation by a nimble dodge and comeback. The hawks stayed decidedly on the offensive, but the vultures soon drifted off with more of dignity than of cowards.—VERA MCELWEEN, Nashville, Tenn.

EDITOR'S NOTE: Since the above observation was in autumn rather than in mating season, no question of territory defence would have been involved, and because of different feeding habits, neither would it have been caused by competition of food. The writer feels safe to conclude that it was a demonstration of "play" rather than a real attack. Similar demonstrations have been recorded, between a Sparrow Hawk and pigeons by Warriner, and between a Marsh Hawk and Crows by the writer, both notes having been published in *THE MIGRANT* for Dec., 1937, p. 38. Interflock demonstrations of play among Crows is a frequently witnessed occurrence.—A. F. G.

BLUE JAYS BURYING FOOD: At various times during the month of December, 1942, I have watched an interesting procedure when two Blue Jays took advantage of an abundant supply of food to store a goodly portion of the surplus before other birds could eat it. One morning after a quantity of cornbread had been thrown on the ground at the rear of the house, I happened to see a Jay fly from the food to the front lawn with a piece of corn muffin in his beak. First he attempted to push it into the carpet of Norway Spruce leaves under that tree. This place did not seem satisfactory for he hopped a few feet to the pin oak, again pushed the bread into the ground, next he grasped an oak leaf in his beak, placing it carefully over the bread and adding one or two more. It was so completely concealed that to find it, I had to hunt under a number of small leaf mounds. Another morning a liberal feeding of sunflower seeds had been put out for the flock of Cardinals that came daily. . Soon afterward I was astonished to see a Blue Jay arrive, apparently gobble 7 to 10 unshelled seeds, fly to a rear perch with one seed

in the beak. The two banded Jays alternated coming and going to various spots in the rear and side border of trees and shrubs. Finally one chose a conspicuous perch giving me a good view of his actions. He flew to the ground, pressed his beak downward, placed a leaf, hopped a foot or so and repeated the procedure several times before returning to the house to pick up more seeds. It is not known if the Jays returned to these caches when hungry but I do know that a Crow may remember the spot and later return to hidden food and eat it. I have seen a hand-raised Crow hide bread in crevices, poking it as deep as possible, cover with dead leaves and some hours later return to the place, pull out the wad of leaves with his beak and eat the food. It is quite possible that Blue Jays, like squirrels, inadvertently assist nature to some extent by planting large seeds at some distance from the parent stock.—AMELIA R. LASKEY, Nashville, Tenn.

CONNECTICUT WARBLER SEEN AT NASHVILLE: Due to the misunderstanding of someone reporting data to Mr. Conrad Jamison for THE SEASON, MIGRANT, V. 13, p. 46, a Mourning Warbler was reported seen by me. The record should have read Connecticut Warbler seen May 19, 1942. The bird, a singing male, was closely observed as it faced me from a sapling at the edge of a thicket adjacent to our place. I believe it stayed nearby for three days as the songs were heard occasionally from various shrubby clumps but I was never able to get a view of it again. The song sounded more like a Kentucky Warbler's than any with which I am familiar. AMELIA R. LASKEY, Nashville, Tenn.

WINTERING OF RED-HEADED WOODPECKERS NEAR NASHVILLE: In winter, the Red-headed Woodpecker is generally a bird that is hard to find in the Nashville area, so the finding of a number of these birds wintering the present season is of interest. The birds were first discovered on Nov. 1, in the Westmeade open woodland, about 7 miles west of Nashville. The writer heard them calling and upon investigation counted 11 of them in the area. About two-thirds of those observed were in immature plumage. They were busily engaged in storing away an abundant acorn crop, chiefly if not altogether those of the chestnut oak, the acorns of which are small and not bitter. There were no beech trees in this area. On Nov. 15, 12 birds were found in the locality. One immature bird was watched as he energetically constructed his first roosting cavity and working away, without previous experience or "instruction," he was producing a very neat job. He paid little attention to the group of bird students watching from 30 feet below, diving into the cavity and then backing out with a beak full of "saw-dust." On Dec. 20, I visited the locality and counted 16 of the woodpeckers. Dec. 26, I again visited the place, and spent most of the day observing them. Although I did not cover the entire area, as on previous occasions, I counted nine birds. Individual birds seemed to have staked out a rather definite territory as I saw no bird wander very far, nor did I see two birds close together at any time. Most of the immature birds were now in adult plumage or in the process of changing from immature to adult colors. The moult of the head feathers seemed to progress from the back of the neck toward the top of the head and black ones were replacing the gray ones in the back. I heard one bird repeatedly give a rather high pitched squeal as it fussed at a Fox Squirrel.

The woodpecker would "stoop" at the squirrel on a limb, much in the same manner that a falcon stoops at its prey. Perhaps this squirrel had been caught stealing the acorns the woodpecker had so providently stored for its winter use. I also saw one of the birds catching flying insects in an approved flycatcher manner, as it often does in summer. From its perch on the tip of a dead stub, it would suddenly dart out and upward some 15 or 20 feet to catch the insect, then return quickly to the perch from which it started. As an interesting sequel to these observations, one of our members included the area in his Christmas Census route, arriving during a steady, gusty rain, but not one of the birds would poke their heads out of the roosting cavities they had found or constructed for just such inclement weather. So, after being dead sure of getting a lot of Red-headed Woodpeckers on his census, it fell the lot of another party to record a lone individual from another locality.—CONRAD JAMISON, JR., Nashville, Tenn.

WREN EVICTS A TURTLE: Last spring, a pair of Carolina Wrens decided to build a nest for themselves in a flower box on the front porch of a friend of mine. My friend was first attracted to the nest by noticing that some dirt had been scratched out upon the floor just under the wire rack on which the flower box rested. Upon close examination it was found that the birds had dug a hole in the dirt in the box and was then lining it with green moss, leaves and other materials. In due time, the nest was completed and contained 4 eggs. About this time the family left home for a week or more, leaving instructions for the servant to feed the small turtles in the glass bowl on the top shelf of the flower rack, just above the wren's nest. The servant, forgetting how much food to give them, proceeded to give what would have been a year's rations. As a result, the water turned nearly black and the small turtles were hidden from view. When the family returned and learned what had been done, they poured out the entire contents of the jar and put in clear water. Up to this time, the wrens had not been aware of the presence of the little reptiles, but as soon as the mother bird espied them, she flew to the bowl, grasped one of them by the neck, threw it to the floor and proceeded to beat it with her wings and peck it. As the turtle drew in its head and closed its shell the wren seemed satisfied that she had dispatched it and flew back to her nest.—H. S. VAUGHN, Nashville.

SOME NOTES ON HAWKS: Late in October, as I drove through my pasture to the highway, a small hawk stooped at a squirrel which was playing at the foot of a tree. It passed within 10 feet of the car and I noted that it was darker and had broader wings than the Sparrow-Hawks which are always present about my house. This hawk lit in a dead tree-top so I stopped the car to inspect it more closely and found it to be a Pigeon Hawk. In November, while standing in front of the house, I heard the cry of a Red-Shouldered Hawk close by and looking up, saw it alight in an oak tree a few rods away. It flew immediately and had not gone 50 yards before its place was taken by a Pigeon Hawk. These little falcons are seldom seen here and these are the first I have seen in several years.

I have a female Sharp-shinned Hawk, which I keep on a bow-perch in my yard. The perch is surrounded by a wire fence to keep out dogs and cats. Recently, stepping out the front door, I saw another hawk hopping about on the outside of the fence evidently trying to get in. It was a male Cooper's

Hawk and of course flew away as I approached. It had evidently come in low and was stopped by the fence. It may have been attracted by the feathers of a sparrow that my hawk had eaten a short time before. My little hawk is usually very much frightened by a larger hawk sailing close overhead but she did not seem to mind this Coopers, not even leaving the perch. A short time ago however, when I left the house one evening, I saw a Red-shouldered Hawk fly out of my Sharp-shin's pen. The latter was flying about at the end of her leash, but was uninjured and did not seem frightened when I went to her. Perhaps she is getting used to larger hawks from seeing me carrying a Peregrine Falcon that has recently come into my possession. The intrusion of the larger hawks in the Sharp-shin's pen suggests that in the wild, the larger species habitually rob the smaller ones of their prey whenever the opportunity is offered.—DAN R. GRAY, Mt. Pleasant, Tenn.

PALM WARBLERS WINTERING: On Dec. 19, 1942, I identified at my home near Columbia, Tenn., a very unusual visitant in the shape of a Yellow Palm-Warbler (*Dendroica palmarum hypochrysea*). A few days later, on Dec. 23, while listing birds about the nearby Hoover and Mason lake, I found five more. All of these birds were observed at close quarters and I am sure of their identification. I understand that they were also recorded on Christmas census lists from Murfreesboro and Knoxville.—PVT. HARRY YEATMAN, Camp Davis, N. Car.

CHRISTMAS CENSUS AT GREENEVILLE: (Reed farm along Roaring Fork Creek, Lick Creek).—Dec. 23; 10 a. m. to 4:30 p. m. cloudy all day, with showers; wind very light, east; temp. 44° at start, 47° at return. One observer, 3 miles on foot and 8 miles by car: Turkey Vulture, 1; Sparrow Hawk, 5; Mourning Dove, 178; Flicker, 3; Pileated Woodpecker, 2; Red-bellied Woodpecker, 4; Yellow-bellied Sapsucker, 2; Downy Woodpecker, 2; Prairie Horned Lark, 52; Blue Jay, 10; Crow, 600; Chickadee, 6; Tufted Titmouse, 5; White-breasted Nuthatch, 2; Bewick's Wren, 2; Carolina Wren, 13; Mockingbird, 7; Robin, 1; Bluebird, 4; Golden-crowned Kinglet, 2; Cedar Waxwing, 43; Migrant Shrike, 1; Starling, 327; Myrtle Warbler, 4; English Sparrow, 27; Meadowlark, 6; Cardinal, 17; Goldfinch, 35; Towhee, 2; Junco, 5; Field Sparrow, 12; White-crowned Sparrow, 3; White-throated Sparrow, 5; Song Sparrow, 7; Total, 34 species; 1,395 individuals.—RUTH REED NEVIUS, Greeneville, Tenn.

NOTES FROM THE KNOXVILLE CHAPTER.—Our activities have been varied and interesting during the past fall. In September, we trapped 2112 Chimney Swifts at the U. T. Law College. All were banded except about 10 percent which had previously been banded here and 15 birds which wore "foreign" bands placed by banders in other states or cities.—At our October meeting, Dr. Henry Meyer gave a paper on "The interpretation of bird behavior." A feature of the November meeting was a talk by Mrs. Robert A. Monroe in which she gave us a glimpse of the Sierras and told us of the life of John Muir and of the habits of the Water Ouzel.—The October Field Day was held on the Ogden farm near the airport. In November, we combined forces with the Smoky Mountains Hiking Club and made a trip to the Greenbrier region of the Park. Our December field trip comprised the 6th annual X-mas bird census of the Great Smokies and our 20 members, after the days

search "from top to bottom," gathered at the home of the Stupkas, our host, for supper, and found we had reached the excellent total of 48 species and 1178 individuals. The list, personnel and other data, are given on another page. Our officers for 1943, are: Pres., Ed. W. Dougherty, Vice-pres. Dr. Henry Meyer, Curator Wm. M. Walker, Jr., and Secty.-Treas., the writer—ELISE MORRELL, 148 W. Peachtree St., Knoxville, Tenn.

FALL FIELD DAY AT NASHVILLE: The Nashville Chapter, T. O. S., enjoyed a perfect day for its Fall Field Day, Oct. 18, 1942. The weather was bright with sunshine and crisp enough to be invigorating. Several members from a distance joined 45 of our local members for the days tramp afield. Dividing into several groups, these radiated from the picnic grounds on Little Harpeth River in Edwin Warner park, 10 miles west of Nashville. The terrain covered included valley, meadows, wooded pastures and the picturesque high hills. At one o'clock we reassembled to compare our finds, and to eat our lunches, topped off with a cup of Dr. Vaughn's renowned campfire coffee. After lunch we again indulged in shorter hikes. Many members of long standing declared this to have been one of the club's most enjoyable outings. So, come what may, we know we can find a bit of peace and relaxation from the distractions of a warring world, among our Harpeth Hills and valleys. Our composite list showed 60 species of birds, as follows: Horned Grebe, Mallard, Blue-wing Teal (these three at Radnor Lake), Turkey and Black Vultures, Osprey, Sharp-shinned, Cooper's, Red-tailed, Marsh and Sparrow Hawks, Bob-white, Killdeer, Dove, Great Horned Owl, Kingfisher, Flicker, Pileated, Red-bellied, Red-headed, Hairy and Downy Woodpeckers, Yellow-bellied Sapsucker, Phoebe, Blue Jay, Crow, Chickadee, Tufted Titmouse, White-breasted Nuthatch, Brown Creeper, Winter, Carolina and Bewick's Wrens, Mockingbird, Robin, Hermit Thrush, Bluebird, Golden-crowned and Ruby-crowned Kinglets, Cedar Waxing, Starling, White-eyed Vireo, Blue-headed Vireo (1), Black-and-white Warbler, Myrtle Warbler, English Sparrow, Meadowlark, Bronzed Grackle (huge flocks), Cowbird, Indigo Bunting, Goldfinch, Cardinal, Red-eyed Towhee, Slate-colored Junco, Savannah, Chipping, Field, White-throated, Swamp and Song Sparrows.—KATHERINE ANDERSON, (Sect'y), Nashville, Tenn.

IN THE ARMED SERVICE: Ben B. Coffey and Carlyle D. Chamber (of K. O. S. at Louisville) were, until Christmas, members of the same Field Artillery Regiment unit at Ft. Bragg, N. Car; Ben is now in training at Ft. Sill, Okla. Austin W. Burdick, now at L. S. U., is expecting to be in southern Mexico during January, after which he is scheduled to enter the army. Pvt. Harry C. Yateman, of Columbia, is stationed in N. Car, his address being Med. Det. 479 CA, Bn (AA), Camp Davis, N. Car. Robert Norris editor of Georgia's *The Oriole*, enters the Navy in January. Albert F. Ganier, Jr., has recently been promoted to the rank of Major, division of Field Artillery. Charles Vaughn, veteran airways pilot, is now flying transport planes across the ocean. Burt Monroe of Louisville is stationed with army air forces in Wyoming. If we have missed any, let us know.

MEMPHIS CHAPTER, T. O. S., meets on third Mondays. Their officers are Mrs. M. L. Torti, Pres., Mary Davant, Vice-pr., Lawrence Kent, Treas., and Pauline James, Secty. Contact officers for place of meeting.

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it is not necessary to go beyond it."*

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EDITOR'S CHAT

Your editor wishes to express his appreciation to those of our members who have so generously sent in the 30 articles and items which go to make up this issue. The excellent cooperative Christmas census, participated in by 84 members, rolled up the remarkable statewide total of 108 species despite the fact that some of our best observers were away in the armed services. In Dr. Pickering's article on Reelfoot Lake birds, he literally takes us on an autumn vacation to this unique haven where water birds—strangers to most of us—are to be found in great variety. Dr. Mayfield, in explaining the extent to which the Starling mimics other birds, incidently puts us on our guard against listing the return of spring migrants by their calls alone. Harry P. Ijams, pioneer observer and artist for our cover, has served us a real "scoop" in rounding up the record of that big flock of Sandhills. Dr. Spofford, combining the technique of the anatomist with a love of falconry, has made the most of the opportunity to observe and describe the orderly process of the Gyrfalcons moult, from a brownish immature to its splendid white and black plumage of maturity. Messrs. Jamison and Simpson, dependable and energetic young men who "have what it takes" to climb big trees, have found out and told us, in this and past articles, a lot that wasn't known about "round-the-clock" nesting of Barn Owls. The Round Table is full to overflowing with items of interest about our Tennessee birds but space forbids more detailed comment. For our next issue, appearing in early spring, we have saved out some interesting nesting notes and more of these are solicited. Meanwhile, our members should be taking and sending in notes that may develop from their trips afield during the winter. Your editor would like to have a symposium upon how and where birds roost, especially from mid-winter until the leaves come again to offer protection, so, be making observations. To our members in the armed services, this issue constitutes "a letter from home" and during 1943 there will be four more to reach you.

—A. F. G.

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A species index for vols. 12, 13 and 14, will be published in the Dec. 1943 issue. Such indices were printed in the issues of Dec. 1937 and Dec. 1940.

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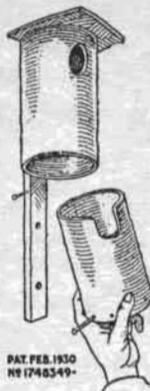
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