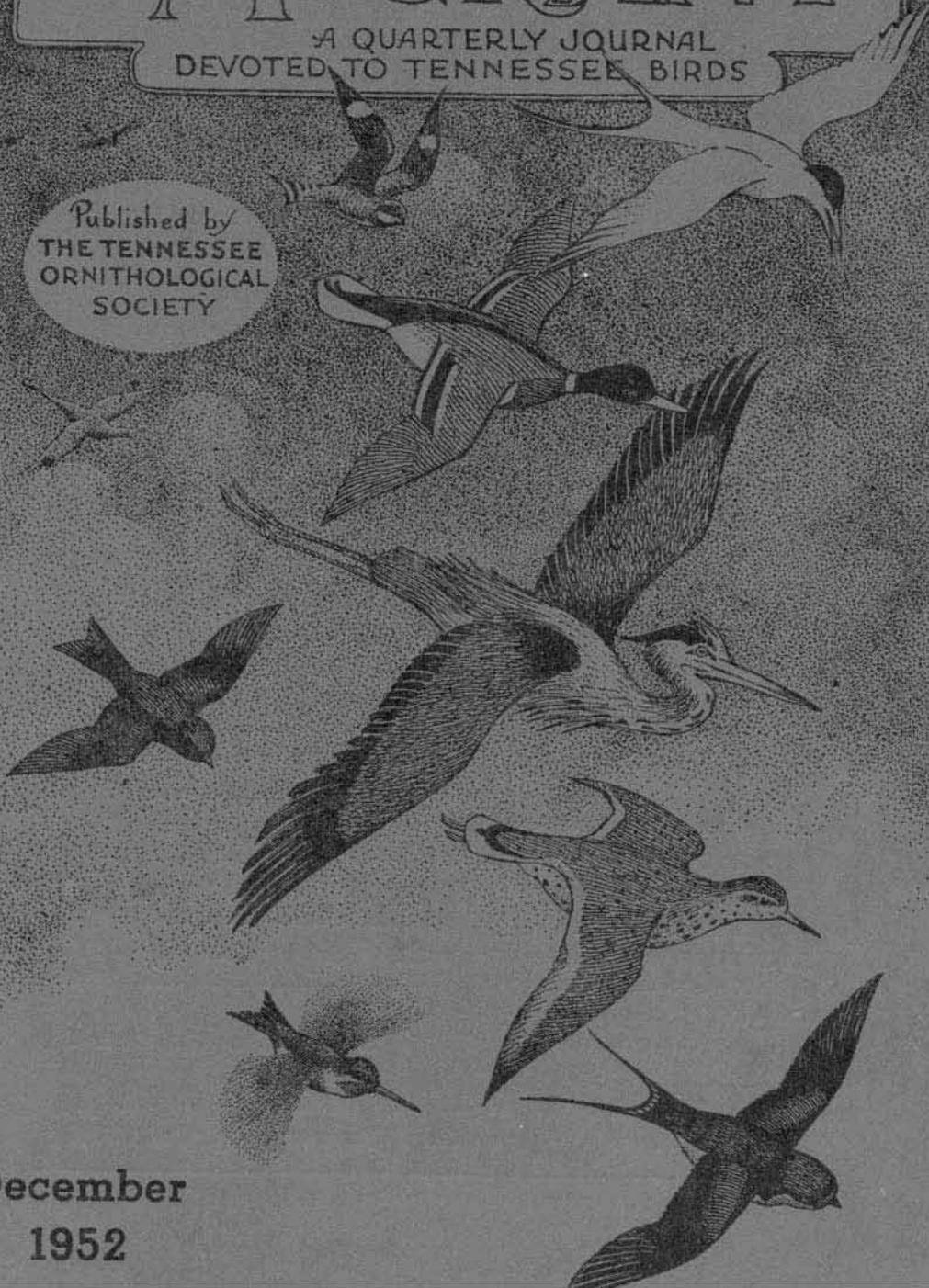


THE MIGRANT

A QUARTERLY JOURNAL
DEVOTED TO TENNESSEE BIRDS

Published by
THE TENNESSEE
ORNITHOLOGICAL
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THE MIGRANT

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

VOL. 23

DECEMBER, 1952

No. 4

A DECEMBER DAY IN A WATERFOWL REFUGE

By MRS. WILLIAM F. BELL

The Tennessee National Wildlife Refuge is one of the great national refuges that have been created for the purpose of affording a resting and wintering place for migratory waterfowl. It comprises 48,000 acres of land and water. The Duck River Unit of this refuge is located on the Tennessee River (now Kentucky Lake) where the extensive Duck River bottoms join with those of the Tennessee. A dike around these bottoms keeps most of an area about eight miles long and from one to two miles wide (6000 acres) from being inundated by the waters of the lake. Such rain water as naturally flows into this "dewatering" area is pumped out during early May. Some of the land is then planted in corn, soy beans, buckwheat, and other crops liked by waterfowl and part of this is left on the land for the birds. The bottoms are full of sloughs and shallow ponds, some of which are bordered by or overgrown with willows and similar growth. This area, long known as "Big Bottom", together with the island dotted lake on two sides, is all included in the refuge. An article by Eugene Cypert on an extensive heronry that exists here may be found in *THE MIGRANT*, 1949, 20:41-42.

Our trip was made on Dec. 6, 1952, and had been arranged by Mr. Cypert, of Paris, who is a Biologist in the U. S. Fish and Wildlife Service. With Mrs. Cypert and his assistant Robert Easley, he met our party at Johnsonville, Tenn., at 8 a. m. with two jeeps, one a station wagon and the other a light truck. Our Nashville party consisted of Mr. A. F. Ganier, Miss Jenny Riggs, Miss Ruth Castles, Miss Frances Hager, and the writer, Mrs. William F. Bell. The weather was perfect, being clear and cool. We first drove to the Kentucky Lake shore below the new power plant to view a flock of about 100 Ring-billed Gulls resting on a muddy peninsula. We then drove several miles southward, to the pumping plant on the dike, leaving our car there because only the jeeps could crawl thru the muddy roads to be encountered a mile farther on. At the dike end, a mile from the pumping station, we left the jeeps and walked a quarter mile toward mud flats and bays on the Tennessee River side of the dike, noting flocks of several hundred ducks and Canada Geese. The ducks were mostly Mallards, Pintails, and Black Ducks. As we watched, more geese began to come in from other parts of the refuge and soon more than a thousand had congregated on a low, narrow point. Mr. Cypert told us the day before he had observed here a flock of 20 Blue Geese accompanied by one Snow Goose. Many flocks of Double-crested Cormorants, a species which nests here in summer, were flying to and fro.

In a stand of cat-tails at the edge of the pond, we found a Long-billed Marsh Wren and observed it leisurely while it reciprocated the observation. Close watch was kept on the many muddy sloughs and lake shores for late shorebirds but only a few Killdeers were seen. We gave most of our attention to the waterfowl and but little time to the small land birds of the thickets and fields, but noticed that these birds were less common than in the hills. This is perhaps because so much of the area finally becomes inundated before winter is over. A find of unusual interest was that of a Leconte's Sparrow, one or more of which were with Savannah Sparrows in some tall Johnson grass. One of the Leconte's was maneuvered into an open space where all could study its handsome plumage at twenty feet.

Our jeeps then proceeded forward, negotiating mud-holes in which an ordinary car would have bogged down, and from every slough Mallards and sometimes other ducks would arise in flight. Messrs. Cypert and Easley were using the day for one of their periodic duck counts, so we visited a number of recently flooded low places near Clear Lake and there caused the feeding birds to rise by beating the metal roof of the truck. So many ducks would take to the air that it gave the effect of the great flocks of blackbirds we sometimes see at Nashville roosts. The total number of ducks mentioned in this paper, about 35,000, are their estimates.

We were told to expect eagles and soon located the first one perched in a large tree. We viewed him with interest at a distance of 300 yards and as he took flight a few minutes later. He alit in another tree by the road and seemed so absorbed in watching a flock of Redwings on the ground below him that he permitted even closer approach. We noted his almost black underparts, the buteo-like head, and the golden-brown of his neck and crown. As he took off, he displayed ashy-white areas under his wings and a whitish tail with broad black terminal band, thus confirming our first opinion that our bird was a Golden Eagle and not an immature Bald. During the day we saw at least twelve eagles and we were only in the upper and lower thirds of the Refuge. We identified at least four of them to be Golden Eagles and most or perhaps all of the others were immature Balds. They spent a good deal of time perched in trees, sometimes two together, and at other times soared about at less than a thousand feet. One of the eagles was a partial albino, having much white on the back and shoulders as well as on the body below and about the head and tail. We hesitated to call it a Bald Eagle because it repeatedly engaged in playful flight with one of the Golden's. This may have been a courtship demonstration. Another eagle, high in air, was being heckled by a Crow which darted at it repeatedly from above but never actually struck it. We assume that the eagles have gathered here because of the presence of many thousands of ducks, and of Coots earlier in the season. The high, heavily wooded hills, which extend here for several miles along the opposite side of the river, should afford good nesting sites for Bald Eagles. The Golden Eagles were quite unexpected in this low, flat area for most of the Tennessee winter records are of those which soar about the high knobs south and east of Nashville. Because no guns are allowed in the Refuge, the eagles have become remarkably unwary and they permit observation to fine advantage.

During the afternoon we traversed the "upper bottom", this being the east third of the Refuge bordering Duck River. At the many sloughs and ponds, we flushed flock after flock of ducks and more Great Blue Herons, making twenty or more of the latter for the day. Mr. Cyfert told us that an American Egret had remained during the previous winter.

Hawks were numerous, including 8 Red-tails, 3 Red-shouldered, and 6 Marsh Hawks. The most interesting of this group however was a Peregrine Falcon or Duck Hawk, seen in the upper bottoms. As we were driving along a winding road, hedged in by high Johnson grass, the Falcon darted swiftly across the road forty feet in front of us and dived into the brush after a small bird. It then emerged and flew around the next turn of the road. As we reached the turn, the falcon was seen in the road preparing his victim. As it arose again, we could clearly see the long, pointed wings, the blue back of an adult bird, and the narrow rounded tail. It re-alit in the road, then took off on our approach and disappeared.

One pond was passed in which there were three Ring-Billed Gulls, flying above a flock of 75 ducks which were mostly mergansers. We identified four of them as Hooded and two as American Mergansers before they took flight.

As the bright sunny day came to a close, we took up a station where we could see the evening flights to the roosts. Some, including the geese, took to the open water of the lake about the small islands, but more flew to the inland sloughs which were chiefly grown with weeds and willows. For over half an hour flocks were continually in the air. We had never seen so many waterfowl and it was truly a fitting end to a most exciting and satisfying day.

Mr. Ganier has kindly collaborated in the preparation of this paper and added comments on the eagles in which he was especially interested. The complete list of birds seen is as follows.

Double-crested Cormorant, 1500; Great Blue Heron, 20; Canada Goose, 1000; Mallard, 30,000; Black Duck, 3000; Baldpate, 50; Amer. Pintail, 1000; Green-winged Teal, 1; Ring-necked Duck, 100; Bufflehead, 3; Mergansers, 75 (including Hooded and American Mergansers); Turkey Vulture, 15; Red-tailed Hawk, 8; Red-shouldered Hawk, 3; Golden Eagle, 4; Bald Eagle, 8; Marsh Hawk, 7; Peregrine Falcon (Duck Hawk), 2; Sparrow Hawk, 1; Killdeer, 8; Ring-billed Gull, 103; Mourning Dove, 3; Kingfisher, 2; Flicker, 4; Pileated Woodpecker, 2; Red-bellied Woodpecker, 3; Yellow-bellied Sapsucker, 3; Downy Woodpecker, 2; Blue Jay, 6; Crow, 150; Carolina Chickadee, 10; Bewicks Wren, 2; Carolina Wren, 1; Long-billed Marsh Wren, 1; Mockingbird, 1 (in the hills); Bluebird, 5; Cedar Waxwing, 24; Loggerhead Shrike, 3; Myrtle Warbler, 1; Meadowlark, 2; Red-wing Blackbird, 5000; Rusty Blackbird, 3; Bronzed Grackle, 220; Cowbird, 50; Cardinal, 25; Goldfinch, 10; Towhee, 3; Savannah Sparrow, 6; Leconte's Sparrow, 2; Slate-colored Junco, 6; Field Sparrow, 8; White-crowned Sparrow, 3; White-throated Sparrow, 2; Fox Sparrow, 1; Swamp Sparrow, 30; and Song Sparrow, 20.

NOCTURNAL BIRD MIGRATION AT NASHVILLE, TENNESSEE

By ALBERT F. GANIER

In response to the call by Mr. Robert J. Newman (1952) of Louisiana State University, a group of Nashville T. O. S. members made a set of observations of birds passing across the full moon, during the nights of September 30 to October 4, 1952, inclusive. Due to the southward movement of a cold front in the midst of the period, these observations proved to be particularly valuable and interesting.

Because of the dismantling of the Vanderbilt University observatory in the course of constructing a new one, the equipment used in the spring of 1948 (Ganier, 1948) was unavailable, but we were fortunate, thru the courtesy of Mr. John H. DeWitt of Nashville, to be given the use of his private observatory. His telescope is a 60 power reflecting model of 180 inch focal length, 12 inch aperture, electrically operated and of English manufacture. Viewing was done thru a right-angled eyepiece, and the observers changed places every ten minutes to prevent eye-strain. About a minute was lost at each change in order to make adjustments, etc. The skies were clear thru the entire period until clouds blotted out the moon at 11 p. m., Oct 4, thus ending the observations.

The figures following the names of the participants listed below represent the number of nights attended and the number of minutes at the telescope. Mrs. Wm. B. Bell (1-41), Miss Ruth Castles (2-96), Fairman Cumming (2-63), Albert F. Ganier (5-245), Miss Helen Howell (2-45), Al. Mayfield (1-58), Mrs. Al. Mayfield (1-37), Dan Schreiber (1-31), and Edwin Schreiber (2-57).

The site of the observations was twelve miles south of Nashville, at the W. S. M. radio tower near the Franklin Pike. This was so well removed from the lights of the city that there was no likelihood of birds converging to the site because of light attraction. The surrounding country, for a mile, was nearly flat.

In order to better present the figures for study, the most pertinent data is given below in tabular form. Briefly summarized, migration was found to be sub-normal the first night, Sept. 30 (27 birds in 92 minutes net time), but on Oct. 1, there was a perceptible increase beginning at 11 p. m., portending perhaps the cold front which arrived at 4 a. m. The next night, Oct. 2, an abnormally heavy migration poured thru (234 in 197 minutes) following the arrival during the day of the cold front that had been borne in on a brisk north wind. The wind died down the next morning and that night, very few birds were flying (14 in 146 minutes). On the next and last night, Oct. 4, migration was no longer in evidence.

There being no rain during the period, it would seem that the direction and force of the wind was the chief factor which set the birds in flight. Sept. 30 was quite warm and calm with winds not over 2 m. p. h. South winds blew all day on Oct. 1, rising to 8 m. p. h. at mid-day and 6 m. p. h. at midnight. Southward flying birds had to go against this wind. After mid-

night (our operations had ceased) the wind reversed and at 6 a. m., it was blowing at 7 m. p. h. from the northwest and by noon had risen to 16 m. p. h. not abating until the early morning of Oct. 3. Our observations the night of Oct. 2 showed large numbers of birds riding this wind southward. Although Oct. 3 was even colder than Oct. 2, a calm had set in by night-fall and practically no birds were migrating that night. It was the same on the following night.

Date	Time of Observation Begin-End	Actual Time at Scope	Total Birds Seen	Birds per Minute	Wind in m.p.h. Begin-End	Temperature Begin-End
Sept. 30	9:30-11:15	92 min.	27	.29	S1-S2	66-63
Oct. 1	8:50-11:30	145 min.	43	.29	S3-S6	71-67
Oct. 2	8:57-12:34	197 min.	234	1.19	NW8-N7	55-51
Oct. 3	9:23-12:05	146 min.	14	.10	O-S2	50-45
Oct. 4	9:20-11:00	94 min.	1	.01	S6-S5	63-65

During the above period, a set of observations were also taken by Mrs. Amelia Laskey and Mrs. Katherine Goodpasture at the south city limits about nine miles away. I understand that their observations were similar to ours. At Memphis, the same dates were covered by T. O. S. members there and reported on by Mr. Coffey. The cold front reached there a few hours before it struck Nashville and Demett Smith and Bobby Cooper began recording the first rush of birds at 2:15 a. m. on the morning of Oct. 2. The night that followed that day was likewise their "big night". At Charlotte, North Carolina, 180 miles east-southeast of Knoxville, B. R. Chamberlain (1952) reports 450 birds in 390 minutes on the night of Oct. 3. At Thomasville, Ga., a few miles north of the Florida line, Mr. H. L. Stoddard told me in conversation that the bird-wave struck there at about the same time. The broad front of this migration is of particular interest.

At Nashville, on the night of Oct. 2 between 9:30 and 11:30, we found that birds were passing our small arc of vision at the rate of two a minute during most of that period. In agreement with Dr. George H. Lowery's recent studies (1951), we have found that the birds observed increased in numbers during the early hours of the night and tapered off after midnight. Such evidence, he says, strongly supports the theory that after an evening period of sleep and rest, the birds awaken, become restless, arise and fly for some hours, then come to earth after midnight. This poses the interesting question of how well birds can see at night. One might think that they would prefer a moonlit night, to better enable them to choose a proper place to alight when tired. However, we know from hearing migrating birds call overhead on dark and even rainy nights, that they are not at all dependent on moonlight. Thrilling accounts of a great migration in such weather, on Oct. 23, 1935, have been published by Bamberg et. al., (1935) in THE MIGRANT. A sound recording device that could magnify and record night

calls thru the migration season would give a more comprehensive set of data on the times of migration altho it would not tell the direction. It is probably true too that birds are more vociferous on a dark stormy night and fly closer to the earth's surface.

Our detailed observations have been sent to Mr. Newman to be correlated with a great number of similar observations from other parts of the country and we shall look forward to his findings, particularly with reference to this October flight of migrants.

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- 2112 WOODLAWN DRIVE, NASHVILLE 12, TENN. December 1952.

FALL MIGRATIONS OF HAWKS IN 1952

By FRED W. BEHREND

Altho there were fewer observations this year, hawk migration observation in East Tennessee, the neighboring southwestern part of Virginia, and along the Tennessee-Carolina line produced results during the 1952 fall season comparable to those of the preceding two years. The table below shows a total of 2464 Broad-wings observed. An additional 173 of a variety of hawks migrating over this region,—Red-tailed, Red-shouldered, Sharp-shinned, Cooper's, Duck, Sparrow, and Marsh Hawks; Osprey and Bald Eagle—were listed.

In keeping with the practice of recent years, special attention was paid to the migratory movement of Broad-winged Hawks. An initial attempt was also made at correlation of simultaneous observation in different localities. Russell on Hayter's Knob tower and Behrend on Mendota tower, points about 20 miles apart on the Clinch Mountains in southwestern Virginia, teamed up from morning to afternoon of September 20 to record the number of hawks passing these points and arrive, by way of calculation, at an estimation of speed of flight. The relatively small number of hawks seen during the brief period of time devoted to this phase of observation does not warrant the drawing of any conclusions. The observers concur in that it will take observation of flights of some size and a more extended period of watching than in the present instance to accurately estimate the degree of continuity of flight along the ridge and speed of flight of the birds between the points of observation.

As in 1950 and 1951, the Clinch Mountains proved to be a major flyway for the Broad-wings. In the territory of observation as a whole, a few localities were added this Fall to those of previous years in which flights of Broad-winged Hawks occurred. This allows for further speculation concerning flight direction in particular localities. There is the example of the Knoxville group's finding as related by Tanner, that the Broad-wings observed at or near the end of the Clinch Mountains northeast of Knoxville usually left the end of the ridge in a westerly or southwesterly direction, indicating that their flight in this direction would bring them to the Cumberland Mountains in the vicinity of Rockwood. Exceedingly interesting in this respect are the observations of substantial flights by Mrs. E. M. West, reporting from Kingston, Tennessee, approximately 40 to 50 miles southwest of the terminus of the Clinch Mountains and a very few miles east of Rockwood, which seems to substantiate this conclusion.

Equally interesting is the observation by Richard Nevius of a large flight of Broad-wings near the southern end of Bays Mountain in the Tennessee Valley, north to northwest of Greeneville. Observations at the northern end of this ridge near Kingsport, in 1950 and 1951, indicate sizable flights of Broad-wings all along the narrow Bays Mountain ridge. In what direction they proceed upon reaching the relatively level country at the southern end of Bays Mountain, in the middle of the Valley, is a puzzle.

On the theory that Broad-winged Hawks, according to 1950 and 1951 observations by members of the Greeneville Chapter on Camp Creek Bald and Rich Mountain towers, follow the crest of the master chain of the Appalachians farther southwestward, investigation was extended to Max Patch, a bald, by Behrend, who spent the better part of September 22 and 23 in that locality. Even tho the number of Broad-wings seen there was comparatively small, perhaps because of unfavorable weather and wind conditions prevailing at the time, it is significant that the hawks were invariably taking a southwesterly course from that point along lower ridges toward the Great Smoky Mountains, which are approximately 10 miles distant. This would make it appear reasonable that Broad-wings migrate along the crest of the Smokies in at least their eastern part.

Flights of more moderate sizes were spotted in certain places along or near the Blue Ridge (Craggy Pinnacle and Grandfather Mt.) where concentrations of Broad-winged Hawks were observed by T. O. S. members in preceding years. Casual observations by individuals with a minor interest in bird study placed flocks of Broad-wings at the following points and late dates: an estimated 100 on Sept. 30 and Oct. 6 at Lake Phillip Nelson in the southwestern corner of Carter County in East Tennessee (Morgan) and estimated "hundreds" on Oct. 12 at Mt. Rogers in southwestern Virginia (Shields).

Investigation of the western escarpment of the Cumberland Plateau near Sparta, Tennessee (Ganier, September 25), extending from early morning to mid-afternoon, proved wholly unsuccessful, confirming like experience in other localities west of the Cumberlands in 1951.

COUNTS OF BROAD-WINGED HAWKS DURING FALL MIGRATION 1952

	A	B	C	D	E	F	G	H	I	J	K	Total
Sept. 6								1 (2)				1
Sept. 20	271 (1)	65 (2)										336
Sept. 21	912 (1)		104 (3)						4 (2)			1020
Sept. 22				65 (6)			6 (2)					71
Sept. 23				407 (6)			8 (2)					415
Sept. 25					300 (7)							300
Sept. 26										86 (2)		86
Sept. 27			194 (4)								11 (2)	205
Sept. 28						26 (8)						26
Sept. 30			4 (5)									4
Total	1183	65	302	472	300	26	14	1	4	86	11	2464

KEY TO LOCALITIES:

A—Hayter's Knob Tower, Clinch Mountains, northwest of Abingdon, Va.

B—Mendota Tower, Clinch Mountains, northwest of Bristol, Tenn.-Va.

C—Clinch Mountains, northeast of Knoxville, Tenn.

D—Kingston, Tenn., approx. 40 miles west-southwest of Knoxville.

- E**—Bays Mountain (Bluff Mt., Marvin), north-northwest of Greeneville, Tenn.
- F**—Camp Creek Bald (Part of Cold Spring Mountain) Tower, on crest of Appalachians, Greene County (Tenn.) and Madison County (North Carolina).
- G**—Max Patch, on crest of Appalachians, Cocke County (Tenn.) and Madison County (North Carolina).
- H**—Hump Mountain (Yellow Mountains), Carter County (Tenn.) and Avery County (North Carolina).
- I**—Little Snowball Mountain Tower, west of Craggy Mountains near Blue Ridge, northeast of Asheville, North Carolina.
- J**—Craggy Pinnacle, northeast of Asheville, North Carolina.
- K**—Grandfather Mountain (Blue Ridge), near Linville, North Carolina.

KEY TO OBSERVERS—(1) Stephen M. Russell, Bristol Chap.; (2) Fred W. Behrend, Elizabethton Chap.; (3) Dr. James T. Tanner, Knoxville Chapter; (4) Dick Laurence, John Sonner, John Jacobs, Don Hurley, Hugh Davis, Knoxville; (5) J. B. Owen, Knoxville; (6) Mrs. E. M. West, Kingston, Tenn. (Chattanooga, Tenn. from November, 1952) (7) Richard Nevius, Greeneville Chapter; (8) Mr. and Mrs. Richard Nevius, Virginia Nevius, Greeneville Chapter.

It is of interest that in segments of the Southern Appalachians, other than those of Tennessee and southwestern Virginia, members of the Carolina Bird Club were signally successful in seeing good-sized flights of Broad-winged Hawks along the Blue Ridge from close to the Virginia border all the way down to near Blowing Rock, and reports from Georgia and Alabama indicate migration of Broad-wings along southernmost parts of the Appalachian Mountain system.

607 RANGE STREET, ELIZABETHTON, TENN.

BIND YOUR MIGRANTS—This issue marks the end of another "block" of 3 volumes of this magazine and the index, covering 1950-51-52, makes the 12 issues ready to bind into one book. For some years the writer has had from 30 to 40 sets bound at a Nashville bindery and is glad to say that he has a quotation from them at no advance in price. For buckram binding with strong over-sewn stitching, this price is \$1.35. Add 10 cents for return post. Missing issues can be supplied for 30 cents each. In order to get this "quantity price", the magazines should be sent to me between March 1 and 15. No more interesting books can be had for your Tennessee bird library than bound volumes of THE MIGRANT.—ALBERT F. GANIER, Pres., 2112 Woodlawn Dr., Nashville 12, Tenn.

A title sheet to bind with the three volumes is being printed, and a supply will be in Mr. Ganier's hands for the sets he receives to be bound. Others wishing this sheet may get one on request to the Editor (Dept. of Zoology, Univ. of Tennessee, Knoxville, Tenn.).

ADDITIONAL BIRDS OF THE YAZOO-MISSISSIPPI DELTA

By MERRITT G. VAIDEN

This paper is the eighth in a series on the birds of this region published in *THE MIGRANT* (Sept. 1939; June 1940; Sept. 1940; Sept. 1943; Sept. 1947; Dec. 1948; and March, 1952).

The records and specimens mentioned in this paper are from Bolivar County. All specimens collected are in my private collection.

Mr. Allen Duvall of the Fish and Wildlife Service, Washington, D. C., made all subspecific identifications for me and I am grateful for this help.

EASTERN BROWN PELICAN (*Pelecanus occidentalis carolinensis*) On September 23, 1952, this species was flushed from a drying up borrow-pit. The bird was observed as it rested on a small mud-bar with feeding herons, egrets, and over sixty Wood Ibises. When flushed it circled and flew directly over us twice as it gained altitude. This is my second record for Bolivar County. The first was at Lake Bolivar when this lake dried completely up during the drought of 1930. Observation dates were October 5, 7, 8, and 12.

EASTERN LEAST BITTERN (*Ixobrychus c. exilis*) We have again located this bird's nesting area at Legion Lake. A male was taken on July 22, 1952.

SWAINSON'S HAWK (*Buteo swainsoni*) I can find no record of this bird having been secured in Mississippi. I have two females collected September 27 and October 19, 1952. These birds were collected nine miles south of Rosedale.

EASTERN PIGEON HAWK (*Falco c. columbarius*) Examples taken, both females, on September 17, 1948, and September 23, 1951, proved to be the eastern race.

KING RAIL (*Rallus elegans*) Since we note so much published in the literature in recent years of this bird wintering and breeding in Mississippi and Arkansas it might be of interest to give a few of my notes. I have found this bird fairly to plentifully distributed in suitable areas in the Delta areas of both states. I have birds in my collection taken in Bolivar County on January 30 and January 27 of 1945 and 1946. Five birds were taken for food on January 3, 1926. My earliest nesting record for Arkansas is May 3, 1913, and for Mississippi it is April 16, 1920.

HERRING GULL (*Larus argentatus smithsonianus*) This bird is rarely seen here on the Mississippi River or the lakes. I have an immature specimen taken by Bobby Collins one-half mile west of Rosedale, on December 25, 1947. This bird was feeding with geese along a sand-bar of the Mississippi River.

COMMON TERN (*Sterna h. hirundo*) This species has not proved a common one here in migration for I have only nine records in thirty-four years. I have two females in my collection taken on May 24, 1952, at Legion Lake.

SCISSOR-TAILED FLYCATCHER (*Muscivora forficata*) While accompanied by Mrs. Vaiden, Mrs. Klingman, and Bobby Collins, I discovered this species on May 11, 1952, as it fed in high weeds along the slope of

the levee six miles south of Rosedale. Two shots were made with a small bore shotgun; both were misses. A search was made daily for ten days thereafter, but not a trace of the bird was found.

ALASKA WATER PIPIT (*Anthus spinoletta geophilus*) Specimens taken January 27, a male, and November 17, a female, in 1946 proved to be this race. I find no record of this form being taken in this State.

WORM-EATING WARBLER (*Helmitheros vermivorus*) I collected my first fall specimen on September 4, 1952, at Old River Lake. It is occasionally observed in spring migration.

BLUE-WINGED WARBLER (*Vermivora pinus*) On August 14, 1952, a female was secured at Old River Lake for my third collection.

LOUISIANA WATER-THRUSH (*Sciurus motacilla*) My second collection for Bolivar County occurred on September 3, 1952. I have no other sight records for the Delta. This bird is a fairly common breeding one in certain sections of the central and eastern Mississippi.

ATHENS YELLOW THROAT (*Geothlypis trichas typicola*) This form has not before been reported from northern Mississippi. Mr. Duvall assigned specimens taken on September 13 and October 5, 1946, and on May 4, 1947, to this race. This seems to be an extension of the range of this sub-species.

WESTERN MEADOWLARK (*Sturnella neglecta*) On April 26, 1952, a beautiful male of this species was taken. The flock was first located by Bobby Collins on April 21st. We have checked the area many times since the collection date and have not again located this species. Altho our local Eastern Meadowlarks were breeding at the time of collection of the Western Meadowlark, we have failed to find this bird breeding; the specimen collected however had sex organs completely developed.

EASTERN BLUE GROSBEAK (*Guiraca c. caerulea*) Altho this species is a fairly common summer resident in the central and northern sections of the State, I have heretofore had but one sight record. On April 22, 1952, a fully adult male was taken from the side of the levee three miles north of Rosedale.

INDIGO BUNTING (*Passerina cyanea*) We continue to occasionally find this species building nests in growing cotton plants. In the summer of 1951 we located nests with eggs. We found a pair building on July 17, 1952, in a cotton plant, which is rather late for this species to start nesting in this area.

PINE SISKIN (*Spinus pinus pinus*) Feeding with thousands of migratory Goldfinches, a few of these birds were found during May, 1952. They were feeding along the streets, in the city park, and in yards. No collection was made.

ALASKA FOX SPARROW (*Passerella iliaca zaboria*) A male and female taken on January 24, 1952, proved to be this race and are the first reported from Mississippi.

EASTERN SONG SPARROW (*Melospiza m. melodia*) A male and a female of this form were taken on February 15, 1952, at Legion Lake and proved to be a first record from northern Mississippi.

ROSEDALE, BOLIVAR COUNTY, MISSISSIPPI, DECEMBER 13, 1952

THE 1952 CHRISTMAS SEASON BIRD COUNTS

By T. O. S. MEMBERS

The grand total of species seen over the State in the 1952 Christmas Counts is 112, four less than the all-time record set a year ago. Two species, the Green-tailed Towhee and the Harris's Sparrow, both seen at Memphis, are new to the Christmas Counts, and the first is a new species for Tennessee. A new locality, included for the first time in our Counts, is the Duck River bottoms near Johnsonville, and the inclusion of this area greatly increases the numbers of waterfowl reported. Also Golden Eagles were reported from there, the first time in the Christmas Counts since 1939.

The richness of our winter bird life can be quickly perceived by examining the table, in which the localities are arranged as in a map, from west to east across the State. Memphis and Reelfoot Lake reported the most species, 80 and 79 respectively, and the number decreases eastward to the total of only 9 species reported from wintery Roan Mountain. An examination of the numbers of certain species, hawks, Red-bellied Woodpecker, wrens, and others, reveals a similar decrease from west to east. A few species, however, increase eastward, like Mourning Dove and Phoebe.

Some interesting points and a few obvious changes from previous years are worth mentioning. Last year a single American Egret was seen at Reelfoot Lake, the first time this species was recorded in a Christmas Count. This year 29 Egrets were reported from there. There have been other records within the past year of American Egrets wintering in Tennessee for the first known time. Pine Siskins were reported in large numbers from the Great Smokies for the first time in several years; they have been fairly common around Knoxville this winter, and 10 were reported from Nashville on the Christmas Count. The total count of Juncos is nearly twice as high this year as compared with last, and Tree Sparrows were reported from four localities this year as compared with only one in 1950 and 1951. The really high numbers for any species are those of blackbirds observed at roosts. Red-wing Blackbirds lead with a total approaching 2½ million, 2 million being the estimated number in the tremendous flocks roosting at Reelfoot Lake. Grackles came second with a total of 680,000, Starlings third with 95,000, and Cowbirds fourth with 70,000 birds observed at roosts.

In the table and descriptions that follow, the localities are listed from west to east. Under the heading "Information on the Counts" are described the areas, types of habitats covered, weather conditions, number of observers or parties, miles covered, number of species, and approximate number of individual birds observed, and the names of the observers. The species and numbers of individuals observed at each locality are listed in the table except for the report from Roan Mountain which is entirely included in paragraph for to enable including the altitudinal information. For additional information on records marked with an asterisk (*), see the paragraph containing the information on the locality.

SPECIES	Memphis	Reelfoot	Jackson	Duck River	Nashville	Murfreesboro	Great Smokies	Greeneville	Kingsport	Elizabethton
Belted Kingfisher	3	14	2	-----	13	1	10	4	1	5
Flicker	137	33	78	8	101	2	15	19	7	8
Pileated Woodpecker	2	7	-----	3	8	-----	14	3	3	-----
Red-bellied Woodpecker	62	36	33	5	49	-----	-----	3	-----	-----
Red-headed Woodpecker	5	2	3	-----	1	-----	-----	-----	-----	-----
Yel.-bellied Sapsucker	7	8	21	1	26	1	1	1	-----	2
Hairy Woodpecker	21	4	5	-----	9	-----	14	2	1	1
Downy Woodpecker	86	24	33	4	60	1	34	6	10	10
Phoebe	2	-----	-----	-----	1	-----	11	4	6	1
Horned Lark	169	-----	494	-----	49	-----	6	4	-----	-----
Blue Jay	362	21	125	31	78	5	29	67	58	19
Raven	-----	-----	-----	-----	-----	-----	6	-----	-----	-----
Eastern Crow	132	70	48	80	121	12	176	1500	72	44
Fish Crow	*1	-----	-----	-----	-----	-----	-----	-----	-----	-----
Black-cap'd Chickadee	-----	-----	-----	-----	-----	-----	*	-----	-----	-----
Carolina Chickadee	289	56	74	11	134	-----	*256	89	47	45
Tufted Titmouse	177	68	58	8	78	-----	15	34	19	17
White-brsted. Nuthatch	8	5	4	2	-----	-----	2	3	4	-----
Red-breasted Nuthatch	-----	-----	-----	-----	-----	-----	19	-----	-----	-----
Brown Creeper	9	6	8	-----	13	-----	13	3	2	2
Winter Wren	39	2	20	-----	3	-----	5	2	-----	-----
Bewick's Wren	-----	-----	3	3	7	3	1	1	-----	-----
Carolina Wren	110	56	36	5	77	2	46	54	18	25
Mockingbird	109	6	24	5	98	5	15	58	37	19
Brown Thrasher	24	5	24	1	-----	-----	-----	*2	2	-----
Robin	218	1	13	3	1100	46	28	158	-----	5
Hermit Thrush	32	5	11	-----	8	-----	20	-----	2	1
Bluebird	16	4	32	12	126	7	28	24	7	27
Gold'n-Crowned Kinglet	33	1	22	-----	11	-----	83	2	-----	26
Ruby-crowned Kinglet	8	-----	2	-----	1	-----	2	2	-----	-----
American Pipit	49	-----	13	-----	*27	-----	-----	-----	-----	-----
Cedar Waxwing	26	10	22	17	10	5	3	-----	20	25
Loggerhead Shrike	30	8	25	2	8	5	3	1	-----	3
Starling	*	250	250	*	2780	32	29	200	-----	169
Myrtle Warbler	64	27	22	-----	72	7	-----	14	18	53
Palm Warbler	-----	-----	-----	-----	-----	1	-----	-----	-----	-----
English Sparrow	461	75	300	50	240	9	140	115	85	46
Eastern Meadowlark	515	49	305	55	93	8	40	80	5	54
Red-winged Blackbird	*	*	99	*	2	1	2	1	-----	-----
Rusty Blackbird	5	-----	19	-----	-----	-----	-----	-----	-----	-----
Brewer's Blackbird	4	-----	*2700	-----	-----	-----	-----	-----	-----	-----
Purple Grackle	*	500	9	*	40	-----	-----	1	-----	-----
Cowbird	*	50	63	*	1	-----	-----	-----	-----	-----
Cardinal	566	130	120	36	370	16	102	159	65	86
Purple Finch	24	-----	4	-----	12	3	54	3	-----	1
Pine Siskin	-----	-----	-----	-----	10	-----	625	-----	-----	-----
Goldfinch	489	51	66	30	213	3	205	93	9	88
Red Crossbill	-----	-----	-----	-----	-----	-----	36	-----	-----	-----
Green-tailed Towhee	*1	-----	-----	-----	-----	-----	-----	-----	-----	-----
Red-eyed Towhee	99	1	50	11	85	-----	20	15	26	8
Savannah Sparrow	37	-----	12	8	7	-----	-----	-----	-----	-----
Leconte's Sparrow	*1	-----	-----	-----	*1	-----	-----	-----	-----	-----
Vesper Sparrow	-----	-----	4	-----	*2	-----	-----	1	-----	-----

SPECIES	Memphis	Reelfoot	Jackson	Duck River	Nashville	Murfreesboro	Great Smokies	Greeneville	Kingsport	Elizabethton
Slate-colored Junco	689	177	390	6	337	16	500	49	35	159
Tree Sparrow	*3	*40	-----	4	*1	-----	-----	-----	-----	-----
Field Sparrow	83	41	27	5	139	2	200	99	36	16
Harris's Sparrow	*1	-----	-----	-----	-----	-----	-----	-----	-----	-----
Wh.-crowned Sparrow	43	54	20	6	*185	4	*4	9	3	14
Wh.-throated Sparrow	1307	131	252	45	220	2	170	32	35	75
Fox Sparrow	70	27	49	2	5	-----	2	-----	1	1
Swamp Sparrow	105	15	5	100	44	-----	2	-----	-----	3
Song Sparrow	396	86	170	16	232	6	127	71	27	40
Lapland Longspur	228	-----	-----	-----	-----	-----	-----	-----	-----	-----
Total Species	80	79	68	66	72	34	57	52	38	45

INFORMATION ON THE COUNTS

MEMPHIS, TENN.—(1946 area plus Penal Farm and northeast corner President's Island; wooded bottomlands 25%, deciduous woodlots including city parks 30%, old cottonfields, pastures, airports and farm 25%, suburban roadsides 20%). Dec. 21, 1952; 6:45 a. m. to 5 p. m. Dark, cloudy in a. m., partly cloudy in p. m.; temp. 39 to 45 to 42 degrees; wind 1-5 m. p. h. Twenty-four observers, 4 main parties, breaking up at various localities, 4 smaller parties. Total party-hours afield 86 (66 on foot, 20 in car); total party-miles 210 (52 on foot, 158 by car). 80 species, about 808, 381 individuals. Mr. and Mrs. Ben B. Coffey, Jr. (compilers), Mrs. Elizabeth Barton, Thompson Bonner, Frederick T. Carney, Mary Davant, Richmond Gill, Luther F. Keeton, Lawrence C. Kent, Edward M. King, Charles Marcus, Charles McPherson, Jr., Mrs. J. H. McWhorter, Jim McWhorter, Nelle Moore, Charles Seahorn, Jr., R. Demett Smith, Jr., Mrs. Ellen Stringer, Mr. and Mrs. M. L. Torti, Dr Wendell L Whittemore, Donald Wilson, Mrs. Rose N. Woolridge, Orval M. Wood, III.

Three species—Short-eared Owl, Green-tailed Towhee, Harris's Sparrow—are firsts for Memphis Counts, and the latter two are firsts for State-wide Christmas Counts. In addition the Green-tailed Towhee is a new species for Tennessee (see note in the Round Table). The immature Harris's Sparrow seen by Luther Keeton and Ed King is the third State record for this species; it was studied at 10 feet for fifteen minutes and flushed three times. The Short-eared Owls (R. D. S. and others) were evidently attracted by the blackbird roost. A satisfactory estimate of the number of birds in the blackbird roost could not be made on Dec. 21, so the number of birds using the roost on that date is set at 800,000 based on an estimate of 895,000 made on Jan. 3 and 4 and an estimated 10% increase over the Count date (based on size of roost area seen from above). Four observers at one-half to two miles away checking the main lines of travel recorded varying width of lines against time and rate of passage. Based on a traverse of the roost on the night of the Count by Coffey and R. D. Smith, Jr., the proportionate species estimate would be: Starling 60,000, Red-wing

150,000, Purple Grackle 550,000 and Cowbird 40,000. The 5 Rusty Blackbirds were seen in the roost, the 4 Brewer's Blackbirds elsewhere. Other records: Fish Crow (B. C.), LeConte's Sparrow (L. C., C. McP.), and Tree Sparrow (F. C., W. W.); the Bald Eagle was in adult plumage. Individual counts continued low on most small, woodland species.

REELFOOT LAKE, TENN.—(including Reelfoot National Wildlife Refuge, essentially same area as in previous years. Dec. 20, 1952. Overcast, some rain; temp. 48 to 42 degrees; wind northwest, 5 to 15 m. p. h. Eight observers in two or more parties. Total party-hours 35½, 79 species, about 2,065,000 individuals Howard Barbig (compiler), Evelyn Barbig, W. W. Fickle, Richmond Gill, Charles McPherson, George Peyton, Bro. Leo Thomas, Thomas Walker.

The numbers of the following species were estimated: Mallard 22,000; Gadwall, 11,400; Ring-necked Duck, 14,500; Red-wing Blackbird, 2,000,000, the same estimate as in previous years. The Tree Sparrows were observed at two locations by five different people.

JACKSON, TENN. (West Tennessee Experiment Station, Forked Deer River bottom and river, Cypress Creek bottom, and local ponds; river bottoms 45%, open fields 35%, roadside thickets 10%, ponds 5%, upland woods 5%. Dec. 29, 1952; 5:30 a. m. to 4:30 p. m. Morning partly cloudy, afternoon clear; temp. 30 to 52 degrees; wind SW, no wind in a. m., 8-10 m. p. h. in p. m. 3 observers in 1 party. Total party-hours 11 (8 on foot, 3 by car); total party-miles 50 (10 on foot, 40 by car). 68 species, about 6,381 individuals. Kilian Roever (compiler), Mrs. W. E. Roever, Jimmie Shaw.

In order to be positive that the blackbird flocks contained Brewer's Blackbirds, one shot was fired into a flock and three male Brewer's Blackbirds were killed.

DUCK RIVER BOTTOMS, TENN. (7½ mile radius centering at the Johnsonville steam plant and extending eastward and southward on the Tennessee National Wildlife Refuge and including the Duck River De-watering area and the adjacent portions of Kentucky Lake, and extending westward to include the town of Camden; river bottom farm land 50%, bottomland marshes 10%, open water and shoreline 20%, urban 5%, highways 5%, brush land 5%, bottomland hardwood-bordered sloughs 5%, Dec. 21, 1952; 7:00 a. m. to 4:30 p. m. Cloudy, temp. 32 to 45 degrees; wind SE, 6 m. p. h.; ground wet but no rain fell during the day. Four observers in one party. Total party-hours 9½ (2½ by car, 7 on foot); total party-miles 33 (30 by car 3 on foot). 67 species, about 460,700 individuals. Eugene Cypert (compiler), Mary Louise Cypert, Robert Easley, Grace Wyatt.

For an account of Golden Eagles in this area, see the article about this area in this issue of THE MIGRANT. The numbers of the following species were estimated: Starling, 30,000; Red-wing Blackbird, 260,000; Purple Grackle, 130,000; Cowbird, 30,000.

NASHVILLE, TENN. (localities and terrain same as last 2 years). Dec. 21, 1952; 6:30 a. m. to 4:30 p. m. Overcast but visibility good; temp. 38 to

41 degrees; wind 5 to 10 m. p. h.; ground bare and frozen. 25 observers in 7 parties. Total party-hours 61 (45 on foot, 16 by car); total party-miles 135 (38 on foot, 97 by car). 72 species, about 7800 individuals.—B. H. Abernathy, O. C. Ault, Mrs. Wm. B. Bell, Ruth Castles, Bert Chambersc, Mrs. Ovid Collins, Jr., Albert F. Ganier (compiler), Eddie Gleaves, Mrs. E. W. Goodpasture, Mrs. K. B. Everly, Frances Hager, Helen Howell, Al. Marsh, Al. Mayfield, Geo. R. Mayfield, Larry McClain, John Ogden, Douglas Oxford, Jennie Riggs, Jas. A. Robins, Mrs. Walter Sharp, Dan Schreiber, Edw. Schreiber, Mrs. E. B. Travis, and G. B. Woodring. (members Nashville chapter T. O. S.)—All water birds were seen on Radnor (85 acre) Lake. No local bird roost in area. White-crowned Sparrows more common than usual. Vesper Sparrows identified by Riggs (first local winter record); Tree Sparrow by Bell and Ogden; Leconte's Sparrow by Ogden. Pipits were in river bottom wheatfield. Seen two days previous were Turkey Vulture 3, and within week following were Palm Warbler 1, Brown Thrasher 1, Am. Golden-eye Duck 2; also four more Red-headed Woodpeckers.

MURFREESBORO, TENN.—Dec. 25, 1952; morning. Clear to partly cloudy; temp. 50 degrees. Two observers in one party. Total party-hours about 4. 34 species, about 260 individuals.

GREAT SMOKY MOUNTAINS NATIONAL PARK, TENN.—N. C.—(same as 1937 and subsequent years). Dec. 28, 1952; 6:30 a. m. to 6:00 p. m. Overcast below 3000 feet until noon, clear all day above 3000 feet; temp. 10 to 38 degrees; wind mostly SW, 1 to 10 m. p. h. Thirty observers in 10 parties. Total party-hours 72 (62 on foot, 10 by car); Total party-miles 172 (66 on foot, 106 by car). 57 species, about 3300 individuals. Jon Beasley, Hubert Bebb, Mr. and Mrs. Harvey Broome, Mary Ruth Chiles, William Cole, Brockway Crouch, Hugh Davis, Jr., Ronald Davis, Mr. and Mrs. Robert J. Dunbar, Keeton Griffin, Joseph C. Howell, Don Hurley, William M. Johnson, May Kedney, Richard Laurence, Mrs. Frank Leonhard, Mr. and Mrs. R. A. Monroe, S. A. Ogden, Mrs. E. E. Overton, J. B. Owen, Robert R. Scott, Arthur Stupka, James T. Tanner, Fred Taylor, Charles Thompson, Samuel R. Tipton, and D. W. Yambert.

The number of chickadees includes both Black-capped and Carolina Chickadees. The White-crowned Sparrows observed by Joseph C. Howell and Samuel R. Tipton at Pigeon Forge were the first of this species for Christmas Counts in this area.

GREENEVILLE, TENN.—(circle of $7\frac{1}{2}$ mile radius about Greeneville, including Roaring Fork Creek, Bluff Mountain at Marvin, Tusculum, Afton, Shiloh, Alexander's Beach on the Nolichucky River, White's Mill; stream banks 30%, deciduous woods 25%, open fields and thickets 40%, city suburbs 5%. December 29, 1952; 8 a. m. to 5 p. m. Clear; temp. 22 to 40 degrees; wind SW, 5 m. p. h. Nine observers in 5 parties. Total party-hours 60; total party-miles 87 (15 on foot, 72 by car). 52 species, about 3,103 individuals. Mrs. Willis Clemens, Mr. and Mrs. Alfred Irvine, Mr. and Mrs. J. B. White, Mr. and Mrs. Richard Nevius, Mr. C. M. Shanks (compiler).

One of the Brown Thrashers observed was reported by Mr. and Mrs. J. B. White; it was seen at close range near Mosheim, Tenn. The other Thrasher has been seen on a number of occasions during the early winter near the home of Mr. and Mrs. C. M. Shanks at Tusculum.

KINGSPORT, TENN. (5 mile radius centering at Civic Auditorium; woodland 40%, field and marsh 20%, residential area 10%, pasture 30%). Dec. 28, 1952; 7:30 a. m. to 5 p. m. Temp. 24 to 45 degrees; no wind or snow, some ice. Thirteen individuals in 6 parties. Total party-hours 26 (20 on foot, 6 by car). 38 species, about 1,410 individuals. C. Crane, E. McMahon, H. Young, R. Gift, W. E. Gift, Mrs. C. A. Harris, Mr. and Mrs. W. C. McHarris (compiler), Mrs. M. Pike, Mrs. J. W. Smith, Dr. and Mrs. M. J. Adams, Mrs. R. M. Switzer.

A pair of Red-shouldered Hawks were seen on the day before the Count, and a pair of Red-bellied Woodpeckers have been seen in one area all winter.

ELIZABETHTON, TENN. (same area as in previous years). Dec. 28, 1952; 7:00 a. m. to 5:30 p. m. Clear; temp. 21 to 38 degrees; wind 0 to 10 m. p. h. Fourteen observers. 45 species, about 1249 individuals. Mrs. Roberta Bashor, Mr. and Mrs. J. C. Browning, Miss May Cook, Mrs. Ebbie Evans, Mr. Ronnie Graham, Mr. and Mrs. L. R. Herndon (compiler), Mr. Robert Herndon, Mrs. Ruth Hughes, Dickie Hughes, Mr. and Mrs. John G. Luker, Mrs. Hugh L. Taylor.

ROAN MOUNTAIN, TENN.-N. C.—(from crossing of old and new roads (3750') on old road to Carver's Gap (5512'), thence on new road to parking area on Roan Mt. (6100'), return to Carver's Gap, Round Bald (5826') and Engine Gap (5600'), route of descent from Carver's Gap same as on ascent; deciduous woodland 70%, spruce and fir mixed with rhododendron 20%, grassy treeless area 10%) Dec. 21, 1952; 7 a. m. to 4:45 p. m. Drizzle and poor light till mid-morning, blanket of low clouds, dim sun through fog 10:30 to 2:30, heavy fog and again poor light rest of day, visibility no more than 200 to 400' all day; temp. 38-30-34 degrees; wind variable NW-N-NE 1-20 m. p. h.; 1 to 3" slushy snow from 4500' upward; trees above 5500' covered with light coat of ice, rime, snow. Total hours 9½; total miles 8 (on foot). Ruffed Grouse, 4 (4950 to 5200'), Downy Woodpecker, 1 (4250'); Blue Jay, 3 (5700'); Chickadee, 5 (4100 to 4900'); Tufted Titmouse, 16 (4100 to 5700'); White-breasted Nuthatch, 1 (4450'); Red-breasted Nuthatch, 1 (5900'); Golden-crowned Kinglet, 1 (5750') Slate-colored Junco, 4 (4050 to 4200'). Total, 9 species, 36 individuals—Fred W. Behrend, Elizabethton chapter, Tennessee Ornithological Society.

ADDENDA—The following information on Christmas Counts arrived after the table had been set in type. The Lebanon Chapter held a count on Dec. 27 with five participants and found 42 species. The Bristol Chapter held a count on Dec. 28 and found 33 species. In Nashville, two Short-eared Owls were seen during the week after the count made there, and again on Jan. 11, 1953, when both were flushed from grassy fields near the river.

THE ROUND TABLE

THREE BIRDS DEAD NEAR AN AIRPORT CEILOMETER IN ILLINOIS—In view of heavy losses of birds at airport ceilometers, reported most recently in THE MIGRANT for December 1951, the following might be of interest. While stationed at Scott Air Force Base, Illinois, about 25 miles southeast of St. Louis, I checked the area around the ceilometer at the base. On the morning of Sept. 2, 1952, I found a Sora, a Red-eyed Vireo, and an unidentified warbler, freshly dead within 25 feet of each other, and 200 feet south-southeast of the ceilometer. No cause of death was apparent. There was a heavy thunderstorm the evening of Sept. 1 with rain stopping at 10 p.m. The wind averaged 15 m.p.h. with a maximum of 25 m.p.h., and was from the north, 7:30 p.m. to midnight, then shifting from the northwest. The temperature remained at 60 degrees F. If the ceilometer was instrumental in the death of the above three, there was apparently either little migration at the time or weather conditions were such that most birds simply passed thru the ceilometer beam. It might be noted that the lunar migration watch at Memphis was on duty the night of Sept. 2-3 and reported a heavy movement overhead from station opening at 7:17 p.m., Sept. 2, and apparently tapering off somewhat later in the night. The observers assumed this movement was the result of an earlier drop in temperature and a shift of wind. — ALAN ZIEGLER, Memphis.

RED CROSSBILL IN KNOX COUNTY, TENN.—Red Crossbills (*Loxia curvirostra*) regularly inhabit the spruce-fir forest of the Great Smoky Mountains and occasionally descend to the pines of lower elevations. They have been observed in Gatlinburg at the edge of the Smokies. The following observation was made at a spot about twenty-four airline miles from Gatlinburg, and is apparently the first record of a Crossbill in Knox County, Tennessee.

On the morning of Dec. 20, 1952, I heard what sounded like a Crossbill flying over my home in Little Switzerland, about four miles southeast of Knoxville. The bird returned a few minutes later, circled a few times, and perched on the top of a tall scrub pine. It called several times and then descended a few branches and appeared as if it were feeding. The pines contained many new cones, but I did not hear the sound of the bird opening any cones. Twice during this time it came into good view and I recognized the characteristic bill shape and plumage color of a Red Crossbill, apparently a young male. It soon disappeared, but about an hour later I heard the characteristic call again from a flying bird. The spot where this bird was seen is a high ridge which is about half-covered with tall scrub or Virginia pine and half with deciduous trees.—JAMES T. TANNER, Knoxville, Tenn.

GREEN-TAILED TOWHEE IN MEMPHIS, TENNESSEE—The recording of an accidental is always a pleasant surprise to any field student of bird distribution. Just such an accidental, found on the Memphis Christmas Count, Dec. 21, 1952, was identified as a Green-tailed Towhee (*Oberholseria chlorura*). A first glimpse showed rufous cap and yellowish-green in rump and tail regions. Recognizing it as different from the other and more common wintering sparrows with which it was found, a follow-up was made. Thru 10x50 coated binoculars, at 60 feet, we also noted white throat, gray breast, and yellowish-green of folded wings. The writer was accompanied by Richmond Gill and Thompson Bonner. The bird was seen again on Dec. 23 (Gill) and Dec. 25, but not on Dec. 26 when three parties searched extensively at separate times. The area, consisting of weedy roadside fields with several piles of felled trees, is just northeast of old Ensley station on the Y. & M. V. R. R. This is the northeast corner of that area often referred to as the "Ensley-Darwin bottoms" and 3 miles southwest of Riverside Park. In connection with a harbor project this area is now all within the Memphis city limits. This is a new species for Tennessee, —normally it is not found east of west Texas. There is a record of a Green-tailed Towhee at Northhampton, Mass., from late December, 1946, to mid-March, 1947 (AUDUBON FIELD NOTES, May 1947:125).—R. DEMETT SMITH, JR., Memphis Tennessee.

LECONTE'S SPARROW AND PIPITS AT NASHVILLE—In Bells Bend on the Cumberland River at Nashville on November 8, 1952, two rare birds were seen. While walking abreast through bent over Johnson grass, Johnny Ogden, Douglas Oxford, and I flushed a sparrow that instantly took cover about ten feet away. Surrounding the spot where it had disappeared, we again flushed the bird only to have it dive under the grass out of sight. On the eighth try we were able to get a good look at the bird. It was then identified by Dr. Mayfield as a Leconte's Sparrow. An hour later we sought to show our find to others in the group and again we found the sparrow in the original spot.

The afternoon of the same day in a field of sprouting rye which contained twenty-five Horned Larks, we located forty American Pipits. They were not mingling with the larks. On November 17 they and the larks were still there.—JENNIE RIGGS, Nashville, Tenn.

NO WHOA, NO WOE

This issue conclude another volume of THE MIGRANT, but now is no time to stop. Now is the time to send in 1953 dues. If you are a chapter member, chapter treasurers will collect your dues and send them in. If you do not belong to a chapter, buck up just the same and send dues to the T. O. S. Treasurer, Lawrence C. Kent, 1896 Cowden Avenue, Memphis 4, Tenn. Please inform him of any change of address.

THE MIGRANT

A Quarterly Journal Devoted to the Study of Tennessee Birds

Published by the Tennessee Ornithological Society

Free to Members. To Subscribers, \$1 per Year; Single Copies 30c

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Knoxville, Tennessee

BOOK REVIEW

THE WHOOPING CRANE. By Robert Porter Allen. 245 p. 1952. Research Report No. 3, National Audubon Society, 1000 Fifth Ave., New York 28, N. Y. \$3.00.

From the pages of this book emerges the picture of a tall, white bird walking over the marshes, head high, long legs swinging, alert and yet always dignified and imposing. Big in almost every way is the Whooping Crane, in size, in voice, in its long migrations, and yet-despite its bigness-it has met its doom or nearly so in the man with the gun. Only about thirty individuals now exist.

This report summarizes the research done by its author and others on the Whooping Crane with the aim of finding ways to preserve the species. The original status and distribution of the species have been estimated from the reports of early explorers and naturalists. Its life cycle and migrations are described as far as is known, the best known part being the behavior and food habits of cranes wintering on the Texas coast. The facts that have been learned are enough to provide the base for the beginnings of a conservation program; the last chapter of the report outlines in some detail a suggested program. The report is well illustrated by photographs and drawings.

Bob Allen, as he is known to many, has a sincere and heart-warming interest in the plight of species threatened with extinction. This interest must have supplied the drive that carried him thru months of field work, much of it uncomfortable, much of it tedious, some of it dangerous. There were, no doubt, hours of rare beauty and days of rewarding observations, but the latter especially must have been few considering all the time spent in the pursuit of a bird so rare. The report does not mention the unpleasant things that Allen went thru, but you may be sure that they were there. His interest has not led him to color the report nor to get sentimental about the tragedy of the cranes. The report describes a fine and painstaking job of research on the Whooping Crane, and we hope it was done in time.

—J. T. T.

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Compiled by JAMES T. TANNER

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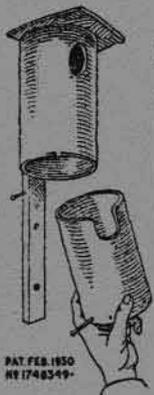
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