

THE MIGRANT

A QUARTERLY JOURNAL
DEVOTED TO TENNESSEE BIRDS

Published by
THE TENNESSEE
ORNITHOLOGICAL
SOCIETY

DECEMBER
1964





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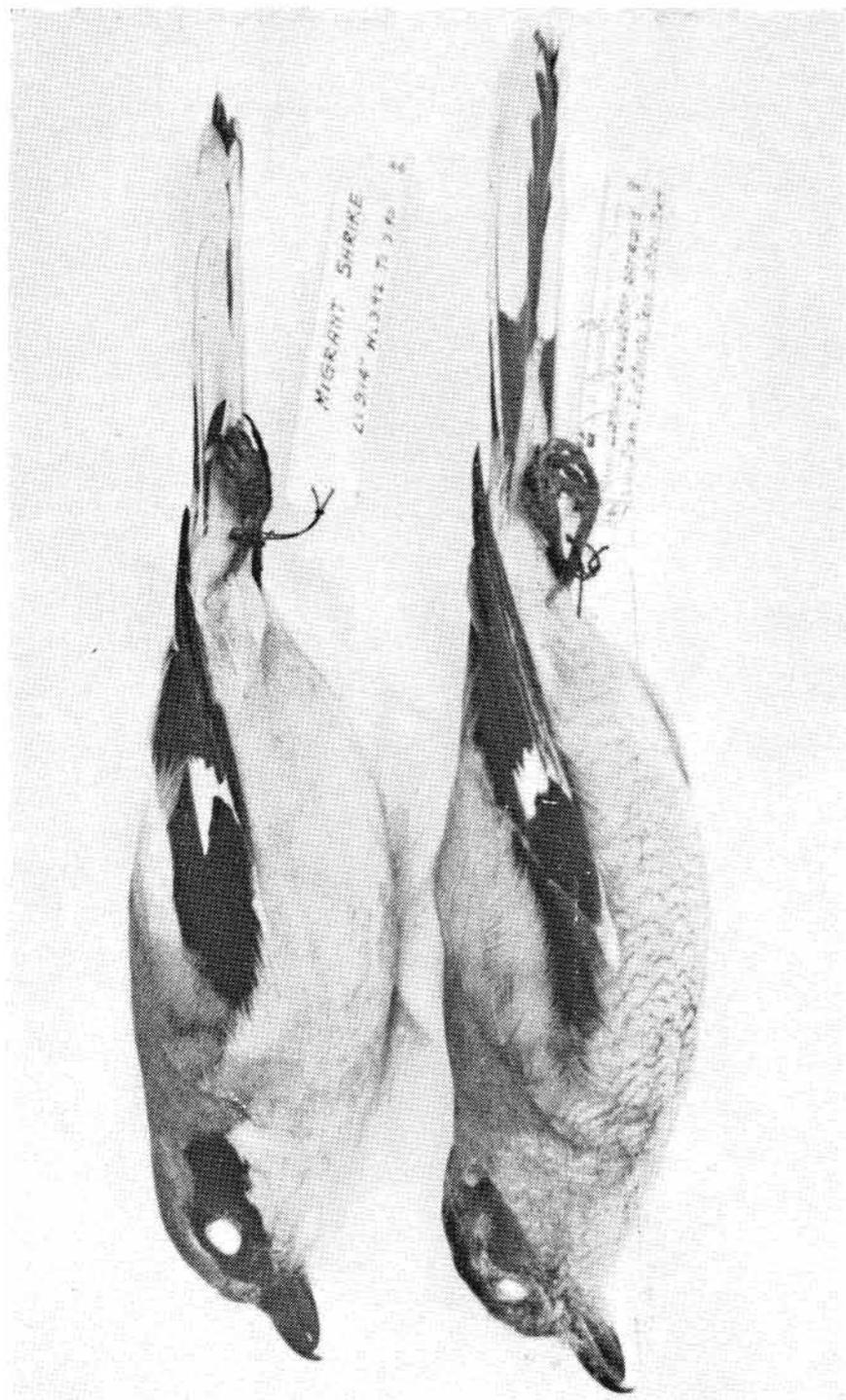
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Upper: Migrant Shrike (*Lanius ludovicianus migrans*), Side views.
Lower: Northern Shrike (*Lanius excubitor borealis*). Photo by Henry Farmer.

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. 35

DECEMBER 1964

NO. 4

NORTHERN SHRIKE AT BRISTOL — A NEW SPECIES FOR TENNESSEE

by JOHN WALLACE COFFEY

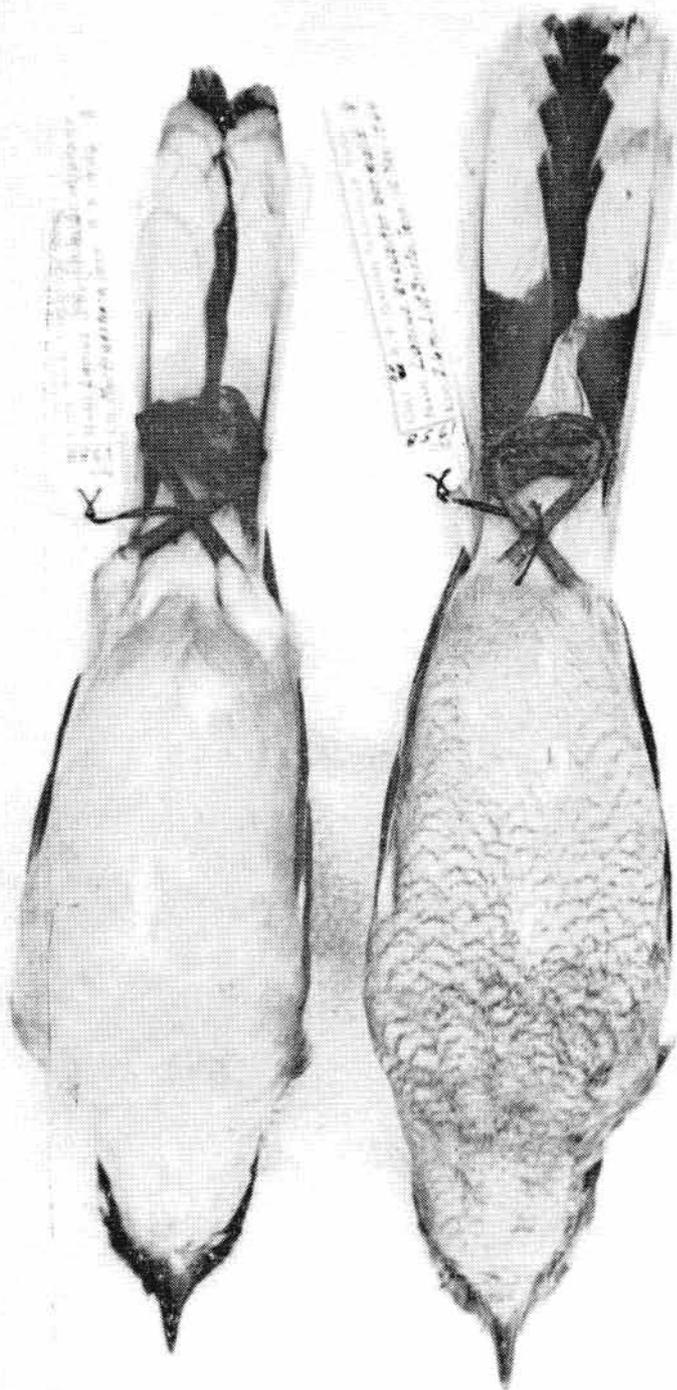
The discovery of a Northern Shrike (*Lanius excubitor borealis*) at Steel's Creek Park Recreational Area, near Bristol, Sullivan County, Tennessee on 9 November 1964 by John Wallace Coffey and the subsequent collecting of the specimen by Coffey and Theodore Roger Stone on 10 November at the same location warrants the addition of this species to the Tennessee list.

The specimen was seen by Dr. Lee R. Herndon and Mr. Thomas W. Finucane before being shipped to Mr. Albert F. Ganier, Curator of the Tennessee Ornithological Society, at Nashville, Tennessee on 20 November. Mr. Ganier prepared a study skin from the specimen and it was sent to the United States National Museum where Dr. Alexander Wetmore aged the bird and gave support to the previous identification. Mr. Ganier informed the writer (letter: 5 January, 1965), Since I wrote last, I have heard from Dr. Wetmore. . . . He says the specimen is an immature, without question. "There is considerable variation in the amount of brown in the plumage the first fall, some being very deeply colored, and others, like your specimen, much paler. The adult at this season is light gray and white. . . ." The specimen has been placed on temporary loan in the A. F. Ganier collection at Nashville where it is currently entered as specimen #1758, a female, measuring L—9.50" (241mm), W—4.52" (115mm), T—4.23" (107mm).

The location at which the specimen was collected is approximately 14,000 feet (2.65 miles) south of the Virginia-Tennessee state line and 3000 feet from the Bristol, Tennessee city limits. The elevation is about 1670 feet above sea level.

The initial discovery and identification of the shrike was made possible after seeing a bird fly across the road while driving along Steel's Creek Park Lake on 9 November. At a glance the bird first appeared nearly as large as a Mockingbird (*Mimus polyglottos*). The characteristic flash of the white wing patch in the Mockingbird was not observed. The bird flew into the top-most branch of a leafless tree about 20 feet above the ground. At a distance of 300+ feet it appeared to be a shrike. It was possible to detect indistinct vermiculation on the breast. The 10x50 binoculars used would not allow for clear distinction at that distance and a spotting scope was used for more careful observation.

Some readers may be interested in searching for this species elsewhere in Tennessee. It is felt by the writer that continuous checking of shrikes in this area for the past five years has prepared the observer to recognize such an opportunity. For this reason, additional discussion of characteristics and the habits of the Northern Shrike will be presented here.



Upper: Migrant Shrike (*Lanius ludovicianus migrans*). Ventral views.
Lower: Northern Shrike (*Lanius excubitor borealis*). Photo by Henry Farmer.

By the use of a 30X telescope, it was possible to view the bird from a distance of 250 feet. The following description is taken from field notes made while watching the bird and suggest characteristics which were distinguishable in this immature bird under the conditions stated:

" At different times, the bird faced directly towards me, perched sideways and with its back towards me. It flew to the ground and made one unsuccessful strike returning to the same tree at a lower branch The bird appeared to be a dusky gray below with fine horizontal barring on the breast and belly extending nearly to the legs. It could be seen from 300+ feet. . . . The lower mandible had a definite light mark at the base and was light for a portion of $\frac{1}{3}$ to $\frac{1}{2}$ of the lower mandible. . . . The forehead area appeared to be slightly lighter than the crown but definitely had no signs or traces of black that could be seen . . . there appeared to be some black at the lores but it was lacking just below the eye. The black eye-line to the rear of the eye and just above the auricular patch was complete and distinct."

It must be understood that this is not a description of the specimen as it appeared in the hand but rather, a first impression of its appearance as seen in the field. The writer had never seen the species previous to this observation but had studied skins in a collection by comparison to the Loggerhead Shrike (*Lanius ludovicianus migrans*) Palmer (Migrant Shrike).

A return trip to the park on 10 November at 9:00 a.m., with Stone, found heavy fog and no shrikes. By noon a shrike was located and identified as the Northern. The bird was approached by sneaking up the back side of the hill and walking through a small stand of pines. This area is actually very open with the exception of a small stand of trees on the hill where the shrike had selected a perch tree on the edge of the wooded area. This is the same tree in which the bird had been found the previous day. Upon approach, several Mourning Dove (*Zenaidura macroura*) flushed and one flew to the perch tree and was instantly attacked by the shrike. The dove escaped and the shrike did not give pursuit. The shrike left in another direction.

After checking about three other shrikes, all of which were evidently Loggerhead, the Northern was again seen in the perch tree and Stone managed to collect the bird. It was agreed that when a reasonable view was possible of either the Northern or Loggerhead, they could be distinguished at a glance.

The flight of the Northern Shrike is recognized by its tendency to drop from its perch flying low over the ground and swooping upwards to the next perch. This specimen nearly always was seen to fly in this manner and then perch in the tip-top of a tree—a characteristic habit recorded by other observers (Peterson 1947:176 and Bent 1950:114). An interesting action that was not observed with this specimen is the act of hovering or "mousing". Bent states (1950:123), "Occasionally, it would hover like a sparrow hawk over an open space, as if looking for mice or insects." Francis H. Allen says in his notes (Bent 1950:123), "A shrike I watched mousing over river meadows in Millis, Mass., January 25, 1931, hunted mainly by hovering. It would start off with two or three bounds in the air and then rise almost vertically for perhaps six to ten feet—that is practically vertically at the top of the rise—and then hover for some time, turning its head from left to right to scan the grassy marsh. It was a very pretty performance."

The invasion of the Northern Shrike to wintering areas far south of its breeding grounds has been determined as a cycle occurring on an average of every 4.2 years and is suspected to be correlated with the well-known cycle of mice (*Microtus* spp., *Dicrostonyx* spp.) (Bent 1950:125). Mr. Ganier suggests (letter 22 November, 1964), "Its appearance at the end of a long period of Indian Summer is surprising for it is one of those species that we would expect to come in mid-winter after a hard cold front." In this area, it was shirtsleeve weather and temperatures for October were -4°F below the normal 58°F average. The first ten days of November ranged from $+3^{\circ}$ to $+7^{\circ}$ above the normal 45.9°F average. Until 20 November, temperatures continued upwards to a $+19^{\circ}$ above normal. This later temperature increase did not influence this specimen but is graphic of the season experienced during this particular period. However, immature birds generally wander more than adults — an additional factor to consider with this individual.

The above information was supplied by the U. S. Weather Bureau and the weatherman suggested that perhaps local conditions did not influence the birds appearance but that extreme low temperatures in the northern states could be considered. He suggested that warm weather in the south is usually being countered by extreme low temperatures in the north.

The A.O.U. Check-list (fifth edition) lists the winter range for the Northern Shrike as follows (page 462):

"... from southern parts of breeding range south to eastern Kansas, southeastern Iowa (Hillsboro), south-central Illinois (Big Lake), southwestern Indiana (Vincennes), central Ohio (Springfield, Zanesville), western Pennsylvania (Beaver), Maryland (Dulaney's Valley, Patapsco, Ocean City), Washington, D. C. (and adjacent Virginia), and southern New Jersey (Cape May); casually to central northern Kentucky (Lexington), North Carolina (Pea Island), and Bermuda."

At the time of publication of this paper, Mr. Ganier is checking carefully all southern records for this species in order to determine if the recently collected specimen is a probable most southerly record. Present information indicates that there may be some question as to the validity of the Lexington, Kentucky record upon which the present status in that state is based. Additional information and discussion of that record may likely be published at a later date.

The general status for Virginia is considered as a "Very rare winter visitor in the Washington region, where there are about a dozen records. Dr. A. K. Fisher took a specimen in Virginia near Washington, November 11, 1887. Freer, M. G. Tillotson and Melvin Mitchell report one seen at Lynchburg, December 26, 1950." Murray 1952:84). Dr. Ruskin S. Freer writes (December 2, 1964), "Tillotson was originally from upper New York State and had been familiar with the bird there. I largely accepted his identification, as I had not seen the bird before. I am very familiar with the Loggerhead, and this bird was definitely larger and brownish in color, so doubtless an immature."

In North Carolina, the species is considered to be a rare or accidental winter visitor, with a single specimen (immature male) collected at Pea Island, December 9, 1909 and sent to Bishop. (Pearson, 1942:293 revised). This specimen, collected on the coast, is now with the Bishop collection placed in the Chicago Museum of Natural History (Ganier, letter 25 December, 1964).

Acknowledgments

Appreciation is due to Mr. Albert F. Ganier for the efforts he made in checking literature on the subject and in supplying valuable data gathered from his many resources and contacts with other ornithologists. Mr. Henry Parmer made the photographs of the specimen and Mr. Ganier's Migrant Shrike appearing with this paper. Dr. Ruskin S. Freer and Mr. Enno vanGalder supplied other information needed. Roger Stone aided in field work by securing the shrike.

LITERATURE CITED

American Ornithologists' Union

1957 Check-list of North American birds. 5th ed. 691pp.

Bent, A. C.

1953 Life histories of North American wagtails, shrikes, vireos, and their allies. *U. S. Nat. Mus. Bull.* 197. pp.411.

Murray, J. J.

1952 A check-list of the birds of Virginia. 113pp.

Pearson, T. G., C. S. Brimley, and H. H. Brimley

1942 Birds of North Carolina. *N. C. Dept. of Agric.* 434pp. (revised 1959, D. L. Wray and H. T. Davis).

Peterson, R. T.

1947 A field guide to the birds. Houghton Mifflin Co., Boston. 290pp. 508 Spruce Street, Bristol, Tennessee

A RED PHALAROPE AT NASHVILLE.—On 24 Oct., 1964, the writer found a phalarope while on a visit to Bush Lake. The south end of the lake had many patches of moss that barely broke the surface and the bird was feeding very actively in these, swimming from one patch to another at about five minute intervals. The size was too large for the little Northern, being at least that of the Solitary and Pectoral Sandpipers. The plumage was changing, probably from juvenile to winter, making a search of many color plates that night almost useless. The distance was about 200 feet, too far for an accurate view of plumage. On a return trip the next morning the bird was watched for an hour at about 80 to 100 feet. This gave a chance to revise his sketch of plumage some what. The day being clear he took 20 Kodachrome pictures of the swimming bird with a 550 mm lens, trying to get a different angle of view on each. That afternoon he returned with Jimmy Parrish and they managed to flush the phalarope in an attempt to check for wing bars and to see the tail pattern. This failed as his view was blocked for an instant and the bird was immediately behind a tree and gone. On Saturday Mary Wood flushed it and was sure it had wing bars and a black strip down the tail. On Monday Lawrence Trabue watched it for a while in a heavy rain. Then on Tuesday, 29 Oct. the writer returned and was fortunate to find the bird only five feet from the bank, and managed to drive the car to within 25 feet of it. This gave a wonderful opportunity to study plumage at close range, then a chance to flush the phalarope at only 25 feet. It did have heavy white wing bars and a tail pattern as is shown for both the Northern and Red in Peterson's. So the process of elimination (which the writer certainly doesn't like to use) left only the Red Phalarope. For final identification the slides were sent to John Ogden at Florida State Univ. and John reported back that the plumage seemed exactly like the skin of a Red there, and that all who saw the slides felt sure that the bird was a Red Phalarope. This is our first Nashville record.

HENRY E. PARMER, 3800 Richland Ave., Nashville, Tenn. 37205.

DATA FROM THE NASHVILLE T. V. TOWER CASUALTIES AUTUMN 1964

By AMELIA R. LASKEY

During the 1964 autumn migration at Nashville, casualties at two television towers totaled 1940 birds of 73 species, with WSM accounting for nearly twice as many as WSIX—1275 of 61 species and 665 of 58 species, respectively. Possibly the heavier toll at WSM tower is due to its proximity to the city and the tendency of night migrants, flying under overcast skies, to be attracted by the illumination from shopping centers, street lights and neon signs, as well as the lights about the towers. This lighted area would lure them to dangerously low altitudes, striking cables and other impediments. In contrast, WSIX tower is located in a suburban area adjoining farm land with no bright lights except those about the tower. WSM tower is taller; WSIX is located on a higher hill, but according to Federal Communication Commission specifications, the over-all heights are the same.

Collections were made from 12 Sept. and terminated 8 Nov. (77 trips personally) with help at various times from Katherine A. Goodpasture, Clara W. Fentress, Mike Bierly and H. E. Parmer.

As usual the nights of heaviest mortality coincided with local cold fronts, northerly winds, overcast, fog or precipitation (one or two of these features or a combination of all). But there were some dates when fog or overcast prevailed here when no casualties or relatively few were found. On more than half of these dates, southerly winds prevailed. Without data from the areas north concerning weather and bird movements, it would be futile to theorize why there were no casualties on the few nights when there was fog and a northerly wind here.

The heaviest mortality occurred on the following nights: 11-12 Sept., 143; 29-30 Sept., 297; 2-3 Oct., 190; 4-5 Oct., about 500 (I worked in rain and many of these were not found until the morning of 6 Oct. when Mrs. Goodpasture found a trail of casualties far from the tower); 14-15 Oct., 141; 18-19 Oct., 179.

Tennessee Warblers headed the casualty list with 488; Bay-breasted Warbler, 194; Magnolia Warbler, 186; Ovenbird 168; Red-eyed Vireo 121; Catbird 88.

Some very interesting records have emerged from these disasters. This autumn, among the 4 Mourning Warblers, none had the dark hood of the adult and one had completely yellow underparts which would have been most difficult to identify correctly in the field. The 3 Orange-crowned Warblers lacked "orange-crowns". A. F. Ganier prepared study skins of each species which were sent to U. S. National Museum where my identifications were verified by Mrs. Roxie Laybourne.

Surprisingly, there were 5 Blackpoll Warblers collected between 12 Sept. and 8 Oct. All were checked with a skin from a previous year, verified by Dr. A. Wetmore.

One Sharp-tailed Sparrow was collected at WSM 30 Sept., the 4th Nashville specimen of this species, which is now in the Ganier collection.

On the night of 14-15 Oct., a White-crowned Sparrow was killed at WSIX tower, the only one of this species found at ceilometers or towers here since the collections began in 1948.

On the credit side, a few of the injured birds were caught, kept in captivity until flight was attained, banded and released. They were fed on a cooked egg mixture, meal worms, insects (especially the black aphids that infest English ivy).

Several new late-departure dates for the Nashville area have accumulated this year: Virginia Rail, 16 Oct.; Whip-poor-will (female), 17 Oct.; Red-eyed Vireo, 26 Oct.; Philadelphia Vireo, 19 Oct.; Warbling Vireo, 15 Oct.; Worm-eating Warbler, 6 Oct.; Yellow-breasted Chat, 16 Oct.; Rose-breasted Grosbeak, 22 Oct.; Sharp-tailed Sparrow, 30 Sept. (latest by 2 days of our 3 fall specimens).

As in previous years, the birds were labeled, dated, packaged and frozen immediately for distribution to several workers for their studies, thus conserving valuable material that would otherwise have gone to waste, and possibly saved some living birds from sacrifice for scientific purposes.

Listed below are the species collected. The first figure indicates WSIX and the second WSM towers. An * preceding a single figure indicates the species was found only at WSM; a single unmarked figure indicates it was from WSIX only.

American Bittern 1; Virginia Rail 1-2; Sora 1-1; Coot 1-1; Mourning Dove *2; Yellow-billed Cuckoo 4-3; Black-billed Cuckoo *1; Whip-poor-will *1; Flicker 1; Yellow-bellied Sapsucker *2; Yellow-bellied Flycatcher *1; Brown Creeper *5; House Wren 2; Winter Wren *1; Long-billed Marsh Wren 1-5; Short-billed Marsh Wren 1-3; Catbird 52-36; Brown Thrasher *1; Wood Thrush 8-6; Hermit Thrush 1; Swainson's Thrush 6-2; Gray-cheeked Thrush 6; Veery 3; Golden-crowned Kinglet 2-3; Ruby-crowned Kinglet 1-7; White-eyed Vireo 4-3; Yellow-throated Vireo 1-4; Solitary Vireo *9; Red-eyed Vireo 20-101; Philadelphia Vireo 12-33; Warbling Vireo 1-1; Black-and-white Warbler 4-22; Worm-eating Warbler *1; Golden-winged Warbler 1-1; Tennessee Warbler 114-374; Orange-crowned Warbler 1-2; Nashville Warbler 5-13; Parula Warbler 1; Magnolia Warbler 86-100; Myrtle Warbler 6-11; Black-throated Green Warbler 19-51; Blackburnian Warbler 6-9; Yellow-throated Warbler 1-1; Chestnut-sided Warbler 20-29; Bay-breasted Warbler 62-132; Blackpoll Warbler 3-2; Palm Warbler 31-45; Ovenbird 51-117; Northern Waterthrush 4-4; Mourning Warbler 1-3; Yellow-throat 25-22; Yellow-breasted Chat 2-8; Hooded Warbler *1; Wilson's Warbler 1; Canada Warbler 1; American Redstart 17-28; Bobolink 3-1; Scarlet Tanager 1-4; Summer Tanager 3-1; Rose-breasted Grosbeak 13-9; Indigo Bunting 13-9; Savannah Sparrow 2; Grasshopper Sparrow *1; Sharp-tailed Sparrow *1; Slate-colored Junco *1; Chipping Sparrow 2; Field Sparrow 1-1; White-crowned Sparrow 1; White-throated Sparrow 5-3; Fox Sparrow *1; Lincoln's Sparrow 2-2; Swamp Sparrow 18-7; Song Sparrow 2-1; Un-identifiable account condition 7-23.

1521 Graybar Lane, Nashville, Tenn. 37215.

PEREGRINE FALCON SURVEY.—In the June 1964 MIGRANT, page 56, we gave the negative results of a search made in Tennessee of the former eyries of this species and promised further information when available. The two investigators mentioned in the article worked northward from Tennessee to Maine and failed to find a single Peregrine at any of the former eyries investigated. Any reports of the species henceforward will be looked upon with great interest and should be carefully followed thru and put on record.

OBSERVATIONS ON A CHUCK-WILL'S-WIDOW

By ALBERT F. GANIER

On 11 July, 1963, a young Chuck-will's-widow (*Caprimulgus carolinensis*) was found in a woods road by Boy Scouts at Camp Morris, 8 miles south of Camden, Tenn., near the Tennessee River. I arrived there the same day to visit my grandson, Mitchell, who was Camp Naturalist, and fed the bird twice daily. The fledgling, which was capable of short flights, was entirely unresponsive to food offerings. It had to be force-fed, by manually opening its beak and dropping the food into its cavernous mouth and throat. A feeding consisted of six crickets (the fisherman's variety) and several earth worms. The bird was fully feathered and the measurement of its folded wing was 7.85 inches. The feather sheaths of the primaries, 1.5 inches in length, were still in place and I judged the bird to be between three, and four weeks old. Unfortunately, its tail had been pulled out at the time of capture.

Realizing the possibilities of learning something of interest about this unique species, as a result of observing one in captivity, I decided to take the bird back to Nashville with me and did so on 14 July.

On arrival, I released the youngster in an unoccupied room so that it could practice flight. I visited it there several times a day, disturbing it as little as possible. It was fed twice daily; after breakfast and in late afternoon. A meal consisted of six of the crickets and five half-inch diameter pellets of "Red-heart" dog food, a canned product of putty-like consistency. This diet seemed to keep it healthy and strong and to maintain normal flesh on the breast.

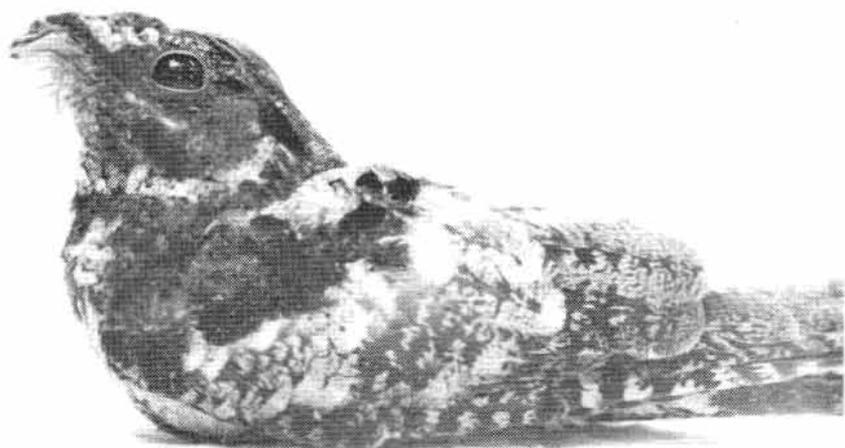
On my entering the room, it would usually fly on my quiet approach and on striking a window or wall would fall to the floor, following which I would pick it up and handle or feed it. In the case of most young captive birds they soon associate their source of food with their keepers and anticipate visitation with enthusiasm. No trace of such response developed however in this young bird; at best, it was a dumb and primitive creature.

Its mode of defense indicated that the species still retains traits of its reptilian ancestors. This defense procedure, exhibited against me at first and against strangers throughout when one reached to pick it up, consisted of thrusting its head quickly upward toward the extended hand and, with its large white mouth open, emitting a hissing noise. It would do this repeatedly, especially when cornered. I have witnessed the exact same tactic displayed by Cotton-mouth moccasins, spreading adders, and other snakes. The bird's beak is small, soft and pliable, incapable of striking an effective blow and this game of bluff is its only defense.

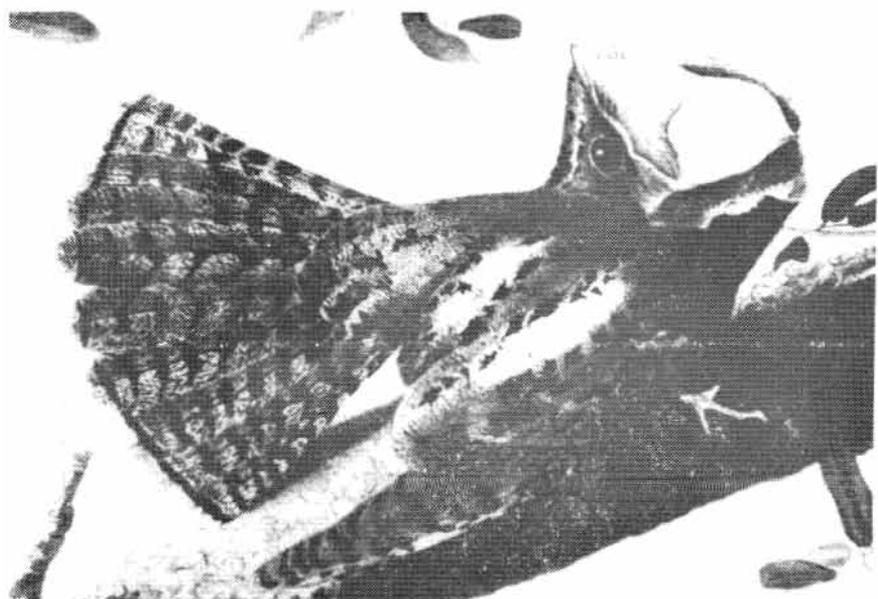
Efforts to get the bird to take a live cricket from my fingers were ineffective and this is traceable to the fact that adult birds do not pick up food with their beaks before swallowing it. Their method of taking food is to "fly it in" as they wing their way through the air with mouth open in pursuit. When visited at dusk, the young captive was found to emit a food call which consisted of a series of single notes, which could be imitated by a low-pitched whistle.

Due to their habit of living on the ground during the daylight hours, or on a fallen branch a few inches above it, nature has equipped them to spring upward quickly and be on the wing before most predators can catch them. This is achieved by the formation of the leg which one can note in handling one of the birds. One's first impression is that the bird has ex-

tremely short legs but this applies only to the tarsus. When the leg is pulled out to its full extent it is found that the thigh bone is so long that the entire leg approximates that of most other birds of the same size. This combination gives it unusual springing capability.



Chuck-will's-widow, 5 weeks old but capable of full flight. Photo by Ganier.



Chuck-will's-widow with mouth open. Photo by Ganier.

While handling this captive, it was noted that the eyes are very large and in the case of this young one appear to be entirely black. They stand out from the side of the head quite prominently as though they were capable of seeing backward as well as forward without a turn of the head. The pupil bulges from the eyeball (and from the side of the head) more than any species of which I know. Attempts to get a red reflection from the eyes of this specimen at night were unsuccessful. This reflectivity, noted in adult birds during their summer sojourn with us, is probably not acquired before maturity.

Ten days after its capture, I took photographs out of doors of the young bird, posing it on a white bath towel background before a previously focused camera. To guard against the bird flying away, I tied a white thread to its leg with a small weight at the other end. To exclude part of the light from its eyes, the bird manipulated its eyelids so that they formed an oval instead of a circle. In a flashlight photograph, taken inside at night by Henry Parmer, the eyes are open to the full extent, the lids making a perfect circle.

The unresponsive and unsociable deportment of this bird is no doubt typical of the species and is attributable to its way of life. By day, when other birds are active, it is asleep in the woods and not until other birds have gone to roost for the night does its period of activity begin. Even at that time, it feeds alone although if the time be mating season it gives its calls frequently and goes through a brief period of courtship. Evidence gathered by the writer and others show that the males do not assist in incubation or even in care of the young, sharing this aloofness with the Wild Turkey and a very few others. In a previous paper (Ganier, 1959) I have discussed the effects upon a species that may be expected as the result of the lack of social stimulus. Such a life of isolation and non-participation have caused this species to remain, in my opinion, the most primitive of all North American birds.

On 24 July, after keeping the young Chuck-will's-widow under observation for thirteen days, it became necessary for me to leave on a trip. Finding that no new tail feathers had begun to appear, making flight erratic, and realizing that it would starve if released, I prepared it as a study skin for my collection. I had no example of this light transition plumage and since I am told that but few exist, perhaps in its present form it will continue to serve for future studies of this strange species.

In a recent issue of *The Wilson Bulletin* (Ganier, 1964), the writer has given considerable further information on the life history of this species but the main purpose of the article mentioned was to refute the oft-quoted story of Audubon; that the birds will carry their eggs away to another site if they are touched by human hands. No supporting evidence whatever was found for this entertaining story. A few separates of this article are still available from the writer.

2112 Woodlawn Drive, Nashville, Tenn. 27212.

GANIER, ALBERT F. 1959, The degree and effect of sociability among birds. *THE MIGRANT*, 30:17-19.

GANIER, ALBERT F. 1964, The alleged transportation of its eggs or young by the Chuck-wills-widow. *The Wilson Bulletin*, 76:19-27.

WHIP-POOR-WILL NESTS AT BASIN SPRING

Following is a brief account of observations on two nests of Whip-poor-wills at Basin Spring; one in 1962, the other in 1964.

Each nest was located by flushing an adult from a nest with eggs. The two nests were within 15' of each other 30 or 40' west and below the 920' summit of a steep hill. This location is part of the escarpment rising from the Central Basin toward the Highland Rim. The 1962 nest was near but not against a maple seedling about 1½ inches in diameter whose lower twigs overhung but did not shield the nest. The 1964 nest seemed unrelated to any plant, log or rock though green Virginia creeper leaves were on the ground nearby. The high canopy was closed overhead and the general situation was well shaded. Each nest was a shallow depression in the dead leaf floor of deciduous woods. One of them measured 4" in diameter and about 1" in depth.

Both nests were found in late April. In 1962 a Whip-poor-will was flushed from 1 egg on 28 April, from 1 egg on 29 April, from 2 eggs 1 May, from 2 eggs 18 May, from 1 egg and 1 chick on 19 May, and from 1 chick about 3" out of the nest 20 May at which time neither the second egg nor evidence that it had hatched could be found.

In 1964 a female Whip-poor-will was flushed from 2 eggs on 26 April. At 3 PM on 10 May she flushed from 1 egg and 1 chick that appeared recently hatched. At 7 AM the following morning, 11 May, 2 chicks were found. On 12 May when the younger chick was about 24 hours old and the other at least 2 days old, one was obviously larger and more active than the other. One weighed 8.5 grams (Hanson dietetic scales calibrated to 0.5 gr.) and was 2.5" from bill to tip of the tail. The other weighed 6.0 gr. and was 2.0" long. When first found the baby Whips were covered with a very soft bright buffy down. They uttered barely audible notes when held close to the ear. Recently hatched chicks could scarcely lift their heads and their eyes were closed; At no time during these observations did baby birds gape or beg for food. Tarsi of two-day-old chicks were too small to hold bands.

In 1962 the incubating and brooding female was disturbed as little as possible. In 1964 early morning and evening observations of the nest were made for several days. While incubating the female would slip quietly off the nest when approached to within about 15'. After both eggs had hatched she remained motionless on the nest until the observer's hand came within a foot of her. She left the nest fluttering with both wings extended as in a crippled-wing display. She frequently made low clucking sounds and once exhibited an abortive act of aggression by flying toward the observer. On one occasion she returned to brood within about 5 minutes. The male was observed only once. At 6:45 PM he appeared and gave low clucking calls. This was during the normal period of Whip-poor-will activity but no feeding was observed.

The Whip-poor-will population is regularly high in the Basin Spring area. There is evidence of their arrival there the last 2 or 3 days of March. The above records indicate eggs may be laid within about 3 weeks of arrival. Unfortunately the 1962 eggs were not marked. The foregoing observations support previous records that eggs are not laid on successive days, that incubation begins before the 2-egg clutch is complete and that eggs hatch at least 24 hours apart. In one nest 1 chick and one egg were found 21 days after the female was flushed from a single egg. This chick appeared to be only recently hatched.

In spite of disturbance and handling of eggs for photography during incubation and the same disturbance after hatching began, the chicks stayed in the nest and were brooded for 48 hours after which one chick was brooded about 10' from the nest. Both the 1962 and 1964 nests were judged to be successful though the little Whip-poor-wills seemed fragile as they nestled amongst the leaves in the world beyond the nest.

KATHERINE A. GOODPASTURE and LARRY E. DOUGLASS, Vanderbilt Medical School, Nashville.

THE SEASON

COLUMBIA.—After a cool August, September was rather dry with normal weather during October and several extremely cold spells in November and early December.

Loons - Duck: Common Egrets (4) and Canada Geese (40) at AL 3 Oct. All ducks appear to have increased in numbers again this year, and all species commonly found here have been seen this season except the Redhead.

Hawks - Shorebirds: Osprey: one 3 Oct. AL. Virginia Rail: at AL 12 Sept. (1). Several Common Snipe, Spotted Sandpiper, Pectoral Sandpiper, Least Sandpiper and Stilt Sandpiper (1) at SP 29 Sept. Semipalmated Sandpiper (1) several Least and Pectoral Sandpipers at AL 27 Sept.

Vireos - Warblers: last dates for vireos were: Warbling, 26, Sept., Red-eyed and Philadelphia, 30 Oct. and White-eyed Vireo, 4 Oct. Last warbler dates were: Prothonotary, 27 Sept., Black-and-white, Ovenbird, Yellow-throat and Redstart, 4 Oct. Black-throated Green Warbler, 31 Oct.

Finches - Sparrows: Rose-breasted Grosbeak: extremely numerous in area this fall—as many as 40 in flocks several days before last record, 11 Oct. First arrival dates for some sparrows were: Swamp, 3 Oct., White-throated and Song Sparrow, 14 Oct.

Abbreviations: AL—Arrow Lake, SP—Sunnyside Pond.

Contributors: GRM—George R. Mayfield, Jr., and DRG—Daniel R. Gray, Jr.

GEORGE R. MAYFIELD, JR., Maury County Hospital, Columbia.

NASHVILLE.—**Loons - Ducks:** Common Loon: are never numerous here, 17 Nov. (10) RL (MCW) and 18 Nov. (3) SC and (6) RL (LOT) are unusual. Horned Grebe; on 21 Oct. (3) OHL (LOT). Double-crested Cormorant: a rare visitor at OHL 10 Oct. (LOT). Canada Goose: early 26 Sept. (2) TJ (KAG et al.) and BaLa (17) fide (ARL). Flock DRR 4 Oct. (KD, HEP). Snow Goose: two DRR 4 Oct. with flock of Canadas—5 days early. Blue Goose: on 7 Oct. an immature came down in a school yard. was caught by the children and taken to (ARM) for identification and banding—earliest record by 8 days. Black Duck: on OHL 21 Oct. (2) (LOT). Blue-winged Teal: 27 Oct. (3) CL (LOT) and 2 Nov. (1) BL (HEP) unusually late. American Widgeon: BL 5 Oct. (6)—early. Redhead: first SC 18 Nov. (5) (LOT). Ring-necked Duck: the one summering on BL present 8 Oct. when 9 others arrived (MIGRANT: 35, 61). Canvasback: a female at BL 26 Oct. (HEP)—earliest fall record by one day. Bufflehead: a male on BL 20 Nov. (HEP). Lesser Scaup: were scarce and late arriving at OHL 9 Nov. (1) (LOT) and on BL 18 Nov. (40) (HEP). Ruddy Duck: a female on IC 1 Nov. (HEP). Hooded Merganser: at BL 17 Nov. (8) (HEP) and 18 Nov. (16) and RL (10) (LOT).

Rails - Shorebirds: Virginia Rail: caught 1 Oct. on 12th Avenue So. Nashville, taken to (ARM) for identification, banded and released. American Golden Plover: at BL 18 Sept. (1) the only fall record and unusual in about 60% breeding plumage—all other records in winter dress (HEP). Upland Plover: late and rare at BV 22 Oct. (JP). American Woodcock: at TJ 17 Oct. (1) (HEP) and BS 29 Nov. (1) (KAG) are unusual. Common Snipe: first arrival—late at BL 12 Oct. (1) (MCW). Spotted Sandpiper: late at BL 6 Nov. (1) (HEP). Lesser Yellowlegs: at CL 19 Sept. (2) (LOT). Pectoral Sandpiper: at CL 19 Sept. (1) (LOT) and 22 Sept. (2) (MCW). Least Sandpiper: at CL 19 Sept. (4) (LOT). Semipalmated Sandpiper: at CL 22 Sept. (6) (MCW). Red Phalarope: the most outstanding find of the season at BL 24-29 Sept. (1) (HEP).

Gulls - Flycatchers: Herring Gull: first at OHL 15 Oct. (1) (LOT). Ring-billed Gull: at OHL 21 Oct. (2)—maximum 21 Nov. (300) (LOT) reduced 12 Dec. (10) (HEP). Bonaparte's Gull: on OHL 21 Nov. (150) (LOT) reduced to 12 Dec. (6) (HEP). Forster's Tern: at BL 23 Sept. (15) (HEP)—8 days latest ever. Whip-poor-will: one was calling at TJ 20 Sept. (KAG) and 25 Sept. (1) heard at F (RC). Common Nighthawk: on 15 Oct. (2) and Chimney Swift: (3) at home of (HCM)—the last of the season. Black-billed Cuckoo: one found as roadside casualty 24 Oct. (KAG)—latest ever by 6 days. Ruby-throated Hummingbird: very late on 30 Oct. (CBM). Acadian Flycatcher: late TJ 20 Sept. (2) banded (KAG). Traill's Flycatcher: on 19 Sept. (KAG) banded her 12th for the season at TJ. Wood Pewee: last at RL 13 Oct. (2) (KAG, MCW).

Swallows - Waxwings: Tree Swallow: at AC 26 Sept. (10) (AFG)—only swallows for the season. Hermit Thrush: first 9 Oct. at home of (CWF). Blue-gray Nighthawk:—late 27 Sept. (1) at home of (ARL). Golden-crowned Kinglet: one banded at TJ 3 Oct. (KAG). Cedar Waxwing:—a flock 8 Nov. (125) (MCW)—unusual for size.

Vireos - Warblers: Yellow-throated, Solitary and Philadelphia Vireos—one each banded at TJ 4 Oct. (KAG). Golden-winged and Wilson's Warblers: TJ 3 Oct.—Orange-crowned and Nashville Warblers: 4 Oct. all banded by (KAG). Tennessee Warbler: late 25 Oct. (20) at home of (HEP). Nashville Warbler: 25 Oct. (1) at home of (HEP). Magnolia Warbler: late at BL 3 Nov. (2) (HEP). Blackburnian Warbler: five days late 30 Oct. at home of (HCM). Yellow-breasted Chat: heard at F 26 Sept. (JOE).

Finches - Sparrows: Scarlet Tanager: on 11 Oct (ARL) and Summer Tanager: on 16 Oct. (KAG) were later than usual. Dickcissel: one heard 26 Sept. (SB). Purple Finch: first and only one of the season 30 Nov. at home of (JSH). Slate-colored Junco: on 8 Oct. (8) (MCW). White-crowned Sparrow: first 8 Oct. (2) (MCW).

Abbreviations: AC—Ashland City, BS—Basin Springs, BaLa—Battery Lane, BVM—Buena Vista Marsh, BL—Bush Lake, CL—Coleman's Lake, DRR—Duck River Refuge, F—Fernvale, IC—Indian Creek, OHL—Old Hickory Lake, RI—Radnor Lake, SC—Sam's Creek and TJ—Two Jays.

Contributors: SB—Sue Bell, RC—Ruth Castles, KD—Kenneth Dubke, JOE—John O. Ellis, CWF—Clara W. Fentress, AFG—Albert F. Ganier, KAG—Katherine A. Goodpasture, JSH—the John S. Herberts, ARL—Amelia R. Laskey, HCM—Harry C. Monk, ARM—Alan R. Munro, CBM—Mrs. Charles B. Murphy, HEP—Henry E. Parmer, JP—Jimmy Parrish, LOT—Lawrence O. Trabue, MCW—Mary C. Wood.

HENRY E. PARMER, 3800 Richland Ave., Nashville 5, 37205.

COOKEVILLE.—With one exception, the weather since the last report has been about what one would expect. The exception was in August, a wet one. Over six inches of rain fell within 48 hours, this, plus some additional rain, set a record exceeded only once in the past. Light freezes came early but hard freezes came later than usual.

During the last week of November two male Wood Ducks were seen just beyond the northern city limits and at about the same time five were seen near Rickman. Killdeer and Common Snipe (14) have been found on the Tech. Campus where work on a new athletic field has restricted the habitat but this has been partially compensated for by the planting of Kentucky fescue along the drainage ditch west of the field.

Contributors: Caneal Canella, Roy Hinds and P. L. Hollister.

P. L. HOLLISTER, Tenn. Tech., Cookeville.

CHATTANOOGA.—Some of the following were recorded in Franklin and Hamilton Counties while others were netted and banded in the Chattanooga Valley (MP) of Georgia, about a mile south of the Tennessee state line, as indicated by code.

Loons - Ducks: Common Loon: first 15 Nov. (40), another flock 25 Nov. (47), last 29 Nov. (4). Horned Grebe: first 25 Oct. (5), WHR with very few 29 Nov. (22) HC. Double-crested Cormorant: on 15 and 29 Nov. (1) WHR. High counts for the following at WHR were: Mallard: 29 Nov. (698); Black Duck: 15 Nov. (350); Gadwall: 29 Nov. (185); Pintail: 15 Nov. (65); Green-winged Teal: 26 Nov. (1); American Widgeon: 29 Nov. (75); Red-head: 15 Nov. (65); Ring-necked Duck: 15 Nov. (65); Canvasback: 29 Nov. (98); Lesser Scaup: 15 Nov. (100); Common Goldeneye: 29 Nov. (21); Bufflehead: 29 Nov. (20); Ruddy Duck: 29 Nov. (7); Hooded Merganser: 22 Nov. (34) and Red-breasted Merganser: 15 Nov. (3).

Rails - Shorebirds: American Coot: on 15 Nov. (1,000) WHR. Least Sandpiper: on 26 and 28 Nov. (13) SF-CL. Dunlin: on 29 Nov. (2) WHR.

Cuckoo - Sparrows: All of the following records were from MP. Yellow-billed Cuckoo: last 25 Oct. Eastern Kingbird: last 25 Oct. Yellow-bellied Flycatcher: on 5 Oct. (2). Least Flycatcher: on 5 Oct. (1). Philadelphia Vireo: on 5 Oct. (2). Nashville Warbler: on 5 Oct. (2). Northern Waterthrush: on 5 Oct. (2) and 12 Oct. (1). Fox Sparrow: banded 20 Nov. (1). Lincoln's Sparrow: banded 18 Oct. (1).

Abbreviations: CL—Chickamauga Lake, HC—Hamilton County, MP—Morse's Pond, SF—Savannah Flats, WHR—Woods Hole Reservoir.

Contributors: Ralph and Carol Bullard, Maxine Crownover, Kenneth Dubke, Roy Evenson.

KENNETH DUBKE, 3302 Navajo Drive, Chattanooga 37411.

GREENEVILLE.—After a record wet August, eight and two-tenths rain, we had an early freeze the latter part of September. The weather didn't cooperate on hawk migration with most of the best days for observation coming early in the season and during the middle of the week rather than on week ends.

Geese - Hawks: Canada Geese: on 13 Oct. (13) DCL and again 11 Nov. (10). Mallard: on a small pond near NR 17 Oct. Black Duck: a number 5 Sept. DCL. Teal (sp.): 5 Sept. DCL. Wood Duck: on 1 Sept. (15) in a blue-grass pasture field 300 yards from nearest water and again 9 Sept. (25) in same area and 17 Oct. on a small pond near NR. Ruddy Duck: on 5 Sept.

(2) DCL. Red-tailed Hawk: on 4 Sept. (4) were playing in the breeze. They seemed to be local birds not going anywhere since they were in the same location two days later. Golden Eagle: one immature 6-7 Sept. over BM in western part of Greene County. Osprey: on 5 Sept.

Sandpipers - Kinglets: Solitary Sandpiper: on 1 Sept. (1) at a mud hole. Terns (sp.): several 5 Sept. DCL. Yellow-billed Cuckoo: late 12 Oct. Common Nighthawk: migrating 15 Sept. Blue Jay: gathering in flocks of 15 to 25 8 Sept. Golden-crowned Kinglet: first 12 Oct. Ruby-crowned Kinglet: on 17 Oct.

Warblers - Sparrows: Warblers: some last dates were: Orange-crowned Warbler: 17 Oct. Nashville Warbler: 5 Oct. Myrtle Warbler: (first) 7 Oct. Blackburnian Warbler: 17 Oct. Palm Warbler: 17 Oct. Ovenbird: 6 Oct. Yellow-breasted Chat: 12 Oct. American Redstart: 23 Sept. Rose-breasted Grosbeak: immatures 3 Oct.

Abbreviations: BM—Bluff Mountain, DCL—David Crocket Lake, NR—Nolichucky River.

Contributors: Mrs. Ben Clark, Mrs. Chester Darnell and Richard Nevius.

RICHARD NEVIUS, Route 3, Greeneville.

BRISTOL.—It was Indian Summer in our area throughout the fall. Temperatures were never very low. However, the last day of the report period, 30 November, about one-half inch of snow was to be found covering the area during the early morning hours. In spite of this unseasonable weather, some rather interesting observations were made. In general, waterfowl arrived early while some passerine species lingered longer than usual.

Loon - Ducks: Common Loon: early 20 Oct. (41). Horned Grebe: first 31 Oct. (1). Pied-billed Grebe: early 1 Sept. (2). Green Heron: last 3 Nov. Common Egret: last 24 Sept. (5). American Bittern: last 20 Oct. (1). Canada Goose: flying over 26 Sept. (3) MFT (JJM). Mallard: first 9 Oct. Black Duck: first 20 Oct. Gadwall: first 3 Nov. (15). American Widgeon: on 9 Oct. (3). Wood Duck: last 7 Oct. Ring-necked Duck: first 31 Oct. Lesser Scaup: first 20 Oct. Bufflehead: first 21 Oct. Hooded Merganser: first 9 Nov.

Hawks - Shorebirds: Turkey Vulture: regular until Dec. Black Vulture: on 21 Oct. (1). Cooper's Hawk: on 9 Oct. (1). Bald Eagle: from 10 Sept. to 1 Oct. (1) SHL. Marsh Hawk: on 1 Oct. (1). Osprey: from 1 Sept. to 25 Oct. Sparrow Hawk: increasing since Sept. Spotted Sandpiper: last 11 Sept. (4). Solitary Sandpiper: last 3 Nov. (1). Greater Yellowlegs: last 20 Oct. (1). Lesser Yellowlegs: last 20 Oct. (1).

Gulls - Shrike: Ring-billed Gull: first 7 Nov. Caspian Tern: 24 Sept. (15). Black Tern: on 1 Oct. (2) BC (KD). Great Horned Owl: one seen 20 Nov. (2). Yellow-billed Cuckoo: last 22 Sept. Common Nighthawk: last 25 Sept. Chimney Swift: last 7 Oct. Ruby-throated Hummingbird: last 9 Oct. Red-bellied Woodpecker: increasingly common. Red-headed Woodpecker: none since summer. Hairy Woodpecker: on 10 Nov. (1). Wood Pewee: last 6 Oct. Barn Swallow: last 15 Sept. Brown Creeper: first 21 Oct. Winter Wren: first 24 Nov. Long-billed Marsh Wren: 20 Oct. Swainson's Thrush: first 8 Sept. Gray-cheeked Thrush: first 13 Sept. Golden-crowned Kinglet: first 25 Oct. Ruby-crowned Kinglet: first 18 Oct. Cedar Waxwing: first 22 Oct. Northern Shrike: (see details elsewhere in this issue). Loggerhead Shrike: more common since October than in summer.

Vireos - Sparrows: White-eyed Vireo: last 8 Sept. Blue-winged Warbler: last 8 Sept. (Banded). Tennessee Warbler: most common migrant, first 8 Sept. Nashville Warbler: first 14 Sept. Magnolia Warbler: first 9 Sept. Cape May Warbler: on 12 and 18 Oct. Myrtle Warbler: first 4 Oct. Black-throated Green Warbler: first 6 Oct. Blackburnian Warbler: first 6 Sept. Bay-breasted Warbler: first 9 Oct. Blackpoll: first 14 Sept. (banded). Palm Warbler: from 29 Sept. to 17 Oct. Ovenbird: last 16 Oct. Northern Waterthrush: first 13 Sept. Yellowthroat: last 17 Oct. Yellow-breasted Chat: last 8 Sept. Wilson's Warbler: from 8 to 14 Sept. (4 banded). Canada Warbler: first 9 Sept. American Redstart: from 8 Sept. to 6 Oct. Bobolinks: flock 13 Sept. (250) HR. Common Grackle: latest 23 Nov. (5,000). Summer Tanager: last 18 Oct. Rose-breasted Grosbeak: on 22 and 29 Sept. Blue Grosbeak: last 17 Oct. Indigo Bunting: last 27 Sept. Savannah Sparrow: on 20 Oct. (6). Vesper Sparrow: last 26 Nov. Chipping Sparrow: last 25 Oct. Swamp Sparrow: on 20 Oct. (4) and 3 Nov. (15).

Abbreviations: BC—Bluff City, HR—Holston River, MFT—Mendota (Va.) Fire Tower, SHL—South Holston Lake.

Contributors: JA—Judith Abbott, WC—Wallace Coffey, KD—Kenneth Dubke, JDE—J. D. Edmundson, HH—Harvey Hawk, TH—Tim Hawk, JJM—Joseph J. Murray, HWN—H. W. Nunley, RQ—Robert Quillen, JR—James Rogers, CS—Charlie Smith, EG—Enno vanGelder and HW—Hank Woodward.

WALLACE COFFEY, 508 Spruce Street, Bristol, Tenn.

ELIZABETHTON.—The fall and early winter were generally milder than usual. Due to a general lack of rain, the hazard of forest fires presented itself throughout part of the fall. The early winter season was characterized by a lack of most of the typical winter weather. Few prolonged cold spells occurred and precipitation was primarily in the form of rain. No measurable snowfalls were noted.

Loons - Ducks: Common Loon: first observation, 7 Nov. (3); 21 Nov. (8) on WiL; greatest numbers, 22 Nov. (11) on BL. Horned Grebe: 7 Nov. (3) and 22 Nov. (4). Pied-billed Grebe: regular since 5 Sept. (1). Green Heron: last observed, 11 Oct. (1). American Bittern: one observation on 11 Oct. (1) at FH (LRH). Mallard: only three records, 15 Oct. (3), 22 Nov. (2), 6 Dec. (1). Black Duck: first record, 11 Oct. (1); maximum numbers, 21 Nov. (40). Gadwall: 2 Nov. (1), 21 Nov. (1), 22 Nov. (6). American Widgeon: first record, 17 Oct. (5); maximum number, 22 Nov. (26). Green-winged and Blue-winged Teal: one each on 17 Sept. and 17 Oct. Wood Duck: throughout Oct. with maximum numbers on 11 Oct. (10). Redhead: only on 17 Oct. (2). Ring-necked Duck: first record, 23 Sept. (4); maximum numbers on 21 Nov. (60) and 7 Dec. (40). Lesser Scaup: 31 Oct. (44), with one present on WiL since spring. Common Goldeneye: maximum number, 22 Nov. (17) on BL, with one present on WiL since spring. Bufflehead: first record, 21 Nov. (12); up to 50 odd wintering on WiL. Hooded Merganser: 22 Nov. (20) on BL. Common Merganser: 19 Nov. (1).

Hawks - Owls: Black Vulture: one over PHL on 15 Oct. (Mrs. HD, LRH). Goshawk: one along the Blue Ridge Parkway in Mitchell County, North Carolina on 25 Oct. (RDM, JL). Sharp-shinned Hawk: 12 Sept. (1). Cooper's Hawk: 6 Sept. (1), 11 and 25 Oct. (1). Marsh Hawk: 15 Sept. and 1 Nov. (1). Osprey: 19 Sept. and 7 Oct. (1). Sparrow Hawk: regular; maximum numbers, 10 Nov. (4). Sora Rail: only on 20 Sept. (1). American

Coot: 11 Oct. (2) and 22 Nov. (10). Semipalmated Plover: 8 Sept. (1). Lesser Yellowlegs: 5 Sept. (1) at FH. Pectoral Sandpiper: one on 15 and 25 Sept. Least Sandpiper: 4 and 5 Sept. (4), 8 Sept. (6), 15 Sept. (2). Stilt Sandpiper: one on 8 Sept. at RC (KHD). Herring Gull: 6 Dec. (6) on BL (LRH et al.). Ring-billed Gull: first record, 11 Oct. (1); greatest number, 6 Dec. (23). Common Tern: 5 Sept. (3) on BL (KHD, WC, CRS). Caspian Tern: 5 Sept. (130) on BL (KHD, WC, CRS). Great Horned Owl: 11 Oct., 18 Oct., 10 Nov. and 16 Dec. (1). Barred Owl: one on 7 Sept. (RDM).

Nighthawk - Vireos: Nighthawk: maximum number, 12 Sept. (30); last record, 2 Oct. (1). Chimney Swift: last record, 7 Oct. (6). Ruby-throated Hummingbird: last record, 8 Oct. (1). Red-headed Woodpecker: 11 Oct. (1) (HD). Yellow-bellied Sapsucker: first record, 27 Sept. (1). Tree Swallow: 20 Sept. (8). Bank Swallow: 15 Sept. (1). Barn Swallow: last record, 11 Oct. (1). Bewick's Wren: one on HM on 6 Sept. (FWB). Catbird: last record, 23 Oct. (1). Hermit Thrush: one record, 15 Dec. (1) (CRS). Swainson's Thrush: regular through the fall; last record, 15 Oct. (1). Gray-cheeked Thrush: 6 Sept. and 12 Sept. (1).

Warblers - Finches: Orange-crowned Warbler: 10 Oct. (2, banded). Nashville Warbler: 5 Oct. (1, banded). Myrtle Warbler: first record, 11 Oct. (6). Rusty Blackbird: 18 Oct. (6) in SV. Purple Finch: no fall or early winter records. Red Crossbill: 25 Oct. (4), 1 Nov. (8), 13 Dec. (1). Grasshopper Sparrow: last record, 11 Oct. (1). White-crowned Sparrow: first record, 11 Oct. (1). White-throated Sparrow: first record, 4 Oct. (1). Fox Sparrow: first record, 23 Oct. (1). Lincoln's Sparrow: banded on 17 Oct., 23 Oct., 1 Nov. (1). Swamp Sparrow: first record, 4 Oct. (1). Addendum: It has been brought to my attention that a summer record of the Common Snipe failed to be included in the last Season Report. One bird was observed near MC on 13 June (CRS).

Abbreviations: BL—Boone Lake, FH—Fish Hatchery, HM—Hump Mountain, MC—Milligan College, PHL—Patrick Henry Lake, RC—Roan Creek, SV—Shady Valley, WiL—Wilbur Lake.

Contributors: FWB—Fred W. Behrend, WC—Wallace Coffey, HD—Mrs. Harold Dillenbeck, KHD—Kenneth H. Dubke, LRH—Lee R. Herndon, JL—John Luker, RDM—Roby D. May, CS—Charles R. Smith.

CHARLES R. SMITH, Route 2, Johnson City, Tennessee 37601.

AN OLD GOSHAWK RECORD.—A Round Table Note by Arthur Stupka concerning a Goshawk shot near the Great Smoky Mountains National Park (MIGRANT, 34:91) includes a list of previous Goshawk records from Tennessee (with the exception of the recent record near McEwen, Tennessee in MIGRANT, 34:40). To this list I would like to add an old record from Hawkins County, Tennessee in 1907. Included in a short paper by J. H. Fleming in *The Wilson Bulletin*, vol 14 : 154-157, is the following Goshawk record: "I saw one on April 5, with the ashy breast of the fully adult bird, . . ." Fleming's observations were made in the vicinity of Surgoinsville on the Holston River during parts of March and April, 1907. This record would appear to be the latest spring record for Tennessee.

JOHN C. OGDEN, Dept. of Biological Science, Florida State University, Tallahassee, Florida.

THE 1964 CHRISTMAS SEASON BIRD COUNTS

By TOS Members and Guests

The thirty-fifth annual Christmas Season Bird Count tabulated in the following pages lists 119 species and subspecies. This number has been exceeded only in 1954, 1955 and 1960 in which 122 species were recorded for each of the three years. Fourteen counts are tabulated while two counts, for high altitudes only, are presented in paragraph form due to lack of space in the table. Oregon Junco occurs on the list for the first time making a total of 166 species and subspecies recorded since the first census published in THE MIGRANT in 1930. Northern finches were notably scarce this season and numbers of many species were lower than usual.

INFORMATION ON THE COUNTS

Information on the counts and the species list with corresponding numbers of individuals in the table, are given progressively from west to east. Locations for which the species and numbers are not tabulated are indicated under the appropriate location under Information on the Count.

MEMPHIS.—Roughly 1953 areas; wooded bottomlands 30%, deciduous woods and city parks and cemeteries 28%, pastures, bare fields 15% suburban roadsides 25%, river edge 2%. 27 Dec.; 7 a. m. to 5 p. m.; temp. 28° to 34°; wind N, 5-12 m.p.h.; 21 observers in 7 parties. Total party-hours, 75 (55 on foot, 20 by car); total party-miles, 173 (53 on foot, 120 by car). Mr. and Mrs. Ben B. Coffey, Jr. (compilers), Fred T. Carney, Mary Davant, Mr. and Mrs. Henry Dinkelspiel, John H. Embury, Earl Fuller, Edward M. King, Mr. and Mrs. Franklin McCamey, Jr., Robert S. McGowan, Charles McPherson, Mrs. J. H. McWhorter, Mrs. Paul C. Owen, Mrs. Charles Seahorn, Alice Smith, Dr. and Mrs. Arlo I. Smith, Lynn Smith, Mrs. M. L. Torti, Wendell L. Whittemore, Mr. and Mrs. Chas. E. Wilmeth.

REELFOOT LAKE.—All points within 15-mile diameter circle, center Reelfoot Lake: lake 20%, marsh 5%, deciduous woods 45%, field and farm 18%, roadside 12%. 2 Jan., 1965, 7:00 a. m. to 4:00 p. m., overcast; temperature 44° to 60°; wind S shift to N, 0-22 m.p.h.; 5 observers in 3 parties. Total party-hours 24 (4 on foot, 17 by car, 4 by boat); total party-miles 164 (4 on foot, 151 by car, 9 by boat). Total, 78 species (1 additional race); 480,927 individuals. John L. DeLime, Edwin Larson, Jr., Keith Pardue, Steve Pardue and Clell T. Peterson. Compiler—John R. Conder.

DYERSBURG.—Center of circle in Dyersburg; mostly by car and boat, with very little walking. 28 Dec.; 9:00 a. m. to 12:15 p. m.; cloudy, temperature 40° to 55°. Four observers: Jim Ganier, Dayton Keller, Virginia Lamb (compiler), and Mike Underhill. The area included Lake Lauderdale (750) acres which looks very much like Reelfoot Lake except that it does not have as much deep water.

COLUMBIA.—Center of area one mile west of Zion Church as in past years. Some new large phosphate washing lakes held a good variety of ducks. 27 Dec.; overcast; wind, W 5 m.p.h.; temperature 38° to 50°; seven observers in 4 parties. Observation was in progress from early morning until after dark and included a float trip down Duck River. The Harris' Sparrow returned to the same area with a group of White-crowned Spar-

rows as seen two years ago on Christmas count and observed through the winter. So far this season, observed only on the Christmas count. An Oldsquaw was seen on Montezuma Pond with a group of Redheads and Ring-necked Ducks during the period but not on count day. Mary Lucy and William Fuqua, Dan Gray, George (compiler) and Cleo Mayfield and David and Paul Patterson.

NASHVILLE.—Approximately the same area as the past 14 years: the area of a 15 mile diameter circle, centered on Belle Meade Mansion. Included were Radnor and Bush lakes, deciduous wooded hills, 40%; open fields and pastures, 25%; river bottom fields, 20%; roadsides and suburban yards, including 18 feeding stations, 15%. 26 Dec. 1964, 6:00 a. m. to 6:00 p. m. Temp. from 56 down to 35 degrees. Sky overcast, some light rain. 35 field observers in 9 parties, plus 20 at feeding stations and yards. Party-hours 105 (56 on foot, 49 by car), plus 36 watching feeders. Party-miles 236 (41 on foot, 195 by car). Total 71 species and 12,879 individuals of which only 5,000 were Starlings. The water birds were mainly at Radnor and Bush, the Brewer's Blackbirds were in Bell's Bend by Albert Ganier, the single Grackle was at home by Mrs. Don Cassel, and the Tree Sparrows were in Buena Vista marsh by John Ogden and Fairman Cumming. Field observers were: Mr. and Mrs. Clyde Anderson, Sue Bell, Mike Bierly, Mary Rose Bradford, Ruth Castles, Mrs. H. P. McClanahan, Portia Ward Clark, Anella Creech, Fairman Cumming, Milbry Dugger, Mr. and Mrs. John Ellis, Erline Elmore, Charles Farrell, Albert F. Ganier, Katherine A. Goodpasture, Paul Greene, Ben Grose, Mr. and Mrs. John S. Herbert, Louise Jackson, Mrs. Chas. B. Murphy, John C. Ogden, Henry E. Parmer (compiler), Jimmy Parrish, Mrs. Wm. Puryear, Jennie Riggs, Ellen Stringer, Larry and Lawrence Trabue, Mary Wood. Our home area observers were: O. C. Ault, Helen Bell, Bernard E. Britt, Jr., Mrs. Don Cassel, Mrs. Watkins Crockett, Clara W. Fentress, Mrs. E. A. Bergstrom, Mary Frazer, Carol Knauth, Mrs. K. B. Everly, Dr. and Mrs. Hugh Fry, Mrs. Ben Grose, Mrs. Hal R. Swann, Bill Puryear, Mr. and Mrs. Max Schuerman, Kirby Stringer.

LEBANON.—As in past years Lebanon was the center of the seven and one-half mile radius circle. The area included Lock V and a portion of the Cumberland River. Except for the water birds most of the observations were made near the homes of participants. 2 Jan., a very warm day with the temperature mostly in the 50s. John Drennen made the count of water birds. Mrs. Roy K. Hobbs (compiler).

COOKEVILLE.—Territory covered was approximately that of the past six counts except only two lakes, instead of three, were included in the area. 21 Dec.; cloudy, temperature 35° to 37°; winds, light and variable. Habitat changes since last year include, reduced woodland, drained moist areas followed by reseeding, reduced corn acreage but increased pastures and cover crops. Beulah Clark, Dr. and Mrs. J. O. Cummins, Caprice Haile, Roy Hinds, P. L. Hollister (compiler), Dr. and Mrs. Sidney McGee, Dr. and Mrs. Tom Moore, Miser Richmond, Francis R. and Robert Toline and Marie White.

CHATTANOOGA.—All points within a 15-mile diameter circle, center National Cemetery; fields and pastures 35%, woodlands 20%, ponds and lakes 15%, creeks and rivers 15%, roadside 10% and residential 5%. 27 Dec.; 7:00 a. m. to 5:00 p. m., clear; temperature 42° to 65°; wind SW, 6 m.p.h. Twelve observer in 6 parties. Total party-hours, 42 (26 on foot, 16 by car); total party-miles, 186 (31 on foot, 155 by car). Mr. and Mrs. T. Stanley Barr, Benton Basham, Ralph T. (compiler) and Mrs. Bullard, Jr., Maxine Crownover, Roy Evenson, Howard Meadors, Mr. and Mrs. Eugene Ranger, Mr. and Mrs. Eugene M. West.

KNOXVILLE.—(Same area as previous year; weedy fields, hedgerows and roadsides 44%, mixed deciduous and pine woods 24%, residential areas and city parks 12%, pastures and cultivated fields 10%, stream and lake edge 10%). 27 Dec.; 7 a. m. to 8 p. m. Overcast with occasional light rain; temp. 38° to 42°; wind N, 0-6 m.p.h.; no snow or ice. Eleven observers in 7 parties. Total party-hours 62 (50 on foot, 12 by car); total party-miles 243 (50 on foot, 193 by car). Total, 66 species, about 6,043 individuals. James Campbell, John Elson, Mary Enloe, H. C. Garlinghouse, David Highbaugh, Beth Lacy, Paul Pardue, Kenneth Sanders, Maxie Swindell, James Tanner (compiler), George Wood.

GREAT SMOKY MOUNTAINS NATIONAL PARK, Tenn. - N. Car.—Localities are within a 15-mile diameter circle centered on Bull Head of Mt. Le Conte—same general area as in 1937-1956 and 1962 to date. 3 Jan.; 7:00 a. m. to 5:00 p. m. Partly cloudy - overcast; temperature range 18° to 40°; wind variable, 5-30 m.p.h.; high altitude trees ice-covered. Thirty-six observers in 10 parties. Total party-hours, 80 (75 on foot, 5 by car); total party-miles, 135 (52 on foot, 83 by car). Mrs. Thos. Arp, Ross Bender, Carson Brewer, Kit Brewer, Vivien Brown, James Campbell, Donald DeFoe (compiler), Ray Ellis, John Elson, Mary Enloe, Lloyd Foster, Mr. and Mrs. H. C. Garlinghouse, David Highbaugh, Joseph Howell, Susan Hoyle, Beth Lacy, Laura Lacy, Helen Lewis, Mrs. Max Miller, Mr. and Mrs. Robert Monroe, Julia Moore, Louise Nunnally, Ricky Nunnally, Holly Overton, Paul Pardue, Edward Smith, Arthur Stupka, Mr. and Mrs. T. C. Swindell, James Tanner, Mr. and Mrs. W. B. Williams, Mr. and Mrs. G. R. Wood. (Tennessee Ornithological Society, National Park Service and guests.)

GREENEVILLE.—All points within a 15 mile diameter circle, center three miles west of Greeneville on highway 11-E, to include Lick Creek, Roaring Fork, Bluff Mountain, Davy Crockett Lake, Nolichucky River, Albany, Tusculum, and Greeneville; woodland 50% (deciduous with small patches of pines and cedars), open fields and pastures 40% (includes ponds and lakes), town 10%. 1 Jan.; 8:00 a. m. to 5:00 p. m.; intermittent rain; temp. 45°; practically no wind. 13 observers in nine parties. Total party-hours, 20 (8 on foot, 12 by car); total party-miles, 33 (7 on foot, 26 by car). Because of a rabies epidemic in Greene County during the count period, very little time was spent on foot away from houses or automobiles. Most observation was done from roads. Seen in the area during count period but not on count day: Great Blue Heron, Turkey Vulture, Black Vulture, Sparrow Hawk, Marsh Hawk, Rough-legged Hawk, Barn Owl (heard), Red-winged Blackbird, and the Egyptian Goose. Tom Boles, Dr. and Mrs. Turner Clinard, Mrs. Ben Clark, Mrs. Nat Coleman, Mr. and Mrs. Chester

Darnell, Mrs. Marion Edens, Mrs. Richard Nevius, Richard Nevius (compiler), Dale Park, William Rawls.

BIG BALD MOUNTAIN, Tenn. - N. C.—(All points within a 15-mile diameter circle, center head of East Fork Higgins Creek, to summit of Big Bald Mt. in Unicoi and Yancey counties (3,500-5,516 ft.); deciduous woodland 70%, grassy treeless area on top of Big Bald 30%). 23 Dec.; 7:30 a. m. to 5:45 p. m. Cloudy to partly cloudy; temp. 36° to 49°; wind SW, 3-20 m.p.h.; very light trace of snow or frost on ground. Two observers in one party. Total party-hours, 10 (all on foot); total party-miles, 8 (all on foot). Grouse, 3; Pileated Woodpecker, 1; Hairy Woodpecker, 1; Raven, 3; White-breasted Nuthatch, 2; Winter Wren, 1; Robin, 1; Cardinal, 1; Junco, 7. Total, 9 species; 18 individuals. Charles Smith, Fred Behrend (compiler).

KINGSPORT.—Usual area centered on Pactolus and including Kingsport, the Holston River, Patrick Henry Lake and most of Boone Lake, parts of Bays Mt. and River Mt., including the Bays Mt. Reservoir and River Mt. Fire Tower. 26 Dec., 8:30 a. m. to 5:30 p. m. The weather was mild, 54 to 63 deg. F., 0.17 in. rain. The sky was generally overcast, with mild rain now and then, a few claps of thunder, and some sunshine. Spring Peepers and Yellow Jackets were encountered on Bays Mt. as well as other parts of the area. There were 16 observers in 13 parties, a total of 50 party-hours: (on foot 33, automobile 10, canoe 5, motorboat 2). From the River Mt. Fire Tower, 1,500 unidentified ducks and ducklike birds were counted, 1,250 ft. below on the water and shores of a stretch of river that was closed to hunting this year. Arthur Smith had Purple Finches in his yard on Christmas Day but not on census day. Participants: Roy Allen, Charles Baker, Charlotte, Dan, James, John, and Thomas Finucane (compiler), Ed Gift, Mrs. Fred Kays, Frank Oglesby, Mrs. Virgil Peck, George Rodgers, Mrs. Lucille Smith, Mrs. R. M. Switzer, R. M. Switzer, Jr., and Howard Young.

BRISTOL, Tenn. - Va.—All points within a 15-mile diameter circle, center at junction of U.S. 11 and Va. 625, to include Bristol, Stone Mill Marsh, South Holston Lake and River; fields and farmland 40%, mixed deciduous forest 25%, lake and river 15%, town and residence 10%, Misc. 10%. 26 Dec. 6:45 a. m. to 6:00 p. m. Cloudy with intermittent showers; temperature 35° to 50°; wind W, 2-10 m.p.h.; mild weather for the time of year. Eight observers in 3 parties. Total party-hours, 27 (17 on foot, 10 by car); total party-miles, 220 (8 on foot, 212 by car). Judith Abbott, Fletcher Bingham (co-compiler), Wallace Coffey (co-compiler), Robert Quillen, Charles R. Smith, Enno van Gelder, Roger van Gelder, Henry Woodward.

ELIZABETHTON.—(Same as previous years; lake borders 5%, stream borders 50%, woodlands 30% and weed fields 15%). 3 Jan.; 6:30 a. m. to 6:00 p. m., clear to partly cloudy; temp. 31° to 40°; wind SW, 5-25 m.p.h.; ground clear and all water open. Seven observers in 5 parties. Total party-hours, 34 (22 on foot, 12 by car); total party-miles, 126 (22 on foot, 104 by car). Total, 51 species; 2,516 individuals. Fred W. Behrend, J. C. Browning, Mrs. Harold Dillenbeck, Lee R. (compiler) and Lois M. Herndon, Roby D. May, Jr., and Charles R. Smith.

Bufflehead													12	56
Ruddy Duck	3		2	4									5	
Hooded Merganser	6		2	1			19							1
Common Merganser	3													
Turkey Vulture	2	5												
Black Vulture	2		25	11										
Sharp-sh. Hawk										1				
Cooper's Hawk				1	1			1	1					
Red-tailed Hawk	28	9	9	6	16	2		2	2	3	1			
Red-shouldered Hawk		3		1	2			2	1	1				
Golden Eagle		1												
Bald Eagle		36												
Marsh Hawk	4	6	3	3	2	7	1	3	1					
Peregrine Falcon		1												
Sparrow Hawk	5	14	4	4	36	3	5	2	3	5			5	6
Ruffed Grouse										3				
Bobwhite	167			11	15	15	14	32	45	15			23	27
Turkey	11													
Am. Coot	2	17,000		400	38	55		4					130	
Killdeer	7	3	2	11	20		3	28	10	60			7	20
Am. Woodcock										3				
Com. Snipe	1	2		3	2		14	40	11	1			2	2
Herring Gull				1	2				4				1	
Ring-billed Gull		14			8			12	115				2	92
Mourning Dove	71	67	5	160	129	19	47	206	176	147	102		32	103
Barn Owl					1									
Screech Owl				1	3	1					1		2	
Great Horned Owl		1	1	1				1			1			
Barred Owl	1			2										
Belted Kingfisher	2	3		5	16			6	8	11	1		4	8
Yel.-sh. Flicker	164	36	27	35	75	12	16	19	16	4	5		9	4
Pileated Woodpecker	8	9	2	9	22		5	3	6	16	4		7	10

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Red-bel. Woodpecker	79	27	9	32	67	3	16	16	10	6	11	6	6	1
Red-head. Woodpecker	9	4	1	...	1	...	5	2	3
Yel.-bel. Sapsucker	54	6	2	21	21	5	7	10	5	9	2	2	...	3
Hairy Woodpecker	20	2	1	3	15	6	6	4	4	7	...	4	2	1
Downy Woodpecker	64	24	5	23	99	7	29	33	40	44	20	19	15	17
E. Phoebe	...	...	...	2	...	...	2	1	1	7	...	1	...	...
Horned Lark	412	32	...	24	81	25	13	...	3	...	10	6	...	...
Blue Jay	482	24	26	28	115	21	36	104	71	12	19	54	23	10
Common Raven	...	...	...	...	...	...	...	...	...	2	...	...	...	...
Common Crow	39	1,300	50	80	700	2,020	13	256	171	251	53	100	132	286
Blk.-cap Chickadee	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Carolina Chickadee	186	51	15	75	298	38	19	109	67	174	44	83	60	61
Tufted Titmouse	67	26	10	52	246	26	57	126	59	140	58	77	43	45
Wht.-br. Nuthatch	...	5	...	5	9	...	4	19	1	15	2	9	3	2
Red-br. Nuthatch	...	...	...	...	...	...	...	...	1	8	...	...	...	...
Brown Creeper	4	2	...	2	2	...	1	1	9	12	2	5	...	1
House Wren	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Winter Wren	15	...	...	...	...	...	...	2	2	6	1	9	...	3
Bewick's Wren	...	...	...	1	5	1	3	...	1	1	2	...	2	...
Carolina Wren	66	11	2	9	54	1	14	23	85	53	16	35	18	23
Mockingbird	130	8	37	10	158	7	13	99	125	52	33	30	57	20
Brown Thrasher	31	...	1	...	...	...	7	2	3	1	1	2	...	...
Robin	622	4	16	60	1,500	77	26	61	81	84	3	3	27	28
Hermit Thrush	15	1	...	...	2	...	...	3	...	9	...	...	...	...
E. Bluebird	2	12	8	12	80	12	39	70	12	46	2	20	2	14
Go.-cr. Kinglet	10	1	...	...	...	...	...	6	5	42	...	12	...	1
Ruby-cr. Kinglet	27	8	1	2	2	...	...	2	1	12	1	...	...	1
Water Pipit	6	...	...	...	...	...	...	...	...	...	...	...	...	...
Cedar Waxwing	74	...	30	30	59	...	146	114	7	3	...	...	...	4
Log.-hd. Shrike	14	13	10	4	14	...	2	4	11	18	7	...	4	3
Starling	90,000	45,000	200	10,000	5,000	100,250	250	1,736	2,622	612	710	375	1,870	700
Orange-cr. Warbler	1	...	...	...	...	...	...	...	...	...	...	...	...	...

Myrtle Warbler	74				60	50	12	1	7	6	2	7	2	11
Pine Warbler								1						
Palm Warbler										1				
House Sparrow	390	1,000		200	440	83	78	165	261	173	154	260	142	300
E. Meadowlark	180	43	80	40	341	26	60	265	80	102	11	31	59	91
W. Meadowlark	2													
Redw. Blackbird	70,000	200,000	400	2,100	230			55	120	4				1
Rusty Blackbird	9			340	50			5	20	1				
Brewer's Blackbird				2	4									
Com. Grackle	120,000	75,000	30	7,000	1	30	80	9	354		2,052	2	35	2
Br.-head. Cowbird	20,000	17,000	1	1,200		15		32	10					
Cardinal	515	89	51	125	492	21	72	127	369	221	88	93	105	111
Purple Finch	87			10	15			4	5		2			
Pine Siskin												1		
Am. Goldfinch	280	200	7	86	300		37	52	132	65	12	23	63	189
Red Crossbill														6
Ruf.-sd. Towhee	134	1	4	36	151	1	39	67	47	4	3	6		3
Savannah Sparrow	21			15	1			4	1	5				
Vesper Sparrow				12										
Slate-col. Junco	905	250	47	92	676	21	59	436	163	401	26	144	85	192
Oregon Junco	1													
Tree Sparrow		6			15									
Chipping Sparrow			2					4	3					
Field Sparrow	191	14	35	37	215		26	127	84	196	18	16	18	60
Harris' Sparrow	1			1										
White-cr. Sparrow	1		125	34	104	9	2	5	11		40			3
White-th. Sparrow	1,725	400	60	210	241	2	39	194	249	161	35	119	22	51
Fox Sparrow	64	3	1	14	23	3		14	6	5		1		11
Swamp Sparrow	234	1		56	96		11	8	12	3				3
Song Sparrow	483	200	30	105	203	1	10	75	232	135	28	43	59	57
Lapland Longspur	3													
SPECIES	64	78-1	49	71	71	48	45	66	65	57	43	55	39	51
Individuals	308,228	480,927	101,505	22,993	12,879	117,637	1,363	5,237	6,003	3,380	3,514	1,901	3,119	2,506

ROAN MOUNTAIN, Tenn. - N. C.—(All points within a 15 mile diameter circle, center Carvers Gap at 5,500 ft.; Balsam Road for its entire length; Balsam Seed Orchard; Rhododendron Gardens; Round Bald (5,500-6,200 ft.); coniferous forest, 75%; grass bald 15%; briar-rhododendron-alder 10%. 27 Dec.; 7:30 a. m. to 5 p. m.; fog, limiting visibility at times to 250 ft., sunny; temp. 39° - 42°; wind SW 3-15 m.p.h.; ground firm to soft. One observer. Total hours, 10 (all on foot); total miles, 8 (all on foot). Grouse, 3; Blue Jay, 8; Raven, 1; Crow, 2; Red-breasted Nuthatch, 9; Winter Wren, 1; Robin, 4; Goldfinch, 1; Junco, 9. Total, 9 species; 38 individuals. Fred W. Behrend.

ROUND TABLE NOTES

EGYPTIAN GOOSE IN GREENE COUNTY.—On 28 October, 1964, an Egyptian Goose (*Alopochen aegyptiaca*) came to the farm pond of Fred and Rankin Simpson approximately eight miles northwest of Greeneville, Tennessee. Surrounding the pond is a large hog lot in which whole corn is fed to hogs every day. On the pond is a mixed group of ducks and geese, both tame and wild, including one Snow Goose.

Upon being told of the strange goose on the pond members of the Greeneville chapter of T.O.S. made numerous trips to observe the strange bird. No members had seen anything like it before. It was odd enough that it was fairly simple to identify. The first observers could not find such a bird in the field guides, but one member located the goose in **Birds of the World**, by Austin, Oliver L. Jr. and Arthur Singer. Dr. Lee R. Herndon, using a telephoto lens, took several photographs of the goose. One of those photographs is included in this issue.

The sounds made by the Egyptian Goose which would compare with the honk of the Canada Goose is more drawn out, a descending sound some-



what like "ha aa lp" and being much longer than the honk of the Canada. Another sound which is similar to the quack of a duck but more drawn out and sounding like "qouk" is repeated rapidly. The Egyptian Goose is long on legs and short on neck. The legs being like a Canada and the neck more like a duck. The legs were pink, (described by one member as hocking pink), the back was deep gray, the sides pearl gray, and some buff on the lower neck. The upper neck and head were somewhat darker than the lower neck and it appeared to have a reddish

ring around the neck where the two shades merged. There was a dark brown or black spot the size of a silver dollar about the center of the breast. The bill was whitish with several straight line black marks toward the base. The bill tip was black with black also around the nostrils. The lower mandible appeared to be pink. The eye was yellow with bright reddish brown ringing it. In flight there was a large white area in the fore edge

of the wing and a thin black line through the white, parallel to the length of the wing. The goose seemed to be more colorful at the back than the front; it had bright buff under-tail coverts, a deep green tail with a red-brown above the green.

The goose was at home on the water or land and was not afraid of hogs or calves and could take flight from the land as well as from the water. It stayed with the flock while on the pond but seemed to prefer to be away from them when on land and would make short dashes at some of the other members of the flock as if to fight.

Being unfamiliar with Egyptian Geese and unable to find information on them we asked the help of Mr. J. B. Owen, Knoxville. Mr. Owen found that there was none on game farms in Tennessee, that they were bad to fight. Mr. J. T. Mengel, Knoxville, provided the information that Egyptian Geese have been released in Florida to replace the decreasing supply of water fowl there. Florida has habitat similar to that of the Nile Valley in which the geese thrive. In Dade county, Florida, 72 of the geese had been released, early this year many of them were nesting or had young. Egyptian Geese can take care of themselves in the wild. They have a long history of living around water holes infested by crocodiles and visited by predators from over land.

The Egyptian Goose stayed on the Simpson pond about two weeks after the first arrival then left at the beginning of a short cold spell in November. It stayed away for two to three weeks and returned. The second time it stayed about two weeks and left again. The Simpsons considered the goose to be restless and not completely at home both times it came to the pond.

It was observed through binoculars and telescopes and with the bare eyes. It could be approached on foot to within 15 to 20 feet and was not afraid of humans.

RICHARD NEVIUS, Greeneville.

NOTE ON CONNECTICUT WARBLER. — Due to the prevalent let-up of interest in birding each year following the Spring Count, I think we miss not only some good birds, but some important migration facts. This was brought forcibly to my attention during the Spring of 1962 when I continued my daily surveillance of a certain area near Chattanooga through the 21st of May.

On the 8th of May, Fred Haerich and I discovered a male Connecticut Warbler in a low pine sapling approximately 4 feet above the ground. We studied it closely noting all field marks until it flew into a very thick undergrowth nearby. We felt fortunate to see this seldom seen warbler.

Then as I was making the same trek on May 14, I discovered another male—again in the same type habitat—in low pine saplings. On this occasion he sang several times. Incidentally the song was almost identical to the one recorded in **A Field Guide to Bird Songs**.

Following the sighting of this second individual, I found a third one again singing. This time, however, the habitat was a dense honeysuckle tangle. While both birds were found on May 14, they were discovered about ¼ mile apart.

I can't help but wonder if we would find the Connecticut Warbler more often if we watched for it during the month of May. This will of course depend on further observation.

JAMES A. TUCKER, 535 Forest Dr., Melbourne, Fla.

WOUNDED OSPREY AT BOONE LAKE. — On 8 October 1962, Mr. N. W. Riley of Bristol, Tenn. found an injured Osprey (*Pandion haliaetus*) perched on a rock at Boone Lake. It was about 4:00 p. m. when Mr. Riley captured the bird and placed it in a burlap bag. Bob Quillen informed me of the capture and we were able to secure the bird that night and took it to Dr. M. A. Jones, DVM for treatment. The right wing had been broken by what appeared to have been a bullet. The bone was set and four stitches taken and splinted to secure the wound. The bird was administered shots of penicillin and terramycin to combat infection. The bird was placed in a cage and for the next twelve days, force fed on Kaplin and Round Whiting, which is used for Penguin food, secured from a local frozen food supply company. On 20 Oct., examination of the wound revealed that the wing was perishing due to the severe injury to the main blood vessels and that the wound could not heal. Dr. Jones dispatched the bird.

Some measurements of the bird were: wing — 15.50", wing span — 60.25", tarsus — 3.36", tail — 8.75" and bill — 1.31". Sex was not determined.

WALLACE COFFEY, 508 Spruce Street, Bristol, Tenn.

CEDAR WAXWING NESTING IN SHADY VALLEY. — On 9 June 1962, the nest of a pair of Cedar Waxwings (*Bombycilla cedrorum*) was located on the farm of Roby McQueen in Shady Valley at an elevation of about 2,800'. The nest containing four eggs was saddled in the fork of an apple tree about 25' above ground. The birds were in the vicinity and one bird was observed on the nest. Kenneth Dubke, Roby McQueen, Enno and Roger van Gelder made the observations with me. Because of his small size, Roger was chosen to climb the tree and check for eggs. He reported that the nest contained four eggs which he described as being rather blue or gray with brown spots. This description matches that of a Cedar Waxwing egg which I have in an egg collection given to me by Mr. W. D. Hagey, who collected this egg in Bristol, Tenn. during August 1933 at an elevation of 1,672'. This egg measured 21mm by 15mm.

On 23 June Mr. McQueen reported that the nest had been destroyed before the eggs hatched.

WALLACE COFFEY, 508 Spruce St., Bristol, Tenn.

TRAFFIC CONTROL.—Ashland City, County seat of Cheatham County, has two traffic lights in front of the Courthouse. These lights have a fairly common type of "blinder" on them, beaming the signal straight ahead, so it cannot be seen from the side. The blinders consist of a metal cylinder about 8" in diameter, and about the same length, fitted over each of the lights. On a fourway signal, with three lights on each side, this accounts for 12 protected nesting places.

In the summer of 1960, Starlings repeatedly tried to nest in these lights, and the City fathers as frequently tore down the nests.

In the summer of 1961, Rough-winged swallows tried to nest, but were discouraged and left when their nests were destroyed.

In the spring of 1962, Purple Martins moved in. Their nests were pulled down once, but they returned and were not molested any more. By estimate, six to ten pairs of martins successfully nested.

LOUIS FARRELL, Nashville TOS.

OBITUARIES

GEORGE RADFORD MAYFIELD.—The passing of George Radford Mayfield, one of the five founders of the Tennessee Ornithological Society, brought to a close a long life of service in behalf of popularizing the study of birds and also in behalf of conservation of all forms of wildlife.

Born on a farm near Lawrenceville, Ga., 21 March, 1877, his family moved to Atlanta where he completed his preparatory schooling, following which he entered and graduated from Emory University, B. A. 1930. He then came to Vanderbilt University at Nashville, where he taught Latin and Greek while qualifying himself for an A. M. degree in 1904 and a Ph. D. in 1915. He continued at Vanderbilt, as a teacher of German becoming a full Professor, a post he held until his retirement in 1947. About four years ago he had the misfortune to suffer a broken hip and became inactive after that time. He passed away peacefully on 17 December, 1964, at the advanced age of eighty seven. He is survived by his wife, Lillie Haslock Mayfield, herself a member of the T. O. S. since 1918, and by a son, Dr. George R. Mayfield, Jr., of Columbia, Tenn.



Of perhaps greatest interest to readers of this sketch, is the fact that Dr. Mayfield was one of the five founders of the T. O. S. They were all men of maturity, became close friends, addressed each other by their surnames and having come to know each others interest in birds, decided to cooperate by organizing a bird-study club. This was effected 7 October, 1915 and at that initial meeting, the name Tennessee Ornithological Society was decided upon. Twenty years later, the organization having prospered, the four surviving founders, Ganiem, Mayfield, Merritt and Webb, combined to write a history of the T. O. S. and this may be found in the September, 1935 issue of *THE MIGRANT*.

George Mayfield was an excellent writer and used this talent to acquaint the general public with the interest to be derived from the study of birds, or "bird watching" as it has later been called. He wrote several articles for the Nashville papers on various phases of bird life before *THE MIGRANT* came into being. He was also chairman of the T. O. S. committee which conducted a poll among Tennessee School children for the selection of a State Bird. Some 75,000 votes were cast; the net result being that the Mockingbird was chosen and a vast number of children were set to pondering their preference of the fifteen birds that had been nominated and described.

When the Tennessee Academy of Science decided to begin publishing its quarterly, in 1926, Mayfield was selected to become editor of its publication, **The Journal**, and continued in this capacity for several years, then passing the baton to a fellow T. O. S. member, Dr. Jesse M. Shaver. His interest in all phases of wildlife brought him an appointment to the Tennessee Conservation Commission during the years of his retirement and he was soon elevated to its chairmanship. During these years, he was invited by the Nashville Banner to prepare its weekly nature column, **Fin, Fur and Feathers**, and he conducted this newsy column from 1948 to 1958. He contributed a number of articles and Round Table notes to **THE MIGRANT** and always attended the Annual Meetings and Field Days of the Society.

Our subject will be best remembered by his fellow members as an ardent field observer and enthusiastic companion. On each day that he went afield he carried a bird-listing card, jotting down upon it the number of each species found and carefully filing them for future reference. This had been standard procedure for T. O. S. members from the beginning and Mayfield was a strict practitioner. During W. P. A. days, these cards were worked over by employees for that agency and the recordings were transferred to cards for each species observed, noting thereon the dates and numbers found on each observation.

His strongest forte was the capability he had developed of identifying birds by their songs, call-notes or by any audible sounds they might utter. Having a keen ear and a retentive memory, he had developed this technique to a point that was quite remarkable. He also applied this knowledge to studying songs of the Mockingbird, to identify and list the number of species the Mocker had learned to imitate.

Many other activities of university and civic life might be listed in which he engaged or lent his interest. Among these was the Nashville Children's Museum, of which he was a member of the first board of directors. He held memberships in the American Ornithologists Union, The Wilson Ornithological Society, Georgia Ornithological Society and of course, the T. O. S. As a member of the latter, he was a most loyal worker and rarely missed a meeting. He was a past-president of the State organization as well as of the Nashville Chapter.

George Mayfield was blessed with the good fortune to have lived a long and active life and his fellow T. O. S. members and friends will cherish memories of a valued and rewarding association.

ALBERT F. GANIER.

* * * * *

REV. YATES MOORE.—By the death of Reverend Yates Moore on 17 December, 1964, our Memphis Chapter lost a dedicated member. He is survived by his wife, a daughter, Miss Nelle Moore, a son, Mr. Hunt Moore, and three grand children, all active members of our organization.

Reverend Moore was a graduate of Vanderbilt University and as a member of the Memphis Conference of the Methodist Church served as pastor of churches throughout West Tennessee.

His passing has left a vacancy not only in our organization but within the hearts of those who knew and loved him. His ardent devotion to humanity and his love for everything beautiful and good which would make a better world endeared him to his many friends.

ELLA RAGLAND.

MAXWELL E. BENSON.—On 16 December, 1964 the Nashville Chapter lost one of its most enthusiastic and delightful members in the death of Mr. Maxwell E. Benson, who died after a short illness. He was 62 years old.

At the time of his death he was assistant to the Chairman of the Board of Genesco, and for thirty years there had hardly been any area of civic, cultural or religious life in Nashville in which he did not play an active and an important role. To mention a few from among a great many, he was a founder and trustee of Nashville's Children's Museum, and it was in a large measure due to his efforts that it has become one of the country's finest museums. He was a founder and board member of the Nashville Conservatory of Music, a founder and trustee of the Symphony Society and the Community Playhouse. He was an author of national prominence having written many articles for professional magazines, contributed to the literary page of newspapers and had authored, or co-authored, several books in such areas as church histories and sports. In his chosen field of public relations he had received national recognition for his work on Government committees and national professional societies and organizations. He had always given generously of his time and support to numerous charitable activities, having at one time or another served on the board of directors of the Red Cross, the Community Chest, the Salvation Army, and many others.

He and his wife, Katie, did not join T. O. S. until 1960, but their intense interest in birds, as in nature in general, was of long standing. As in every activity Max entered into, his enthusiasm, charm and delightful sense of humor were immediately felt, and the Chapter benefitted greatly. The programs he gave and his performance as toastmaster at our 1963 annual dinner were events which upheld his wide reputation as a speaker. It was largely through his efforts that Mrs. H. G. Knauth's bird column, "Wing Tips", has become a weekly feature of the Nashville Banner.

His last T. O. S. program was on 12 November. His subject, "Adventures of a Little Boy in Wildflowerland", told the delightful story of the enthusiasm, the sweat and the pleasures he had experienced in developing his wonderful wildflower garden. This project in a way was so typical of the ardent zeal of his whole life, and because of this characteristic, to know Max Benson was to love him. We will all miss him greatly.

LAURENCE TRABUE.

PRESIDENT'S MESSAGE

Dear T. O. S. Members:

When you receive this issue of THE MIGRANT, the time for our Annual State Meeting will be fast approaching.

Don't forget this is our 50th anniversary year, and we want to do honor to our Founders by having a large attendance. The dates will be 30 April, 1 and 2 May and the meeting will be in Nashville. Therefore, the distance will not be so great for anyone as it sometimes is when we meet East or West.

Mr. John S. Herbert, President of the Nashville Chapter, tells me he hopes to have advance information in your hands early in March.

Here's hoping to see you in Nashville!

Sincerely,
SUE BELL

BOOK REVIEW

THOREAU ON BIRDS.—Compiled and with commentary by Helen Cruickshank. McGraw-Hill Book Company, 330 West 42nd Street, New York, N. Y. 1964. 331pp. \$7.95.

Mrs. Cruickshank has expertly assembled Thoreau's notes on birds in the vicinity of Concord so that for each species his notes are arranged in chronological order although a few days or perhaps a few years may elapse between references. She compares current status with those of a little over a century ago. Her comments are clearly set apart from those of Thoreau's vivid notes so there is no confusion between the two authors.

It is to be remembered that comparatively little had been written on birds by 1850, and about all the sketches and paintings of birds available were those of Wilson, Audubon, and a few by Nuttall. A few of these are reproduced in this book, however, they do not compare favorably with our present day artists and colored reproductions. Neither was Thoreau equipped with the fine optical instruments available today. During the later years of his life he possessed a telescope, of a sort, which aided him greatly in his observations and identifications. The common names of birds were not as clearly delineated as they are today and they were confusing, so that in many cases, classes of birds were lumped together. An alphabetical list of birds Thoreau knew is given with the correct ornithological names.

Thoreau spent a great deal of time out of doors and enjoyed his experiences as indicated by his notes and he shared them with his neighbors who in turn frequently passed information on to him.

A quotation from his notes will give a clearer illustration of his style of writing than I could possibly give. A portion of a paragraph from page 172 follows: "June 1. (1857) I hear the note of a bobolink concealed in the top of an apple tree behind me. Though this bird's full strain is ordinarily somewhat trivial, this one appears to be meditating a strain as yet unheard in meadow or orchard. *Paulo majora canamus*. He is just touching the strings of his theorbo, his glassichord, his water organ, and one or two notes globe themselves and fall in liquid bubbles from his teeming throat. It is as if he touched his harp within a vase of liquid melody, and when he lifted it out, the notes fell like bubbles from the trembling strings. Methinks they are the most *liquidly* sweet and melodious sounds I ever heard. They are refreshing to my ear as the first distant tinkling and gurgling of a rill to a thirsty man."

Thoreau's writings have not contributed significantly to ornithological literature, however, his impressions are expressed picturesquely and Mrs. Cruickshank has selected the cream of his notes for publication here and corrected some impressions which, otherwise are misleading.

For those who are interested in reading about birds and are not particularly interested in learning something new, this book offers fascinating reading and a vivid description of the Concord area at all seasons of the year.

LEE R. HERNDON, 1533 Burgie Place, Elizabethton, Tenn.

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- Meadowlark, Eastern—**1962:** 10, 31, 70, 72; **1963:** 12, 33, 81, 84, 90; **1964:** 48, 69, 114.
- Western—**1962:** 70; **1963:** 7; **1964:** 114.
- Merganser, Common—**1962:** 9, 13, 18, 28, 48, 67; **1963:** 13, 72, 76, 79, 82; **1964:** 14, 19, 40, 42, 105, 112.
- Hooded—**1962:** 9, 18, 28, 49, 65, 67; **1963:** 13, 30, 37, 53, 72, 77, 79, 82; **1964:** 14, 17, 18, 19, 42, 45, 101, 103, 104, 105, 112.
- Red-breasted—**1962:** 2, 9, 18; **1963:** 13, 30, 72; **1964:** 19, 40, 42, 45, 103.
- Mockingbird—**1962:** 10, 14, 29, 69, 72; **1963:** 11, 12, 32, 62, 63, 84, 90, 96; **1964:** 47, 90, 113, 119.
- Nighthawk, Common—**1962:** 12, 29, 47; **1963:** 8, 31, 50, 72, 73, 74, 75, 76; **1964:** 38, 41, 46, 61, 65, 102, 104, 106.
- Nuthatch, Red-breasted—**1962:** 4, 7, 12, 13, 15, 16, 17, 18, 27, 29, 69, 71; **1963:** 9, 32, 39, 50, 52, 66, 71, 72, 74, 75, 81, 84, 87, 88, 89, 93; **1964:** 14, 15, 16, 17, 19, 35, 36, 38, 39, 40, 41, 44, 47, 113, 115.
- Brown-headed—**1962:** 94, 96.
- White-breasted—**1962:** 16, 17, 18, 29, 69; **1963:** 32, 75, 84, 88, 90; **1964:** 47, 108, 110, 113.
- Oldsquaw—**1962:** 9, 13, 15, 18, 48; **1963:** 13, 79; **1964:** 14, 16, 19, 42.
- Oriole, Baltimore—**1962:** 7, 8, 31, 47, 49, 50, 59; **1963:** 12, 23, 33, 54, 66, 76, 85, 89; **1964:** 17, 31, 36, 38, 40, 42, 43, 48, 53, 62, 63, 64, 66.
- Bullock's—**1962:** 17.
- Orchard—**1962:** 31, 47; **1963:** 23, 33; **1964:** 36, 38, 39, 42, 43, 48, 62.
- Osprey—**1962:** 28, 50; **1963:** 2, 3, 4, 5, 22, 23, 30, 52, 53, 60, 61, 62, 73, 79, 96; **1964:** 10, 31, 38, 40, 41, 42, 45, 66, 101, 104, 105, 117.
- Ovenbird—**1962:** 6, 8, 27, 31, 59; **1963:** 15, 33, 34, 56, 66, 68, 69, 70; **1964:** 36, 39, 41, 43, 48, 53, 64, 95, 96, 101, 104, 105.
- Owl, Barn—**1962:** 29, 50, 51, 68; **1963:** 22, 52, 73, 74, 81, 83, 86; **1964:** 41, 46, 49, 62, 109, 112.
- Barred—**1962:** 29, 35, 65, 68; **1963:** 31, 52, 79, 83, 86; **1964:** 46, 106, 112.
- Burrowing—**1963:** 7.
- Great Horned—**1962:** 8, 16, 29, 68; **1963:** 31, 52, 75, 77, 83, 86; **1964:** 38, 39, 46, 62, 104, 106, 112.
- Screech—**1962:** 29, 68, 71; **1963:** 31, 52, 55, 56, 73, 79, 83, 86, 96; **1964:** 46, 112.
- Short-eared—**1963:** 7.
- Snowy—**1964:** 71.
- Pelican, White—**1963:** 71.
- Penguin—**1962:** 40.
- Pewee, Eastern Wood—**1962:** 29, 59; **1963:** 15, 23, 32, 66, 73; **1964:** 39, 43, 46, 102, 104.
- Phalarope, Northern—**1963:** 92; **1964:** 94.
- Red—**1963:** 31, 75, 92, 96; **1964:** 94, 102.
- Wilson's—**1963:** 28, 31.
- Pheasant, Hybrid—**1962:** 54, 77.
- Ring-necked—**1963:** 30, 54; **1964:** 39, 42, 45.
- Phoebe, Eastern—**1962:** 10, 27, 29, 36, 63, 68; **1963:** 11, 23, 31, 41-49, 74, 80, 84, 88, 95; **1964:** 15, 31, 39, 43, 46, 113.
- Pintail—**1962:** 9, 12, 18, 49, 67; **1963:** 13, 53, 72, 79, 82; **1964:** 14, 35, 103, 111.
- Pipit, Sprague's—**1963:** 7, 8.
- Water—**1962:** 10, 30, 69; **1963:** 78, 79, 84, 89; **1964:** 40, 47, 113.
- Plover, American Golden—**1962:** 9, 12, 13, 47, 48; **1963:** 7, 9, 31, 49, 71; **1964:** 14, 30, 46, 102.
- Black-bellied—**1962:** 9; **1963:** 51.
- Piping—**1962:** 12.
- Semipalmated—**1962:** 9, 12, 26, 28, 48, 50, 52; **1963:** 9, 31, 49, 79; **1964:** 43, 46, 61, 66, 106.
- Upland—**1962:** 47, 48; **1963:** 31, 51; **1964:** 38, 46, 50, 102.
- Poor-will—**1962:** 61.
- Puffin—**1963:** 40, 95.
- Rail, Black—**1964:** 59, 60, 64.
- King—**1963:** 20, 21, 28, 29, 30; **1964:** 45.

- Virginia—1962: 48; 1963: 20, 21, 30, 66, 75, 95; 1964: 39, 59, 64, 96, 101, 102.
- Raven—1962: 3, 4, 29, 69, 71; 1963: 32, 84, 88, 89; 1964: 47, 110, 113, 115.
- White-necked—1962: 61.
- Redhead—1962: 9, 17, 18, 28, 49, 64, 65, 67; 1963: 13, 30, 53, 72, 79, 81, 82; 1964: 14, 19, 35, 42, 45, 101, 103, 105, 108, 111.
- Redstart, American—1962: 8, 31, 50, 59; 1963: 15, 33, 34, 56, 66, 68, 69, 70; 1964: 37, 38, 43, 48, 53, 96, 101, 104, 105.
- Robin—1962: 5, 6, 13, 14, 16, 18, 30, 64, 69, 72; 1963: 8, 11, 32, 39, 72, 78, 81, 84, 88; 1964: 15, 19, 47, 110, 113, 115.
- Sanderling—1962: 10, 13; 1963: 9, 52, 73; 1964: 15.
- Sandpiper, Baird's—1962: 48, 52; 1963: 57.
- Buff-breasted—1962: 10; 1963: 54, 47, 58, 59, 60, 96.
- Least—1962: 24, 26, 29, 49, 51, 52; 1963: 7, 8, 31, 37, 49, 50, 51, 54, 57, 79; 1964: 16, 36, 38, 43, 46, 61, 63, 65, 66, 101, 102, 103.
- Pectoral—1962: 12, 21, 24, 25, 26, 29, 48, 51, 52, 76; 1963: 7, 9, 31, 54, 57, 79; 1964: 46, 61, 66, 94, 101, 102, 106.
- Red-backed—(see Dunlin).
- Semipalmated—1962: 12, 26, 29, 50, 51, 52; 1963: 31, 49, 53, 54, 57; 1964: 36, 37, 38, 43, 61, 63, 65, 101, 102.
- Solitary—1962: 9, 26, 28, 48, 52; 1963: 31, 49, 50, 54, 57; 1964: 15, 39, 43, 46, 61, 63, 94, 104.
- Spotted—1962: 9, 13, 26, 28, 48, 51, 52, 55; 1963: 23, 31, 37, 50, 54, 57, 79; 1964: 15, 36, 43, 46, 61, 65, 101, 102, 104.
- Stilt—1962: 24, 26, 48, 52; 1963: 9, 49; 1964: 61, 101, 106.
- Western—1962: 26, 29; 1963: 54; 1964: 15, 66.
- White-rumped—1963: 49; 1964: 35.
- Sapsucker, Yellow-bellied—1962: 3, 6, 29, 68; 1963: 8, 13, 31, 74, 77, 83, 88, 90; 1964: 38, 41, 43, 46, 96, 106, 113.
- Scaup, Greater—1962: 9, 13, 27, 28, 48, 55; 1963: 79, 81, 82; 1964: 17, 42.
- Lesser—1962: 9, 17, 28, 55, 67; 1963: 9, 13, 22, 30, 37, 50, 53, 76, 77, 79, 82; 1964: 14, 19, 35, 37, 39, 40, 45, 66, 101, 103, 104, 105, 111.
- Scoter, Surf—1962: 9; 1963: 9.
- White-winged—1964: 42.
- Shoveler—1962: 9, 15, 18, 28, 49, 67; 1963: 13, 30, 79, 82, 89; 1964: 111.
- Shrike, Loggerhead—1962: 10, 30, 51, 69; 1963: 32, 84; 1964: 30, 47, 65, 66, 92, 104, 113.
- Migrant—1964: 94.
- Northern—1964: 89-94, 104.
- Siskin, Pine—1962: 12, 13, 17, 18, 31, 47, 56, 65, 70; 1963: 9, 13, 33, 39, 63, 71, 73, 74, 76, 78, 80, 85, 87, 88, 89, 93; 1964: 14, 15, 16, 17, 18, 20, 25-30, 35, 36, 37, 38, 39, 41, 44, 48, 114.
- Snipe, Common—1962: 9, 28, 68; 1963: 7, 31, 54, 74, 79, 83; 1964: 39, 43, 46, 63, 101, 102, 103, 106, 112.
- Sora—1962: 7, 28, 48; 1963: 7, 21, 28, 29, 31, 51, 66; 1964: 42, 45, 59, 63, 96, 105.
- Sparrow, Bachman's—1962: 31, 50; 1963: 25, 29, 33; 1964: 39, 48.
- Chipping—1962: 8, 31, 70; 1963: 8, 9, 10, 15, 34, 50, 73, 85; 1964: 39, 44, 48, 96, 105, 114.
- Field—1962: 7, 8, 10, 18, 31, 70; 1963: 11, 12, 15, 34, 66, 85, 90; 1964: 48, 64, 96, 114.
- Fox—1962: 7, 70; 1963: 8, 39, 73, 76, 78, 80, 85; 1964: 16, 36, 37, 40, 48, 49, 54, 96, 103, 106, 114.
- Grasshopper—1962: 7, 8, 31; 1963: 9, 15, 33; 1964: 39, 42, 44, 48, 96, 106.
- Harris'—1962: 63, 64, 70; 1963: 8, 73; 1964: 36, 48, 49, 107, 114.
- House—1962: 10, 31, 69, 72; 1963: 12, 33, 49, 70, 84, 90; 1964: 48, 114.
- Lark—1962: 47; 1963: 9, 50, 51, 74, 85, 87; 1964: 17, 36, 48, 49, 72.
- LeConte's—1963: 28, 33, 71, 85.
- Lincoln's—1962: 8, 13, 31, 63, 65, 70; 1963: 8, 73, 85, 87; 1964: 38, 49, 96, 103, 106.
- Savannah—1962: 8, 10, 31, 70; 1963: 15, 28, 33, 66, 80, 85, 90; 1964: 20, 42, 44, 48, 96, 105, 114.
- Sharp-tailed—1964: 95, 96.
- Song—1962: 10, 18, 31, 70, 72; 1963: 10, 11, 15, 34, 35, 66, 73, 76, 85, 90;

- 1964:** 49, 54, 96, 101, 114.
 Swamp—**1962:** 8, 31, 70; **1963:** 8, 13, 15, 34, 66, 68, 69, 73, 85, 90; **1964:** 40, 44, 49, 96, 101, 105, 106, 114.
 Tree—**1962:** 63, 70; **1963:** 50, 85; **1964:** 14, 108, 114.
 Vesper—**1962:** 10, 31, 50, 70; **1963:** 33, 73, 80, 85; **1964:** 39, 42, 44, 48, 54, 105, 114.
 White-crowned—**1962:** 17, 31, 64, 70; **1963:** 11, 12, 34, 73, 78, 85; **1964:** 36, 39, 41, 44, 48, 95, 96, 102, 106, 114.
 White-throated—**1962:** 8, 18, 31, 70; **1963:** 8, 10, 11, 15, 34, 39, 66, 73, 76, 78, 85, 90; **1964:** 39, 41, 44, 48, 96, 101, 106, 114.
 Starling—**1962:** 10, 14, 15, 16, 18, 19, 30, 53, 69, 72, 76; **1963:** 8, 10, 23, 32, 53, 74, 80, 81, 84; **1964:** 14, 15, 17, 18, 29, 47, 65, 108, 113, 117.
 Swallow, Bank—**1962:** 10, 29, 47, 49, 50, 51; **1963:** 32, 49; **1964:** 41, 46, 66, 106.
 Barn—**1962:** 10, 12, 29, 47, 49, 50, 51; **1963:** 23, 32, 48, 49, 50; **1964:** 38, 39, 41, 43, 46, 104, 106.
 Cliff—**1962:** 29, 47, 53; **1963:** 32, 49, 75; **1964:** 35, 38, 41, 46, 52, 65, 66.
 Rough-winged—**1962:** 10, 29; **1963:** 32, 75; **1964:** 16, 39, 41, 43, 46, 51, 117.
 Tree—**1962:** 10, 12, 29, 50; **1963:** 7, 13, 23, 32, 49, 50, 71; **1964:** 41, 43, 46, 51, 66, 102, 106.
 Swan, Whistling—**1964:** 16.
 Swift, Chimney—**1962:** 3, 7, 10, 29, 53, 54, 77; **1963:** 31, 33, 71, 72; **1964:** 39, 41, 43, 46, 63, 102, 104, 106.
 Tanager, Scarlet—**1962:** 8, 27, 31; **1963:** 33, 34, 52, 56; **1964:** 36, 38, 39, 42, 43, 48, 62, 96, 102.
 Summer—**1962:** 7, 31; **1963:** 23, 34, 56; **1964:** 36, 39, 42, 48, 96, 102, 105.
 Teal, Blue-winged—**1962:** 9, 15, 28, 49, 50, 51, 55, 67; **1963:** 10, 11, 13, 30, 53, 72, 79; **1964:** 37, 39, 40, 42, 45, 63, 64, 65, 101, 105, 111.
 Green-winged—**1962:** 9, 18, 48, 67; **1963:** 82, 89; **1964:** 37, 42, 103, 105, 111.
 Tern, Black—**1962:** 10, 47, 49; **1963:** 31, 50, 51; **1964:** 15, 104.
 Caspian—**1962:** 10, **1963:** 37, 51, 54, 72, 79; **1964:** 63, 65, 104, 106.
 Common—**1962:** 10, 29, 49, 51; **1963:** 9, 54, 72; **1964:** 39, 46, 63, 65, 106.
 Forster's—**1962:** 10; **1963:** 9, 31, 49, 51, 75; **1964:** 41, 43, 46, 63, 102.
 Least—**1963:** 22.
 Thrasher, Brown—**1962:** 10, 15, 17, 30, 63, 69, 73; **1963:** 10, 11, 12, 13, 32, 66, 81, 84; **1964:** 39, 41, 43, 47, 70, 96, 113.
 Thrush, Gray-cheeked — **1962:** 7, 30, 51; **1963:** 28, 32, 34, 49, 50, 51, 56, 66; **1964:** 36, 39, 47, 96, 104, 106.
 Hermit—**1962:** 7, 18, 63, 69; **1963:** 13, 66, 79, 84; **1964:** 47, 49, 96, 102, 106, 113.
 Swainson's—**1962:** 7, 18, 30, 51; **1963:** 15, 32, 34, 50, 51, 56, 66, 67, 68, 75; **1964:** 36, 39, 43, 47, 53, 62, 96, 104, 106.
 Willow (see Veery).
 Wood—**1962:** 5, 7, 13, 30; **1963:** 9, 15, 23, 32, 34, 56, 66, 75; **1964:** 36, 38, 41, 47, 53, 96.
 Titmouse, Tufted—**1962:** 14, 27, 29, 69, 71, 72; **1963:** 11, 32, 84, 88, 90; **1964:** 17, 47, 113.
 Towhee, Rufous-sided — **1962:** 31, 70; **1963:** 11, 33, 85, 90; **1964:** 48, 62, 114.
 Turkey—**1962:** 28, 37, 40, 61, 62, 77; **1963:** 81, 83; **1964:** 112.
 Turnstone, Ruddy—**1963:** 54; **1964:** 1, 15.
 Veery—**1962:** 5, 7, 30; **1963:** 15, 32, 34, 39, 56, 66, 67, 75; **1964:** 36, 43, 47, 62, 64, 96.
 Vireo, Philadelphia — **1962:** 7, 30, 50, 59; **1963:** 15, 66, 68; **1964:** 39, 47, 53, 96, 101, 102, 103.
 Red-eyed—**1962:** 7, 30, 59; **1963:** 15, 32, 56, 66, 68, 70, 76; **1964:** 43, 47, 53, 95, 96, 101.
 Solitary—**1962:** 5, 17, 27, 30, 49; **1963:** 9, 23, 39; **1964:** 43, 47, 96, 102.
 Warbling—**1962:** 30; **1963:** 8, 23, 32, 50; **1964:** 39, 43, 47, 62, 64, 96, 101.
 White-eyed—**1962:** 7, 27, 30; **1963:** 23, 32, 56; **1964:** 35, 41, 43, 47, 96, 101, 105.
 Yellow-throated — **1962:** 30, 50, 59;

- 1963: 15, 32, 66; 1964: 37, 39, 43, 47, 53, 65, 96, 102.
- Vulture, Black—1962: 28, 50, 67; 1963: 12, 13, 30, 76, 83, 88, 89, 90; 1964: 42, 45, 66, 104, 105, 109, 112.
- Turkey—1962: 2, 28, 67; 1963: 12, 13, 30, 76, 77, 79, 82, 89, 90; 1964: 18, 45, 104, 109, 112.
- Warbler, Bay-breasted — 1962: 8, 30, 50, 51, 59; 1963: 15, 33, 34, 37, 66, 68, 69, 70, 75; 1964: 36, 48, 53, 62, 95, 96, 105.
- Black and White—1952: 7, 27, 30, 59; 1953: 8, 15, 32, 34, 56, 66, 68, 70, 76; 1964: 35, 37, 39, 41, 43, 47, 96, 101.
- Blackburnian — 1962: 8, 30, 50, 59; 1963: 15, 33, 34, 38, 50, 52, 56, 66, 68, 69; 1964: 43, 48, 53, 62, 96, 102, 104, 105.
- Blackpoll—1962: 30, 59; 1963: 23, 29, 33, 35, 38; 1964: 40, 43, 48, 53, 62, 95, 96, 105.
- Black-throated Blue—1962: 5, 7, 8, 13, 27, 30; 1963: 33, 34, 39, 52; 1964: 47, 64.
- Black-throated Green—1962: 8, 27, 30, 59; 1963: 8, 15, 33, 34, 38, 51, 52, 66, 73; 1964: 39, 43, 47, 53, 62, 96, 101, 105.
- Blue-winged—1962: 13, 30, 50; 1963: 32, 50, 66; 1964: 37, 47, 52, 56, 105.
- Brewster's—1933: 73; 1964: 37, 52.
- Canada—1962: 6, 7, 8, 31, 48, 50, 59; 1963: 15, 29, 33, 38, 39, 52, 66; 1964: 41, 43, 48, 53, 62, 63, 64, 96, 105.
- Cape May—1962: 30, 50; 1963: 33, 38, 52, 56, 75; 1964: 47, 52, 105.
- Cerulean—1962: 30, 59; 1963: 33; 1964: 36, 43, 47.
- Chestnut-sided—1952: 8, 30, 49, 50, 59; 1962: 15, 33, 34, 33, 39, 49, 50, 51, 52, 56, 66, 68, 69, 70; 1964: 36, 39, 43, 48, 53, 62, 96.
- Connecticut—1953: 28, 33, 38, 50, 52, 116.
- Golden-winged—1962: 13, 30, 34, 48, 50, 51, 59, 77; 1963: 32, 51; 1964: 43, 47, 62, 66, 96, 102.
- Hooded—1962: 31; 1963: 33, 56, 76; 1964: 37, 38, 39, 41, 43, 48, 53, 64, 96.
- Lawrence's—1962: 30.
- Kentucky—1962: 8, 31, 50, 59; 1963: 8, 15, 33, 50, 56, 66; 1964: 39, 41, 43, 48, 53.
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- Mourning—1962: 7, 8, 13, 59; 1963: 33, 34, 38, 49, 50, 66, 72; 1964: 15, 95, 96.
- Myrtle—1962: 8, 10, 18, 30, 59, 63, 69; 1963: 8, 10, 15, 33, 34, 66, 72, 76, 78, 80, 84; 1964: 15, 39, 41, 47, 96, 104, 105, 106, 114.
- Nashville—1962: 8, 30, 59; 1963: 15, 28, 32, 50, 66, 75; 1964: 15, 47, 62, 96, 102, 103, 104, 105, 106.
- Orange-crowned—1962: 7, 8, 12, 30, 48, 63, 69; 1963: 7, 84, 87; 1964: 38, 47, 50, 95, 96, 102, 104, 106, 113.
- Palm—1962: 8, 10, 31, 59, 65, 69; 1963: 8, 15, 33, 34, 38, 50, 66, 68, 69, 70, 73, 75, 84, 87; 1964: 16, 43, 48, 96, 104, 105, 114.
- Parula—1962: 7, 8, 30; 1963: 32; 1964: 37, 38, 39, 43, 47, 96.
- Pine—1962: 30, 50, 63, 69; 1963: 33, 84, 87; 1964: 35, 37, 39, 43, 48, 64, 114.
- Prairie—1962: 30, 50; 1963: 33, 34, 50, 56; 1964: 39, 41, 43, 48, 64.
- Prothonotary—1962: 13, 30, 50, 54, 59; 1963: 22, 23, 32, 75; 1964: 47, 49, 101.
- Swainson's—1962: 30; 1963: 32; 1964: 30, 43, 47, 66.
- Sycamore—(see Yellow-throated).
- Tennessee—1962: 7, 8, 30, 50, 51, 59; 1963: 15, 32, 34, 56, 66, 68, 70, 73, 75, 76; 1964: 47, 53, 62, 95, 96, 102, 105.
- Wilson's—1962: 7, 8, 31, 48, 51, 59; 1963: 8, 33, 38, 50, 51, 66, 72, 75; 1964: 15, 41, 43, 48, 53, 96, 102, 105.
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- Waterthrush, Louisiana—**1962:** 27, 31;
1963: 8, 33; **1964:** 37, 39, 41, 43, 48.
Northern—**1962:** 8, 21, 31, 51; **1963:**
15, 33, 34, 49, 50, 51, 56, 66, 68, 69,
73; **1964:** 15, 40, 43, 48, 62, 96, 103,
105.
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1963: 13, 32, 39, 75, 76, 78, 84, 89;
1964: 19, 36, 39, 41, 43, 47, 65, 102,
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55, 77; **1963:** 31, 50, 71, 92, 96; **1964:**
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78, 82; **1964:** 14, 17, 19, 35, 37, 40,
42, 101, 103, 104, 105, 111.
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28, 50, 63, 68; **1963:** 14, 31, 54, 71, 89,
95; **1964:** 37, 41, 52, 102, 112.
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71, 72; **1963:** 11, 23, 31, 83, 88, 90;
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1964: 46, 65, 104, 113.
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77; **1963:** 25, 31, 71, 94; **1964:** 37, 52.
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63, 66, 68; **1963:** 11, 23, 31, 51, 52, 54,
66, 77, 81, 83, 89; **1964:** 8, 18, 41, 46,
61, 65, 104, 106, 113.
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1963: 11, 13, 32, 79, 84, 90; **1964:** 36,
43, 47, 66, 106, 113.
Carolina—**1962:** 16, 30, 63, 69, 71, 72;
1963: 11, 32, 80, 84, 90; **1964:** 47, 113.
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50, 51, 66; **1964:** 36, 41, 43, 47, 96,
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1963: 7, 8, 32, 66, 71, 73; **1964:** 41, 64,
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13, 15, 32, 39, 78, 84; **1964:** 43, 47, 64,
96, 104, 110, 113, 115.
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48, 52; **1963:** 7, 8, 28, 31, 37, 54, 57,
72, 79; **1964:** 39, 43, 46, 61, 104.
Lesser—**1962:** 9, 26, 28, 48, 52; **1963:**
7, 8, 9, 31, 54, 57, 59, 79; **1964:** 5, 16,
39, 43, 46, 61, 102, 104, 106.
Yellowthroat—**1962:** 8, 31, 59; **1963:**
15, 33, 34, 50, 56, 66, 68, 69, 70; **1964:**
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