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## COLOR PHASES OF THE EASTERN SCREECH-OWL IN TENNESSEE

Linda J. Fowler

In the eastern part of its range, the Eastern Screech-Owl (*Otus asio*) occurs in two distinct color phases (red and gray) which are independent of sex, age, or season. The relative frequency of red phase birds generally follows a cline from north to south with about a quarter of the northern population composed of red phase birds and up to three quarters of the southern population (Gulf Coast and Florida excluded) in red phase birds (Owen 1963). Birds intermediate in coloration occur in low frequency in most of the bird's range. Only two Tennessee researchers have investigated color phase in the screech-owl. Stupka (1963) collected dead on road (DOR) screech-owls in the Great Smoky Mountains National Park (GSMNP) from 1936-1954 and reported a ratio of greater than 4:1 red to gray phase for 104 DOR screech-owls. In a Nashville study, Laskey (1963) noted a 1:1 red to gray phase ratio for 97 owls brought to her attention over a 32-year period (banded birds, DOR birds, miscellaneous observations, etc.). To date, there have been no studies that focus on color phase of the screech-owl in the Ridge and Valley Physiographic Region of Tennessee. The purpose of this paper is to report on color phases of Eastern Screech-Owls that were collected dead on Tennessee roads from 1976-1982 and banded in Tennessee from 1977-1982, primarily in the Ridge and Valley Physiographic Region.

## METHODS

Between November 1976 and February 1982, DOR screech-owls were collected by me or others knowledgeable of my study. Birds were brought back to the laboratory where they were sexed by internal examination and the color phase was recorded. In addition, stomach contents were analyzed; these results have been reported elsewhere (Turner and Dimmick 1981). From May 1977 to May 1982 screech-owls were captured in wooden owl boxes located in Knox and Anderson Counties, Tennessee, and in Wood Duck (*Aix sponsa*) boxes located along the Holston River in Hawkins County. Both adult and nestling birds were banded using U.S. Fish and Wildlife Service No. 5 lock-on bands, and the color phase was recorded.

## RESULTS AND DISCUSSION

A total of 191 DOR screech-owls was collected from 34 of the 95 counties in Tennessee, predominantly (87%) in the Eastern Ridge and Valley Region from 1976-1982. Four of these birds (all red phase) were collected from counties in the Western Coastal Plain and 12 birds (7 red, 4 gray, 1 intermediate) from the Central Plateau and Basin. Of the total birds, 74% were red, 22% were gray, and 4% intermediate in coloration, which basically agrees with Owen (1963). He examined museum specimens throughout the United States and reported 79% red phase birds from Tennessee. The ratio of 3.4:1 red to gray phase birds in my study was only slightly lower than the 4:1 ratio reported previously by Stupka (1963) for the GSMNP. However, my ratio differs significantly from the 1:1 ratio of Nashville birds reported by Laskey (1963).

Sex was determined for 127 of the 191 DOR birds (Table 1). Ratio of male to female birds was approximately 1:1, which agrees with the sex ratio of screech-owls from an Ohio study (VanCamp and Henny 1975). Ratio of red to gray birds for the sexed birds was nearly identical to the total DOR sample. No significant relationship was detected between sex and color phase of DOR birds (chi-square test). Although it was first concluded in 1874 (Baird *et al.* 1874) that color phase was independent of sex in screech-owls, VanCamp and Henny (1975) doubted that this theory had been tested using a large sample of birds from a given area. Subsequently, VanCamp and Henny (1975) examined 760 nesting screech-owls from northern Ohio and reported no relationship between sex and color phase, which agrees with my findings.

Table 1. Sex and color phase of 127 Eastern Screech-Owls found dead on Tennessee roads 1976-1982.

| Sex     | Red      | Gray     | Intermediate | Total      |
|---------|----------|----------|--------------|------------|
| Females | 46 (36%) | 13 (10%) | 6 (5%)       | 65 (51%)   |
| Males   | 48 (38%) | 12 (9%)  | 2 (2%)       | 62 (49%)   |
| Total   | 94 (74%) | 25 (20%) | 8 (6%)       | 127 (100%) |

Of 225 screech-owls banded between 1977-1982 (105 adults, 120 juveniles), 62% were red, 36% were gray, and 2% were intermediate in coloration (Table 2). The ratio of red to gray owls (1.7:1) was nearly identical for adult and juvenile birds. Intermediates were not detected in juvenile birds and if present were probably misclassified as to color phase. Ratios of red to gray

Table 2. Color phase of 225 nestling and adult owls banded between 1977-1982.

| Age      | Red       | Gray     | Intermediate | Total      |
|----------|-----------|----------|--------------|------------|
| Adult    | 64 (61%)  | 37 (35%) | 4 (4%)       | 105 (47%)  |
| Nestling | 76 (63%)  | 44 (37%) | 0            | 120 (53%)  |
| Total    | 140 (62%) | 81 (36%) | 4 (2%)       | 225 (100%) |

phase birds differed significantly among banded and DOR birds. A good explanation to account for these differences is not available. Gray phase owls may be less noticeable on gray and black road surfaces resulting in possible underestimation of gray phase owls in the DOR sample.

However, if it is assumed that the banded sample more accurately reflects the true color phase ratio in the population, then some type of differential mortality between red and gray phase owls must be present. Mosher and Henny (1976) reported that metabolic rates of gray phase screech-owls enabled them to withstand cold temperatures better than red phase owls. Thus, differential survival rates (along with other environmental factors) among red and gray phase owls accounts for higher number of gray phase birds in the north. Higher survival for gray phase birds during extremely cold weather has also been reported in Ruffed Grouse (*Bonasa umbellus*) by Gullion and Marshall (1968). Although not tested, Mosher and Henny (1976) speculated that hot, humid weather may reduce survival of gray birds in the more southern parts of its range. Future long-term field and laboratory studies should provide more insight into color phase differences in the screech-owl.

#### ACKNOWLEDGEMENTS

I thank the Tennessee Valley Authority for providing nest boxes and some financial assistance for this study and the University of Tennessee Agricultural Experiment Station for use of their facilities. I also appreciate the helpful comments made by Dr. Ralph Dimmick, Dr. David Pitts, and Dale K. Fowler on an earlier draft of this manuscript. Special thanks are due to all individuals that collected DOR owls for this study.

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## FIRST RECORD OF LONG-TAILED JAEGER IN TENNESSEE

Stephen J. Stedman

On 2 September 1984 a Long-tailed Jaeger (*Stercorarius longicaudus*) was studied and photographed near Island No. 13, about 15 km southwest of Tiptonville, Lake County. This sighting constitutes the first state record of this species and the second state record of a member of the Stercorariinae. Observers, besides myself, on 2 September included Barbara H. Stedman, Ronald D. Hoff, Audrey R. Hoff, and Randy C. Stringer. On 3 September Stringer observed the bird again, as did Paul C. Harris *et al.*; on 4 September Dot T. Crawford and J. Paul Crawford *et al.* saw the bird. Observers searching for it on 6 and 8 September were unable to locate it. On 2 September the bird was photographed by me, R. D. Hoff, and R. C. Stringer, and on 4 September photographs were obtained by J. P. Crawford.

Unlike the majority of jaegers observed in the fall, this bird appeared in nuptial plumage (Figure 1). The long tail streamers, its most striking feature, were still quite prominent, extending well beyond the folded wings; its underparts were white or slightly offwhite with no trace of the barring prominent on winter-plumaged birds; and in good light the yellowish wash typical of breeding condition could still be detected on the bird's cheek and upper neck. In addition, the white at the base of the primaries characteristic of the jaegers was limited to the two outermost primaries, which definitively separated this bird (Figure 2) from the Parasitic Jaeger (*S. parasiticus*). Also, the tarsi of the bird were dark gray or blackish, which is consistent with descriptions of some individuals of this species (Cramp 1983), although the tarsi of most individuals have a bluish cast. Because this bird did not closely associate with any other bird while under observation, it was difficult to judge its size. However, its buoyant and agile flying was entirely in conformance with descriptions of the flight of *S. longicaudus* (Cramp 1983).



Figure 1. Long-tailed Jaeger. Photograph by J. Paul Crawford.



Figure 2. Long-tailed Jaeger in flight. Photograph by Ronald D. Hoff.

Migrants of this species do not normally feed extensively while in passage (Cramp 1983), but while under observation on 2 September this bird was noted hawking for insects, which it readily captured after swift pursuit. This behavior was also noted on 4 September (D. T. Crawford pers. comm.). The bird consumed all of each prey item it was seen to capture. On one occasion it swallowed an insect, and in the process of swallowing it one wing of the insect fell to the ground; the bird retrieved and swallowed the wing, although the nutritional value which it offered must have been minimal. Additionally, the bird picked up small items from the ground and ingested them; these may have been edible items or grit. If the latter, it would represent an infrequently noted feeding behavior as Bent (1921), Terres (1980), Pforr and Limbrunner (1981), and Cramp (1983) do not mention it in their discussions of this species' food habits.

The habitat which the bird frequented during the time it was under observation on 2, 3, and 4 September consisted of a 1-km-wide sandbar adjacent to the Mississippi River. During most of the time that the bird was seen 2 September, it remained close to the river's edge, though occasionally it would fly inland a few hundred m; it was not observed flying inland from the river far enough to leave the airspace over the sandbar. Perhaps because the sandbar was quite hot on its surface (probably over 40°C), the bird bathed a few times at the river's edge; the bird was also observed panting several times.

One other sighting of a member of the Stercorariinae has occurred in Tennessee, also in early fall. On 16-17 September 1978 an immature jaeger was sighted at Woods Reservoir, Franklin County, by M. L. Bierly, D. F. Vogt *et al.* It was photographed and initially identified as a Parasitic Jaeger (Purrington 1979), but a later discussion of the bird indicated that some uncertainty about its identification existed (Bierly 1980). The states adjacent to Tennessee have few records of the Long-tailed Jaeger. Those bordering the Atlantic Ocean, such as the Carolinas, record the species

rarely (Potter *et al.* 1980) but with more frequency than those which border the Gulf of Mexico, such as Alabama where only 2 tentative records exist (Imhof 1976; Imhof pers. comm.), or those which are entirely inland, such as Kentucky (Mengel 1965) and Arkansas, where at least one sighting has occurred (Purrrington 1975). These records are sparse enough to reinforce the notion that the Long-tailed Jaeger is "very rare in the interior" (Godfrey 1966). However, since it has also occurred overland in migration in such diverse sites as Kenya and Switzerland (Cramp 1983), there is no reason to suppose its occurrence at midcontinent in Tennessee is other than a normal, if rarely observed, migratory phenomenon.

I thank Ronald D. Hoff and J. Paul Crawford for offering the use of the photographs which are included with this note. I thank J. Paul Crawford also for his assistance in obtaining black-and-white prints of the jaeger. My thanks also go to Barbara H. Stedman for offering comments on earlier versions of the manuscript.

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## THE 1985 SPRING FIELD DAYS

Richard L. Knight

The 1985 Spring Field Days is the 40th annual count, as published in this format. This year 216 species were reported from 12 counts across Tennessee. The species total has been exceeded four times and equaled once, all within the previous decade. The number of counts is near the recent average. Among the unusual species reported, most notable were Yellow Rail, Common Moorhen, Northern Saw-whet Owl, Olive-sided and Scissor-tailed Flycatchers, and Le Conte's Sparrow. Once again, some rarities were reported with little or no documentation.

Comparison of numbers from year to year and even within one report of the Spring Field Days can yield important information, but should be made with caution. Conditions and methods vary more on this count than on the Christmas Bird Count. For instance, there were seven one-day counts and five two-day counts this year. Size of the area covered varies considerably, from one county to several adjacent counties. Also, there is a lack of units of effort (party-hours) which compensates for the difference in numbers of observers. These and other factors need to be taken into account when making comparisons.

## INFORMATION ON THE COUNTS

MEMPHIS—28 April; Meeman-Shelby S.P. in morning, separate parties in afternoon at Penal Farm and along Mississippi R. to Robco L. & Mud L.; Ben B. Coffey, Jr. (compiler—672 N. Belvedere, Memphis 38107); group leaders: William Bean, Lula Coffey, Helen Dinkelspiel, George Payne, Noreen Smith, Martha Waldron, & Jeff Wilson. The Cattle Egrets were flying from Mississippi to a roost in Tennessee.

LAWRENCEBURG—11 May; Lawrence County; 0530 to 2100; clear; temp. 59-70°F; 8 observers in 4 parties—Andy Augustin, Raymond McCrory, Jennifer Moses, Ned Piper, Damien Simbeck (compiler—Rt. 2, Box 3A, Loretto 38469), Don Simbeck, Morris Williams, & Wylie Willis. The Tree Swallows were a nesting pair at Laurel Hill Lake. Also reported—*Accipiter* sp.-1, *Empidonax* sp.-1.

CLARKSVILLE—4 May; Montgomery County; partly cloudy; high temp. 75°F; 9 observers—Joe Allen, Mike Dinsmore, Annie Heilman, Andrea Hopkins, Nancy Hughes, John Quick (compiler—Rt. 1, Box 114-B, Cunningham 37052), Louise Reding, David Snyder, & Ellen Walker.

COLUMBIA—4-5 May; field trips of the TOS Spring Meeting; George Mayfield (compiler—999 Sunnyside Dr., Columbia 38401). The Yellow Rail was seen on 4 May by Jeff Wilson, Don Manning, & Mike Todd. Also reported—peep sp.-5, tern sp.-1.

NASHVILLE—11-12 May; fair with moderate temp.; 62 observers—Jan C. Alexander, Linda Anderson, John & Willa Bates, Sue M. Bell, Sandra Bivens, Jean Cobb, Bonnie Coplin, Kin Corsner, Dot & Paul Crawford, Marion Dorsey, C. Gerald Drewry, Milbrey Dugger, Evelyn & John Ellis, Adele & Nelson Elom, Bob English, John Filley, Karen Filley, Lucy & William Finch, Ray Fleischer, Doug Garza, Katherine A. Goodpasture,

## 1985 SPRING FIELD DAYS

|                        | Memp | Lawr | Clar | Colu | Nash | Mirf | Leba | High | Chat | Knox | Gree | Eliz |
|------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Common Loon            | --   | --   | --   | 2    | --   | --   | --   | --   | 3    | --   | --   | --   |
| Pied-billed Grebe      | 1    | --   | --   | --   | 4    | --   | 3    | --   | 2    | --   | --   | 2    |
| Double-cr. Cormorant   | 55   | --   | --   | 3    | 1    | --   | 83   | --   | 1    | --   | --   | 2    |
| Great Blue Heron       | 2    | --   | --   | 1    | 5    | 1    | 10   | 3    | 14   | 7    | 2    | 3    |
| Snowy Egret            | 2    | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   |
| Little Blue Heron      | 2    | --   | --   | --   | --   | 4    | --   | --   | --   | --   | --   | 1    |
| Cattle Egret           | 121  | --   | --   | 1    | --   | 4    | --   | --   | --   | --   | --   | --   |
| Green-backed Heron     | 11   | 12   | 1    | 16   | 37   | 4    | 5    | 1    | 4    | 12   | 4    | 22   |
| Black-cr. Night-Heron  | --   | --   | --   | --   | 85   | --   | 2    | --   | --   | 1    | --   | --   |
| Yellow-cr. Night-Heron | 4    | --   | --   | --   | 5    | --   | --   | --   | 2    | --   | --   | 4    |
| Canada Goose           | 2    | 11   | --   | 44   | 511  | 10   | 113  | 59   | 20   | 20   | 19   | 20   |
| Wood Duck              | 18   | 14   | 6    | 12   | 58   | 2    | 6    | 8    | 21   | 51   | 22   | 35   |
| Amer. Black Duck       | --   | --   | --   | --   | --   | --   | --   | --   | --   | 6    | --   | --   |
| Mallard                | 15   | --   | --   | 18   | 147  | 6    | 2    | 2    | 4    | 13   | 17   | 36   |
| Blue-winged Teal       | 12   | --   | --   | 19   | 3    | --   | 6    | --   | 8    | 6    | 7    | 8    |
| Northern Shoveler      | --   | --   | --   | --   | --   | --   | --   | --   | 2    | 11   | --   | --   |
| Gadwall                | --   | --   | --   | 1    | --   | --   | --   | --   | --   | --   | --   | --   |
| American Wigeon        | --   | --   | --   | --   | 1    | --   | --   | --   | 3    | --   | --   | --   |
| Canvasback             | 1    | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   |
| Greater Scaup          | --   | --   | --   | --   | --   | --   | --   | --   | 3    | --   | --   | --   |
| Lesser Scaup           | 6    | --   | --   | 1    | --   | --   | --   | --   | --   | --   | --   | --   |
| Bufflehead             | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | 3    |
| Hooded Merganser       | --   | --   | --   | --   | --   | --   | --   | --   | 5    | --   | --   | --   |
| Red-breasted Merganser | --   | --   | --   | --   | --   | --   | --   | --   | 1    | --   | --   | --   |
| Ruddy Duck             | 33   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   |
| Black Vulture          | --   | 3    | 3    | 36   | 67   | 37   | 85   | 2    | 1    | 2    | --   | --   |
| Turkey Vulture         | --   | 31   | 4    | 35   | 77   | 5    | 9    | 14   | 10   | 42   | 5    | 13   |
| Osprey                 | 2    | --   | --   | 1    | 5    | --   | 2    | --   | 3    | 8    | 1    | 2    |
| Mississippi Kite       | 1    | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   |
| Northern Harrier       | --   | --   | --   | 1    | --   | --   | 1    | --   | --   | --   | --   | --   |
| Sharp-shinned Hawk     | --   | --   | --   | 3    | --   | --   | 1    | --   | 1    | 2    | --   | --   |
| Cooper's Hawk          | --   | --   | --   | 1    | 3    | 1    | --   | --   | 1    | 1    | --   | 1    |
| Red-shouldered Hawk    | 2    | 8    | --   | 8    | 11   | --   | 1    | --   | 5    | 2    | --   | --   |
| Broad-winged Hawk      | 4    | 6    | --   | 8    | 9    | 1    | 1    | --   | 5    | 6    | 3    | 3    |
| Red-tailed Hawk        | 5    | 6    | 5    | 20   | 26   | 6    | 6    | 1    | 6    | 6    | 4    | 1    |
| American Kestrel       | --   | 2    | --   | 11   | 24   | 13   | 3    | 3    | 1    | 5    | 2    | 9    |
| Ruffed Grouse          | --   | --   | --   | --   | --   | --   | --   | --   | --   | 2    | 1    | 3    |
| Wild Turkey            | 6    | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   |
| Northern Bobwhite      | 18   | 30   | 12   | 40   | 170  | 42   | 7    | 12   | 19   | 44   | 25   | 15   |
| Yellow Rail            | --   | --   | --   | 1    | --   | --   | --   | --   | --   | --   | --   | --   |
| Virginia Rail          | --   | --   | --   | 2    | --   | --   | --   | --   | --   | --   | --   | --   |
| Sora                   | --   | 1    | --   | 8    | 2    | --   | --   | --   | --   | 1    | 1    | 2    |
| Common Moorhen         | --   | --   | --   | --   | 1    | --   | --   | --   | --   | --   | 1    | --   |
| American Coot          | --   | --   | --   | 1    | --   | --   | --   | --   | 11   | --   | --   | 2    |
| Black-bellied Plover   | --   | --   | --   | --   | 1    | --   | --   | --   | --   | --   | --   | --   |
| Lesser Golden-Plover   | 1    | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   |
| Semipalmated Plover    | --   | --   | --   | --   | 33   | --   | 1    | --   | 5    | --   | --   | 1    |
| Killdeer               | 37   | 13   | 2    | 14   | 62   | 30   | 7    | 6    | 30   | 64   | 37   | 36   |
| Greater Yellowlegs     | 7    | --   | --   | 1    | 4    | --   | 1    | --   | 3    | 1    | --   | 12   |
| Lesser Yellowlegs      | 29   | --   | --   | 3    | 8    | --   | 1    | --   | 3    | 7    | --   | 46   |
| Solitary Sandpiper     | 23   | 1    | --   | 12   | 1    | 2    | 12   | --   | 11   | 9    | 12   | 27   |
| Willet                 | --   | --   | --   | --   | --   | --   | --   | --   | 35   | --   | --   | --   |
| Spotted Sandpiper      | 5    | 1    | 1    | 5    | 24   | --   | 6    | --   | 5    | 16   | 3    | 10   |
| Semipalmated Sandpiper | 3    | --   | --   | --   | 15   | 2    | --   | --   | 9    | --   | --   | --   |
| Western Sandpiper      | --   | --   | --   | --   | 21   | --   | --   | --   | --   | --   | --   | --   |
| Least Sandpiper        | 115  | --   | 6    | 3    | 21   | --   | 1    | --   | 16   | 4    | --   | 14   |
| White-rumped Sandpiper | --   | --   | --   | --   | 5    | --   | --   | --   | --   | --   | --   | --   |
| Pectoral Sandpiper     | 21   | --   | --   | --   | 1    | --   | --   | 1    | 8    | --   | --   | 1    |
| Dunlin                 | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | 2    |
| Stilt Sandpiper        | 2    | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   |
| Common Snipe           | 1    | --   | --   | --   | --   | --   | 2    | --   | 1    | 3    | 1    | 14   |
| American Woodcock      | --   | --   | --   | 1    | 4    | --   | 1    | --   | --   | 1    | --   | 1    |
| Bonaparte's Gull       | --   | --   | --   | --   | --   | --   | --   | --   | 1    | --   | --   | --   |
| Ring-billed Gull       | 31   | --   | --   | --   | --   | --   | 24   | --   | 35   | 26   | --   | 4    |
| Herring Gull           | 3    | --   | --   | --   | --   | --   | 6    | --   | --   | --   | --   | --   |

|                         | Memp | Lawr | Clar | Colu | Nash | Murf | Leba | High | Chat | Knox | Gree | EMz |
|-------------------------|------|------|------|------|------|------|------|------|------|------|------|-----|
| Common Tern             | --   | --   | --   | --   | --   | --   | --   | --   | 6    | --   | --   | 4   |
| Forster's Tern          | --   | --   | --   | --   | --   | --   | 5    | --   | 1    | --   | --   | 4   |
| Rock Dove               | 1    | 72   | 21   | 11   | 131  | 60   | 14   | 12   | 133  | 201  | 24   | 67  |
| Mourning Dove           | 26   | 138  | 28   | 84   | 341  | 108  | 60   | 44   | 105  | 518  | 92   | 153 |
| Black-billed Cuckoo     | --   | --   | --   | --   | --   | --   | 1    | --   | --   | 2    | --   | --  |
| Yellow-billed Cuckoo    | 2    | 8    | 1    | 12   | 66   | 17   | 3    | 2    | 7    | 12   | --   | 2   |
| Common Barn-Owl         | --   | --   | 1    | --   | --   | --   | 2    | --   | 1    | --   | --   | 1   |
| Eastern Screech-Owl     | 1    | 1    | --   | 1    | 2    | 1    | 8    | --   | --   | 5    | --   | 5   |
| Great Horned Owl        | --   | --   | --   | 4    | 3    | 1    | 4    | --   | 4    | 5    | --   | 1   |
| Barred Owl              | 5    | --   | 3    | 6    | 17   | --   | 12   | --   | 3    | 4    | --   | --  |
| N. Saw-whet Owl         | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | 1   |
| Common Nighthawk        | 5    | 1    | 3    | 12   | 25   | 18   | 23   | 2    | 19   | 7    | --   | 6   |
| Chuck-wills-widow       | 4    | 2    | 2    | 7    | 4    | 15   | 15   | --   | 2    | 14   | --   | 4   |
| Whip-poor-will          | 1    | --   | 2    | 2    | 39   | --   | 10   | --   | --   | 1    | --   | 12  |
| Chimney Swift           | 39   | 66   | 135  | 53   | 526  | 172  | 87   | 63   | 562  | 519  | 118  | 312 |
| Ruby-thr. Hummingbird   | 36   | 3    | 3    | 13   | 44   | 6    | 5    | --   | 16   | 12   | --   | 4   |
| Belted Kingfisher       | 2    | 2    | 1    | 8    | 23   | 2    | 9    | --   | 9    | 30   | --   | 13  |
| Red-headed Woodpecker   | 29   | 1    | 1    | 8    | 6    | 3    | 3    | 5    | 1    | --   | --   | 1   |
| Red-bellied Woodpecker  | 52   | 20   | 18   | 43   | 114  | 22   | 11   | 13   | 31   | 64   | 19   | 29  |
| Yellow-bel. Sapsucker   | 2    | 2    | --   | --   | --   | 3    | 2    | --   | 3    | --   | --   | --  |
| Downy Woodpecker        | 19   | 11   | 11   | 32   | 69   | 12   | 6    | 8    | 18   | 34   | 12   | 17  |
| Hairy Woodpecker        | 1    | 1    | 3    | 6    | 9    | 5    | 2    | 1    | --   | 5    | 4    | 3   |
| Northern Flicker        | 16   | 6    | 3    | 5    | 42   | 16   | 2    | 5    | 16   | 52   | 23   | 38  |
| Pileated Woodpecker     | 12   | 5    | 4    | 13   | 40   | 3    | 1    | 1    | 10   | 24   | 9    | 11  |
| Olive-sided Flycatcher  | --   | --   | --   | --   | --   | --   | --   | --   | 1    | --   | --   | --  |
| Eastern Wood-Pewee      | 23   | 18   | 8    | 35   | 107  | 8    | 3    | --   | 8    | 5    | 3    | 1   |
| Acadian Flycatcher      | 35   | 7    | 4    | 32   | 63   | --   | --   | --   | 9    | 5    | --   | 1   |
| Willow Flycatcher       | 1    | --   | --   | --   | 7    | --   | --   | --   | --   | --   | --   | --  |
| Least Flycatcher        | --   | --   | --   | 2    | --   | --   | --   | --   | --   | --   | --   | --  |
| Eastern Phoebe          | 1    | 16   | 6    | 20   | 19   | 10   | 15   | 2    | 8    | 21   | 6    | 23  |
| Great Cr. Flycatcher    | 31   | 22   | 11   | 29   | 67   | 10   | 13   | 4    | 11   | 24   | 11   | 8   |
| Eastern Kingbird        | 37   | 40   | 14   | 37   | 149  | 82   | 24   | 9    | 14   | 40   | 25   | 23  |
| Scissor-t. Flycatcher   | --   | --   | --   | --   | --   | 1    | --   | --   | --   | --   | --   | --  |
| Horned Lark             | 24   | 3    | --   | --   | --   | --   | --   | --   | --   | 1    | --   | 1   |
| Purple Martin           | 32   | 49   | 14   | 42   | 115  | 123  | 15   | 18   | 69   | 60   | 7    | 141 |
| Tree Swallow            | 18   | 2    | --   | 18   | 22   | --   | --   | --   | 15   | 4    | 4    | 51  |
| N. Rough-winged Swallow | 22   | 19   | 14   | 79   | 127  | 22   | 14   | 18   | 39   | 77   | 42   | 217 |
| Bank Swallow            | --   | --   | --   | 30   | 15   | --   | 2    | --   | 5    | 2    | --   | 2   |
| Cliff Swallow           | --   | 6    | 102  | 4    | 1601 | --   | --   | 16   | 38   | --   | --   | 1   |
| Barn Swallow            | 107  | 115  | 16   | 51   | 295  | 240  | 52   | 6    | 75   | 203  | 127  | 287 |
| Blue Jay                | 52   | 27   | 29   | 90   | 197  | 64   | 79   | 46   | 76   | 325  | 99   | 207 |
| American Crow           | 16   | 65   | 29   | 40   | 231  | 50   | 47   | 26   | 101  | 281  | 134  | 165 |
| Fish Crow               | 6    | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --  |
| Common Raven            | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | 6   |
| Carolina Chickadee      | 60   | 7    | 47   | 35   | 110  | 34   | 22   | 7    | 45   | 172  | 33   | 62  |
| Tufted Titmouse         | 139  | 17   | 32   | 63   | 160  | 34   | 29   | 18   | 57   | 155  | 41   | 62  |
| Red-breasted Nuthatch   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | 1   |
| White-breasted Nuthatch | 2    | 4    | 6    | 7    | 26   | --   | 1    | 5    | 11   | 10   | 7    | 14  |
| Brown-headed Nuthatch   | --   | --   | --   | --   | --   | --   | --   | --   | 6    | --   | --   | --  |
| Brown Creeper           | --   | --   | --   | --   | --   | --   | --   | --   | --   | 1    | --   | --  |
| Carolina Wren           | 49   | 3    | 13   | 42   | 99   | 10   | 5    | 7    | 39   | 168  | 53   | 62  |
| Bewick's Wren           | --   | --   | --   | 5    | 1    | --   | 2    | --   | --   | --   | --   | --  |
| House Wren              | --   | --   | 7    | 1    | 16   | 9    | 6    | --   | --   | 10   | 9    | 9   |
| Winter Wren             | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | 1   |
| Sedge Wren              | --   | --   | --   | --   | 1    | --   | --   | --   | --   | --   | --   | --  |
| Marsh Wren              | --   | --   | --   | 2    | --   | --   | --   | --   | --   | --   | --   | --  |
| Golden-crowned Kinglet  | --   | --   | 4    | --   | --   | --   | --   | --   | --   | 1    | --   | 2   |
| Ruby-crowned Kinglet    | --   | --   | 1    | --   | --   | --   | 1    | --   | 34   | 53   | 2    | 17  |
| Blue-g. Gnatcatcher     | 111  | 23   | 5    | 66   | 86   | 4    | --   | 6    | 161  | 88   | 14   | 30  |
| Eastern Bluebird        | 13   | 60   | 17   | 40   | 83   | 51   | 55   | 34   | 30   | 61   | 52   | 53  |
| Veery                   | 1    | 5    | --   | 2    | 6    | --   | --   | --   | 1    | 2    | --   | --  |
| Gray-cheeked Thrush     | 9    | 3    | 1    | 4    | 7    | --   | --   | --   | 1    | 1    | --   | --  |
| Swainson's Thrush       | 60   | 13   | 6    | 20   | 156  | 3    | --   | --   | 2    | 26   | 2    | --  |
| Hermit Thrush           | --   | 1    | --   | --   | --   | --   | --   | --   | --   | --   | --   | --  |
| Wood Thrush             | 41   | 11   | 13   | 21   | 63   | 9    | 7    | --   | 27   | 66   | 11   | 45  |
| American Robin          | 76   | 45   | 71   | 66   | 397  | 210  | 49   | 83   | 249  | 629  | 161  | 532 |
| Gray Catbird            | 10   | 20   | 10   | 37   | 38   | 22   | 15   | 4    | 11   | 49   | 6    | 18  |
| Northern Mockingbird    | 31   | 54   | 21   | 30   | 209  | 122  | 23   | 27   | 35   | 142  | 53   | 83  |
| Brown Thrasher          | 15   | 32   | 8    | 31   | 96   | 50   | 34   | 8    | 24   | 65   | 31   | 25  |
| Water Pipit             | --   | --   | --   | --   | --   | --   | 2    | --   | --   | 10   | 15   | 2   |

|                          | Memp | Lawr | Clar | Colu | Nash | Murf | Leba | High | Chat | Knox | Gree | Eliz |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Cedar Waxwing            | 71   | --   | 2    | 15   | 102  | --   | 7    | 4    | 53   | 153  | 56   | 29   |
| Loggerhead Shrike        | 6    | 9    | 1    | 8    | 47   | 3    | 3    | --   | 3    | --   | --   | 1    |
| European Starling        | 200  | 110  | 95   | 77   | 589  | 400  | 119  | 83   | 675  | 894  | 432  | 859  |
| White-eyed Vireo         | 92   | 11   | 18   | 55   | 105  | 7    | 12   | 1    | 30   | 68   | 14   | 16   |
| Solitary Vireo           | --   | --   | 1    | 1    | 2    | --   | --   | --   | --   | 7    | --   | 15   |
| Yellow-throated Vireo    | 11   | 7    | 1    | 11   | 9    | --   | 3    | 3    | 36   | 15   | 4    | 4    |
| Warbling Vireo           | 9    | --   | 3    | 12   | 17   | --   | 2    | --   | --   | --   | 1    | 2    |
| Philadelphia Vireo       | 1    | --   | --   | 3    | --   | --   | 1    | --   | --   | --   | 1    | --   |
| Red-eyed Vireo           | 69   | 18   | 12   | 54   | 112  | 5    | 6    | 7    | 81   | 194  | 15   | 75   |
| Blue-winged Warbler      | --   | 8    | 1    | 35   | 24   | --   | 3    | --   | 3    | 5    | 1    | 2    |
| Golden-winged Warbler    | --   | 1    | --   | --   | 2    | --   | 4    | --   | --   | 1    | --   | 1    |
| Tennessee Warbler        | 107  | 6    | 47   | 126  | 86   | 5    | 4    | 3    | 26   | 101  | 1    | 3    |
| Orange-crowned Warbler   | --   | --   | --   | --   | --   | --   | --   | --   | --   | 1    | --   | --   |
| Nashville Warbler        | 4    | --   | --   | 14   | 6    | 1    | 2    | --   | 1    | 7    | --   | --   |
| Northern Parula          | 92   | 9    | --   | 31   | 16   | --   | 1    | --   | 1    | 4    | 2    | 13   |
| Yellow Warbler           | 5    | 5    | 12   | 67   | 51   | 2    | 6    | --   | 27   | 37   | 12   | 42   |
| Chestnut-sided Warbler   | 2    | 6    | 1    | 11   | 12   | 2    | 2    | --   | 35   | 13   | 7    | 21   |
| Magnolia Warbler         | --   | 12   | 1    | 4    | 18   | 3    | 3    | --   | 6    | 5    | 1    | --   |
| Cape May Warbler         | --   | --   | 1    | 3    | 2    | --   | 2    | 6    | 15   | 17   | 4    | 5    |
| Black-thr. Blue Warbler  | --   | --   | --   | --   | --   | --   | --   | --   | --   | 1    | --   | 15   |
| Yellow-rumped Warbler    | 31   | --   | 25   | 22   | 5    | 5    | 37   | 16   | 47   | 211  | 70   | 140  |
| Black-thr. Green Warbler | 3    | 2    | 2    | 15   | 5    | --   | 2    | --   | 3    | 43   | 2    | 20   |
| Blackburnian Warbler     | --   | 3    | 1    | 3    | 3    | --   | 6    | --   | 5    | 9    | --   | 2    |
| Yellow-throated Warbler  | 2    | 8    | 2    | 12   | 38   | 1    | 2    | --   | 22   | 4    | --   | 7    |
| Pine Warbler             | 4    | 5    | 2    | --   | 3    | 1    | 1    | --   | 6    | 3    | 1    | 3    |
| Prairie Warbler          | --   | 13   | 13   | 59   | 32   | 2    | 18   | 1    | 3    | 26   | --   | 1    |
| Palm Warbler             | 14   | 2    | --   | 4    | 11   | 1    | 5    | 3    | 15   | 5    | 4    | 7    |
| Bay-breasted Warbler     | 1    | 7    | 1    | 15   | 22   | 2    | 6    | --   | 8    | 12   | --   | --   |
| Blackpoll Warbler        | --   | 2    | 2    | 7    | 52   | 1    | 6    | 2    | 9    | 11   | --   | 1    |
| Gerulean Warbler         | 15   | 3    | --   | 35   | 8    | --   | 2    | --   | 3    | 13   | --   | 3    |
| Black & white Warbler    | 4    | 3    | 2    | 16   | 9    | 2    | 7    | --   | 9    | 32   | 1    | 26   |
| American Redstart        | 18   | --   | --   | 7    | 15   | --   | --   | --   | 24   | 11   | 2    | 1    |
| Prothonotary Warbler     | 48   | 4    | 10   | 24   | 36   | 2    | 4    | --   | 13   | 7    | 1    | 2    |
| Worm-eating Warbler      | 3    | 1    | --   | 13   | 14   | --   | 4    | --   | 5    | 7    | --   | 9    |
| Swainson's Warbler       | 7    | --   | --   | --   | --   | --   | 1    | --   | --   | --   | --   | 1    |
| Ovenbird                 | --   | 4    | 2    | 19   | 12   | --   | --   | --   | 5    | 30   | 4    | 57   |
| Northern Waterthrush     | 2    | --   | --   | 10   | 2    | --   | 3    | --   | 1    | 3    | 1    | 3    |
| Louisiana Waterthrush    | 5    | 9    | 4    | 19   | 16   | --   | 2    | --   | 3    | 11   | --   | 11   |
| Kentucky Warbler         | 37   | 9    | 7    | 45   | 49   | --   | 5    | --   | 14   | 20   | 1    | 7    |
| Connecticut Warbler      | --   | --   | --   | 1    | --   | --   | --   | --   | --   | --   | --   | --   |
| Mourning Warbler         | --   | --   | --   | --   | --   | --   | 1    | --   | --   | --   | --   | --   |
| Common Yellowthroat      | 61   | 53   | 12   | 112  | 208  | 27   | 20   | 4    | 30   | 126  | 44   | 24   |
| Hooded Warbler           | 19   | 2    | 1    | 14   | 21   | 1    | --   | --   | 11   | 29   | 4    | 36   |
| Wilson's Warbler         | --   | --   | --   | 1    | 1    | --   | --   | --   | --   | --   | --   | --   |
| Canada Warbler           | --   | 2    | --   | 1    | 8    | 2    | 1    | --   | 2    | --   | --   | --   |
| Yellow-breasted Chat     | 9    | 17   | 17   | 65   | 83   | 14   | 5    | --   | 10   | 19   | 8    | 8    |
| Summer Tanager           | 70   | 13   | 6    | 36   | 85   | 7    | 18   | 1    | 13   | 18   | 2    | 1    |
| Scarlet Tanager          | 8    | 8    | 1    | 48   | 32   | --   | 2    | --   | 14   | 49   | 7    | 23   |
| Northern Cardinal        | 144  | 66   | 88   | 86   | 533  | 97   | 75   | 45   | 109  | 436  | 148  | 222  |
| Rose-breasted Grosbeak   | 25   | 5    | 9    | 25   | 16   | --   | 5    | 5    | 18   | 48   | 1    | 16   |
| Blue Grosbeak            | 6    | 18   | --   | 18   | 42   | 7    | 7    | 4    | 5    | 6    | 1    | 4    |
| Indigo Bunting           | 317  | 135  | 38   | 200  | 611  | 112  | 20   | 8    | 70   | 117  | 27   | 16   |
| Painted Bunting          | 4    | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   |
| Dickcissel               | 25   | 6    | 20   | 11   | 6    | 2    | --   | --   | --   | --   | --   | --   |
| Rufous-sided Towhee      | 25   | 33   | 38   | 36   | 193  | 41   | 30   | 20   | 31   | 158  | 39   | 68   |
| Chipping Sparrow         | 3    | 7    | 10   | 20   | 53   | 7    | 18   | 16   | 45   | 26   | 7    | 27   |
| Field Sparrow            | 4    | 76   | 6    | 41   | 162  | 32   | 16   | 3    | 75   | 140  | 53   | 26   |
| Vesper Sparrow           | --   | --   | --   | --   | --   | --   | --   | --   | --   | 1    | --   | --   |
| Lark Sparrow             | --   | --   | --   | --   | --   | 2    | 1    | --   | --   | --   | --   | --   |
| Savannah Sparrow         | 9    | 1    | --   | --   | 6    | --   | 1    | 3    | 10   | 16   | 6    | 29   |
| Grasshopper Sparrow      | --   | 1    | --   | --   | 8    | --   | 3    | --   | 8    | 13   | 5    | 5    |
| LeConte's Sparrow        | --   | --   | --   | --   | --   | --   | --   | --   | --   | 1    | --   | --   |
| Song Sparrow             | --   | --   | --   | --   | 42   | 6    | 5    | 5    | 54   | 267  | 100  | 320  |
| Lincoln's Sparrow        | 8    | --   | --   | --   | 1    | --   | --   | --   | --   | --   | --   | --   |
| Swamp Sparrow            | --   | 1    | --   | 7    | --   | --   | --   | --   | 11   | 3    | --   | 3    |
| White-throated Sparrow   | 20   | 1    | 11   | 26   | 2    | --   | 10   | 24   | 43   | 202  | 26   | 104  |
| White-crowned Sparrow    | 5    | --   | 2    | 10   | --   | --   | 6    | --   | 2    | 16   | 15   | 38   |
| Dark-eyed Junco          | 3    | --   | --   | --   | --   | --   | --   | --   | --   | --   | --   | 19   |
| Bobolink                 | --   | 22   | 9    | 3    | 15   | --   | --   | 3    | 4    | 2    | --   | --   |
| Red-winged Blackbird     | 270  | 179  | 56   | 207  | 636  | 1000 | 69   | 16   | 69   | 284  | 135  | 172  |

|                      | Memp | Lawr | Clar | Colu | Nash | Murf | Leba | High | Chat | Knox | Gree | Eliz |
|----------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Eastern Meadowlark   | 104  | 135  | 46   | 73   | 327  | 162  | 66   | 40   | 51   | 191  | 141  | 168  |
| Rusty Blackbird      | --   | --   | --   | --   | --   | --   | 1    | --   | 2    | --   | 4    | --   |
| Common Grackle       | 130  | 154  | 59   | 81   | 669  | 300  | 156  | 81   | 76   | 722  | 341  | 872  |
| Brown-headed Cowbird | 178  | 57   | 39   | 93   | 233  | 47   | 69   | 23   | 38   | 111  | 45   | 82   |
| Orchard Oriole       | 50   | 42   | 4    | 62   | 113  | 12   | 7    | 5    | 10   | 20   | 9    | 4    |
| Northern Oriole      | 33   | --   | --   | 17   | 9    | 1    | 4    | --   | 15   | 10   | 7    | 12   |
| Purple Finch         | --   | --   | --   | --   | --   | 4    | 5    | --   | --   | 4    | --   | --   |
| House Finch          | --   | --   | --   | --   | 2    | --   | 11   | --   | 7    | 29   | 13   | 19   |
| Pine Siskin          | --   | --   | 5    | --   | --   | --   | --   | --   | 12   | --   | --   | 63   |
| American Goldfinch   | --   | 35   | 82   | 72   | 121  | 34   | 36   | 18   | 162  | 190  | 35   | 346  |
| House Sparrow        | 150  | 117  | 83   | 30   | 248  | 75   | 58   | 41   | 330  | 161  | 34   | 85   |
| Total Species        | 135  | 111  | 103  | 144  | 149  | 97   | 140  | 73   | 151  | 146  | 105  | 149  |

Sarah Greene, Dewey Griffin, Mary Anne & Tom Guschke (compilers—113 Taggart Ave., Nashville 37205), Bessie Hagan, Robert M. Hatcher, Ann Houk, Lillian Hunt, Louise Jackson, Edgar Jolly, Carol Knauth, Lee F. Kramer, Adene Lyon, John & Joseph McLaughlin, Portia McMillan, Margaret Mann, Rocky Milburn, Pauline Miller, Richard Newton, Marge & Oscar Patrick, Donald Perry, Larry Raye, Betty Richards, Alice Savage, Pat Stallings, Barbara H. & Stephen J. Stedman, Helen Sterling, Ellen Stringer, Ann T. Tarbell, David F. Vogt, Kenneth Walkup, Cliff Whitehead, Virginia Workamn. Also reported—*Accipiter* sp.-1, peep sp.-17.

MURFREESBORO—11-12 May; overcast to clear; hot & dry; Anne L. Hettish (compiler—1018 Lawndale Dr., Murfreesboro 37130). The Scissor-tailed Flycatcher has returned several consecutive years.

LEBANON—27-28 April; Wilson County; rain, then clearing; 10 observers—Earline C. Berry, Fred Detlefsen, Clark Jenkins, Donald C. Jenkins, M. R. McMillan, Ruth V. McMillan (compiler—Rt. 2, Box 141, Lacassas 37085), Margaret Partee, Ray Pope, Alice Savage, Grace Speck.

HIGHLAND RIM—1800 on 26 April to 1800 on 27 April; partly cloudy, with isolated showers; 13 observers—Carol Barr, Marguerite Hernandez, Agnes Marcrom, Nicky Medley, Phillip Medley (compiler—Rt. 2, Box 173-B, Hillsboro 37342), Anna Mary Parker, Chloe & Howell Peebles, John Wilson, Doub Wimberly, Truman Winnet, Grady & Willa York. Brewer's Blackbird deleted.

LEBANON—27-28 April; Wilson County; rain, then clearing; 10 observers—Earline C. Berry, Fred Detlefsen, Clark Jenkins, Donald C. Jenkins, M. R. McMillan, Ruth V. McMillan (compiler—Rt. 2, Box 141, Lacassas 37085), Margaret Partee, Ray Pope, Alice Savage, Grace Speck.

CHATTANOOGA—27-28 April; Nickajack Dam to hiwassee R.; partly cloudy, with afternoon thundershowers; temp. 61-80°F; 17 observers—Carl Adams, Claire & Del Blum, Linda Cartwright, Jack & Linda Doyle, Ken & Lil Dubke, Gertrude Fleming, Al Jenkins, Barbara & Mike McMahon, Johnny Parks (compiler—1610 East 17th St., Chattanooga 37404), Janet Phillips, Peter Robinson, Pam & Robin Rudd.

KNOXVILLE—28 April; Knox County; overcast to partly cloudy; temp. 59-80°F; 27 observers in 16 parties—Betty Adams, Frank Bills, Sharon Bostick, Howard Chitwood, Linda Fowler, Louise Fuller, Brice Gilmer, Maurice Grigsby, Paul Hartigan (compiler—200 Hermitage Rd., Knoxville 37920), Audrey Hoff, Joe Howell, Susan Hoyle, Hal Hubbs, Jon Koella, Beth Lacy, Bettie & Jim Mason, Charles Nicholson, Holly Overton, J. B.

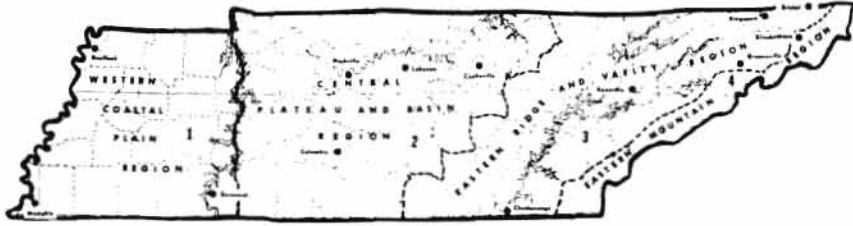
Owen, Truett Patterson, Don Powers, Mark Reeves, Ken & Mable Sanders, Boyd Sharp, Jim Tanner. The Le Conte's Sparrow was a well described individual seen by Joe Howell and J. B. Owen. Also reported—*Buteo* sp.-2, *Empidonax* sp.-1.

GREENEVILLE—28 April; 21 observers; Ben Britton (compiler—Rt. 1, Box 348, Greeneville 37743).

ELIZABETHTON—27 April; mostly within 25 mile radius of Elizabethton; 0330 to 2130; cloudy, with light intermittent rain; temp. 53-66°F; 20 observers in 8 parties; Glen Eller (compiler—Rt. 9, Box 1340, Elizabethton 37643). The N. Saw-whet Owl was heard calling on Roan Mountain.



## THE SEASON



## SPRING MIGRATION: 1 MARCH - 30 MAY 1985

The weather this spring was generally warm and very dry. Early March and early April were cooler than average, but temperatures during the rest of the season were warm. Most regions reported lower than average rainfall, and in some areas, the season was among the driest on record. This probably produced favorable conditions for northward migrating birds, although, as usual, observers' characterizations of the season are mixed.

A variety of species was reported on earlier than average dates, and a few species were reported on record early dates. Among the rare or out of place species reported are Sandhill Cranes near the Mississippi River, a Yellow Rail near Columbia, a Glossy Ibis near Gallatin, and a Harris' Sparrow at the Duck River Unit. Some of the northern species which invaded last winter stayed into this season. These included a White-winged Crossbill, present at Chattanooga until mid-April, and Oldsquaws on Chickamauga Lake in mid-March. Pine Siskins, which increased in numbers late in the winter, stayed into may in Middle and East Tennessee. Some waterbirds were present in unusually high numbers. These included Red-breasted Mergansers in Middle Tennessee, and Double-crested Cormorants in West and Middle Tennessee. The recent increase in cormorant numbers is undoubtedly related to the 40 percent a year population increase recorded at Great Lakes colonies (Ludwig, *Jack Pine Warbler* 62:91-102, 1984). There were also reports of interesting breeding records, such as a territorial Saw-whet Owl on Roan Mountain, and the continued expansion of the Brown-headed Nuthatch, this time to Cleveland.—CHARLES P. NICHOLSON.

Abbreviations used in these reports include EOP - End of Period; ers - earliest report of season; lrs - latest report of season.

**WESTERN COASTAL PLAIN REGION**—Migration was slow and late. Summer residents were observed in good numbers. Unusual sightings included an early date for the American Bittern, a pair of Sandhill Cranes in Lauderdale County, and a pair of nesting Black-necked Stilts at the Enslay Sewage Lagoons near Memphis.

*Grebe*—*Tern*: Horned Grebe: 23 Apr (50+) PLS, (3) BRF (DWB). Double-crested Cormorant: 14 Apr (350) Mud Lake, Shelby Co. (BBC, LCC). American Bittern: 4 Mar (1) MEM (Charlotte Joshlin, Martha G. Waldron); 19

Mar (1) Moss Island, DYC (RPF); 9 May (1) REL, OBC (SJS, RCS). Least Bittern: 9 May (1) REL, LKC (SJS, RCS). Yellow-crowned Night-Heron: 30 Mar (10 birds, 6 nests under construction) MEM (N. P. McWhirter, JRW). Greater White-fronted Goose: 14 Mar (1) DYC (SJS, RCS). Red-breasted Merganser: 11 Mar (1) PEF (HBD, DP); 28 May (13) PLS (DWB). Ruddy Duck: 12 May (12) Robco Lake, MEM (BBC, LCC). Mississippi Kite: 30 Mar (1) MEM (DAD); 19 Apr (1) DYC (RPF); 18 May (3) ESL (JRW); 29 May (4) SFP (Carolyn H. Bullock, Helen B. Dinkelspiel, Sue C. Ferguson, Noreen M. Smith). Sharp-shinned Hawk: 28 May (1) PLS (DWB). Cooper's Hawk: 9 Mar (1) PEF (JRW). "Harlan's" Hawk: 23 Mar (1) TN/MS line near MEM (BBC, LCC). King Rail: 9 May (1) DYC (SJS, RCS). Common Moorhen: 9 May (1) REL, OBC (SJS, RCS). **SANDHILL CRANE:** 18 Apr (2) FPP (RPF); third West Tennessee and first county record, details published in *Migrant* (56: 45-46, 1985). Lesser Golden-Plover: 9 Mar (29) ESL (BBC, LCC); 16 Mar (12) PEF (JRW). Western Sandpiper: 9 May (1) ESL (JRW); 17 May (1) REL, OBC (DWB). White-rumped Sandpiper: 9 May (2) ESL (SJS, RCS); 18 May (5), 30 May (47) ESL (JRW). Stilt Sandpiper: 10 Mar (1) ESL (JRW). Common Snipe: 10 Mar (187) ESL (JRW). Black-necked Stilt: 11 Apr (1), 18 May (1), 30 May (2, nest) ESL (JRW). Common Tern: 23 Apr (2) PLS (DWB).

*Owl—Finch:* Eastern Screech-Owl: 28 Apr (6) PRI (JRW). Olive-sided Flycatcher: 7 May (1) FPP (SJS, RCS). Brown Creeper: 10 May (1) REL, LKC (RPF). House Wren: 3 Apr (1) Toone, Hardeman Co. (RPF). Sedge Wren: 30 Apr (3) Mud Island, Shelby Co. (BBC). Marsh Wren: 28 May (2) BRP (DWB). Gray-cheeked Thrush: 12 Apr (1) MEM (DAD). American Tree Sparrow: 15 Mar (3) DYC (SJS, RCS). Grasshopper Sparrow: 23 Apr (1) PLS (DWB). Lincoln's Sparrow: 31 Mar (1), 27 Apr (3) ESL (JRW); 28 Apr (6-8) PRI (JRW); 9 May (1) Golddust, LDC (SJS, RCS). Western Meadowlark: 5 Mar (1) PEF (JRW). Rusty Blackbird: 9 Mar (250) PEF (JRW). House Finch: 6 May (1 male) MEM (Jo L. Levy).

*Locations:* BRP - Britton Ford, Henry Co.; DYC - Dyer Co.; ESL - Ensley Sewage Lagoons, Shelby Co.; FPP - Fort Pillow State Park, Lauderdale Co.; LDC - Lauderdale Co.; LKC - Lake Co.; MEM - Memphis; OBC - Obion Co.; PEF - Shelby Co. Penal Farm; PLS - Paris Landing State Park, Henry Co.; PRI - President's Island, Shelby Co.; SFP - Shelby Forest State Park, Shelby Co.

MARTHA G. WALDRON, 1626 Yorkshire Drive, Memphis, TN 38119.

**CENTRAL PLATEAU AND BASIN REGION**—In contrast to the cool, wet spring of 1984, the season this year was warm and dry. These weather conditions resulted in a generally less exciting spring for regional field workers, but probably offered migrants a less strenuous and safer passage northward. With rainfall in March over 3 inches below normal in Nashville and that for April and May each deficient about 1.5 inches, there were far fewer adverse weather patterns to bring migrating species down than had been true the previous year. In addition, the balmy weather of April caused foliage to develop more rapidly than it had a year ago, making woodland passerines, which everyone felt to be low, more difficult to detect than a year earlier, at least during the early portion of the migration.

Of the more than 60 field workers who submitted records for this season, 9 offered an evaluation of it, with a considerable variety of judgment



evident among them. Ellen Walker and Annie Heilman (Clarksville) and Lillian Hunt (Nashville) felt the season to be "slow" and "below average." Ruth McMillan (Wilson Co.) commented about the lateness of some species, while Robbie Hassler (Byrdstown, Pickett Co.) regarded the season as a "normal" one. Paul Crawford (Gallatin) labeled it "slightly above average," Richard Simmers (Cookeville) and Damien Simbeck (Lawrenceburg) felt it to have been "fairly good," and Donald Blunk (Dover, Stewart Co.), rounding out the spectrum of opinion, called it "excellent." A synthesis of these evaluations would obviously result in the conclusion that a fairly normal spring season had transpired. It is worth noting that at least 9 unprecedentedly early arrival records were established this spring, while no record late dates were set. Probably a normal number of rarities occurred, with the Crawford's ibis being the most unexpected. Unexpectedly large concentrations were noted for a few species, especially among the shorebirds, but generally this was not true for most species seen and reported during the season. In summarizing the Spring 1985 season, perhaps we can do no more than concur with one previous analyst of the spring migration: the "incredible spectacle of the movable avifauna" was simply a normal, if incredible, spectacle once again.

*Loon—Ibis*: Common Loon: 28-30 May (1 in breeding plumage) RDL (MLJ, *et al.*), lrs. Horned Grebe: 4 May (1) GSP (CGD), lrs. Double-crested Cormorant: 27 Apr (192) DRU (SJS, BHS); 27-28 Apr (80+) WLC (*vide* RVM); period of peak migration denoted. American Bittern: 24 Mar - 27 Apr (1 seen and occasionally heard) MOP (SJS, m.ob.), only report. Great Egret: 1 Apr (2) LOR (Andy J. Augustine), ers; 8 other reports (6 Apr - EOP) from 6 locations. Cattle Egret: 4 Apr (2) I-40 at Rt. 13, Humphreys Co. (CGD), ers; 4 other reports. Snowy Egret: 23 Apr (1) BAR (DWB), only report. Green-backed Heron: 30 Mar (2) LWC (GNP, DJS, MDW), ties LWC early spring date. **GLOSSY IBIS**: 3 May (1 ad in breeding plumage) LWP (DTC, JPC), excellent details submitted, first well-documented NA record.

*Swan—Merganser*: Tundra Swan: 10 Mar (1 imm) CCNWR (DWB), only report. Greater White-fronted Goose: 10-30 Mar (2) Laurel Hill L., LWC (Lloyd W. Clayton, Helen M. Clayton, *et al.*); 13 and 23 Mar (2) MOP (SJS, WNJ, O. Bedford Lochridge, Anne R. Lochridge). Blue-winged Teal: 29 May (1 male with Mallard female and chicks) MC (David F. Vogt), lrs. American Wigeon: 12 May (1 male) Cedar Hill Park, DVC (M. Patricia Stallings), lrs. Gadwall: 4 May (1 female) MOP (JRW, TOS), lrs. Canvasback: 12 Mar (50+) Rushing Creek, LBL (DWB), lrs (also large number). Redhead: 2 Mar (25) CCNWR (DWB); 3 Mar (8) RDL (CGD, *et al.*); 3 Mar (12) DRU (SJS, BHS, ARH); only reports. Common Merganser: 16 Mar (2) DRU (CGD, *et al.*); 20 Mar (1) Hermitage Landing, PPL (MLM); 19 May (1 male) Woods Reservoir, Franklin Co. (SJS, BHS); only reports with the last being late. Red-breasted Merganser: 16-18 Mar (400-500) DRU (CGD, RCS, Ruth Griffin, Dewey Griffin); 23 May (200) Anchor Dr., Old Hickory L. (Lee F. Kramer); 3 May (4) PPL Dam (M. Rebecca Hammett, Stephen R. Satterfield), lrs; period of peak migration indicated by first two sightings.

*Osprey—Merlin*: Osprey: widely reported 11 Apr - 15 May. Bald Eagle: 23 Mar (1 imm) DRU (CGD), last report of an imm (but see Summer 1985 report); adults seen later might have been or were breeders. Northern Harrier: 5 May (1) MOP (JRW, Anne L. Hettish, TOS), lrs. Sharp-shinned Hawk: 8 reports 9 Mar - 4 May (almost identical to data for Spring 1984).

Cooper's Hawk: 8 reports 3 Mar - 12 May (fewer than in Spring 1984). Broad-winged Hawk: 2 Apr (1) Bard's Lake, LBL (DWB), ers. Rough-legged Hawk: 9 Mar (1) CCNWR (CGD, *et al.*), only report. Merlin: 26 Mar (1) MC (R. J. Milburn, Jr.); 20 Apr (1) EWP (PBH); only reports.

*Turkey—Crane*: Wild Turkey: 4 Mar (8) LBL (DWB); 23 Mar (17) Shacklett, CHC (CGD, *et al.*); 6 Apr (1) DRU (SJS, BHS); 20 Apr (1) DYD (CGD); 2 May (1) LEF (SJS); more sightings from more areas than in most recent years. **YELLOW RAIL**: 4 May (1 seen) MOP (JRW, DWM, MCT); although the bird did not call, the white wing-patches were not seen, and the habitat was atypical of that used by the species, this sighting was still well-documented; details should be published. King Rail: 6 May (2) Goose Pond, Grundy Co. (PBH, CPN, Linda Pearsall); 26 May (1) 3.5 km upstream from Bartlett Bridge on Buffalo R. (WNJ); 27 May (1 injured) LAW (*fide* DJS); encouraging a number of sightings. Virginia Rail: 23 May (1 road kill) Five Points, LWC (MDW); usual sightings at MOP reported. Sora: 23 Mar (1) MOP (WNJ), ers; 27 May (1) LWC (DJS, Michael A. Beuerlein), lrs. Common Moorhen: 3, 4, and 11 May (1) GSP (DTC, JPC, CGD, Bessie Hagan, William Jones), only report. Sandhill Crane: 4 Mar (43) BAH (RWS); 4 Mar (98+) BYR (Francis E. Baker); 7 Mar (68+) BAH (RWS); 9 Mar (5) NW of Lebanon, WLC (RVM, Mac R. McMillan), 10th NA record; 16 Mar (63) BYR (Robbie C. Hassler, J. David Hassler); in conjunction with several late-Feb records (see Winter 1984-85 report), usual well-articulated migration denoted.

*Golden-Plover—Tern*: Lesser Golden-Plover: 16 Mar (10) DRU (BHS, Anne Nixon, m.ob.), ers; 24 Mar (4) LOR (DJS); 30 Mar (14) 16 km W of LAW (GNP, MDW, DJS, *et al.*); rarely reported in LWC. Semipalmated Plover: 15 Apr (1) 10 km S of Franklin, WMC (SJS), new NA early spring date; 11 May (29) GSP (JPC), largest number reported. Lesser Yellowlegs: 6 May (470) DRU (CGD, largest number reported. Willet: 21 Apr (4) Cheatham Dam (CGD, m.ob.); 27 Apr (10) DRU (SJS, BHS); 1 May (4) OHD (SJS); usual brief period of migration denoted. Upland Sandpiper: 26 Mar (1) Old Hillsboro Rd., WMC (BHS), new NA early spring date; 24 Apr (2) BAR (DWB), only other report. Semipalmated Sandpiper: 23 May (100+) GRP & LWP (JPC, SJS), largest number reported. Western Sandpiper: 10 May (1) DRU (SJS); 13 May (14) GSP (DTC, JPC); 23 May (2) LWP (SJS, JPC), only reports. White-rumped Sandpiper: 11 May (5) GSP (DTC, JPC), ers; 20 May (10) 10 km S of Franklin, WMC (SJS), few WMC records; 23 May (60) GRP & LWP (JPC, SJS), alltime NA high count; 30 May (4) GRP & LWP (SJS), lrs. Baird's Sandpiper: 6 Apr (3) DRU (SJS, BHS), only report, early. Dunlin: 3 May (1) GSP (JPC, DTC); 10 May (2) DRU (SJS); only reports. Stilt Sandpiper: 13 May (10) LWP (DTC, JPC), high number in spring. Dowitcher sp.: 3 May (20) DRU (MTC, DWM, Wallace Todd), highest number reported. Wilson's Phalarope: 27 Apr (1) DRU (SJS, BHS); 30 May (1) LWP (JPC, DTC); only reports. Bonaparte's Gull: 16 May (80+) DRU (SJS, m.ob.), high number; 5 Apr (1) FRR (BHS), few WMC records. Ring-billed Gull: 11 May (18) FRR (SJS), high number in WMC; 23 May (5) OHD (SJS), lrs. Forster's Tern: 30 Apr (2) Cave Creek Park, PUC (RWS, Amy Johnson, Sam Coward, Kathryn Coward, Roy Sullivan, M. Lassiter), few PUC records.

*Cuckoo—Pipit*: Black-billed Cuckoo: 14 Apr (1 seen and heard) Murrefreesboro (TJW, David McCarroll), new NA early spring date; reported as

more common than usual in Stewart Co. (DWB). Yellow-billed Cuckoo: 3 Apr (1 calling) NASH (Sue M. Bell), new NA early spring date. Common Barn-Owl: reported only from WLC (Fred O. Detlefsen, *vide* RVM) and MTC (AHH, EJW). Great Horned Owl: 11 Mar (nest with 2 chicks) EWP (PBH). **NORTHERN SAW-WHET OWL**: 13 May (1 drinking from bird bath after dark) NASH (Robert Hershey, Susanna Hershey, *vide* PBH), 6th NA record. Common Nighthawk: 4 Mar (1 seen and heard) NASH (Matt T. Hunter), new NA early spring date. Whip-poor-will: 28 Mar (1 calling) RDL (TJW); 28 Mar (1 calling) LEF (BHS); ers. Olive-sided Flycatcher: 28 Apr (1) CHC (CGD); 30 May (1) Rutherford Co. (RVM), lrs. Least Flycatcher: 29 Apr (1 calling) RDL (SJS, LVH); 3 May (1) DOV (DWB); 4 May (2) MOP (CPN, BBC, TOS). Yellow-bellied Flycatcher: as occurred last spring, several reports, without substantive documentation, including a detailed description of song, were received; observers are urged to record this species with care and to report it with complete documentation. Tree Swallow: 3 Mar (1) DRU (BHS, SJS, ARH), ers; 10 Mar (6) CCNWR (EJW), also early. Northern Rough-winged Swallow: 14 Mar (1) LOR (DJS), ers; also earliest ever LWC. Blue Jay: 16 Mar (1 displaying almost complete albinism) DRU (CGD, m.ob.). House Wren: 11 Apr (1) Taggart Dr., NASH (Mary Anne Guschke), ers. Sedge Wren: 1 May (3) CCNWR (DWB); 11 May (1) DYD (CGD); only reports. Wood Thrush: 5 Apr (1) BAH (RWS), ers. Water Pipit: 27 Apr (2) WLC (RVM, Alice Savage), lrs.

*Vireo*—*Siskin*: White-eyed Vireo: 1 Apr (1) RDL (LVH), ers. Warbling Vireo: 14 Apr (1) DRU (SJS), ers. Philadelphia Vireo: scarcer than usual this spring. Red-eyed Vireo: 11 Apr (1) Model Fire Tower, LBL (DWB), ers. Golden-winged Warbler: 9 reports 20 Apr - 12 May. Tennessee Warbler: 24 May (1) BAH (RWS), lrs. Orange-crowned Warbler: 4 reports 20 Apr - 4 May. Northern Parula: 31 Mar (1 seen and heard) LEF (BHS, SJS), new NA early spring date. Chestnut-sided Warbler: 19 Apr (1) RDL (LVH), ers. Blackpoll Warbler: 30 May (1) NASH (MLM), lrs. Cerulean Warbler: 29 Mar (2 singing) LEF (BHS), new NA early spring date. Worm-eating Warbler: 10 Apr (1) RDL (LVH), ers. Connecticut Warbler: 20 Apr (1) Ft. Negley, DVC (CGD), ers. Common Yellowthroat: 5 Apr (1) LEF (SJS), ers. Rose-breasted Grosbeak: 27 May (1) BAH (RWS), lrs. Chipping Sparrow: 6 Mar (1) CLA (EJW), ers. Vesper Sparrow: 2 May (1) MTC (AHH), lrs. Le Conte's Sparrow: 3 Mar (1) DRU (SJS, BHS, ARH), only report. White-throated Sparrow: to EOP (1) Gallatin, Sumner Co. (JPC, DTC), lrs (but see Summer 1985 report). **HARRIS' SPARROW**: 16 Mar (1) DRU (BHS, LVH, Victoria Janson, m.ob.), only report of season and first in region since Winter 1981-82. Dark-eyed Junco: 30 Apr (1) DOV (DWB), lrs. Rusty Blackbird: 16 Apr (1) near LEF (BHS), lrs. Orchard Oriole: 12 Apr (1) DOV (DWB), ers. Purple Finch: 25 Apr (2/1) CLA/NASH (EJW/Ann T. Tarbell), lrs. **RED CROSSBILL**: 16 Mar (20) Model Fire Tower, LBL (DWB), only report. Pine Siskin: 17 May (3) NASH (MLJ), lrs.

*Corrigenda: Migrant* 54:62, 1983: in entry for American Avocet change "4th spring" to "5th spring" record; 54:62, 1983: in entry for Least Tern change "5th" to "10th" NA record; 54:62, 1983: in entry for Willow Flycatcher delete the record for 30 Apr; 54:63, 1983: in entry for Rusty Blackbird add "NA" after "new"; 55:68, 1984: in entry for Horned Grebe change "24 May" to "24 Mar"; 55:69, 1984: in entry for Sandhill Crane change "3rd NA record" to "7th NA record"; 55:69, 1984: in entry for American Avocet

change "5th NA spring record" to "6th NA spring record"; 55:71, 1984: in entry for Mourning Warbler change the second "DIC" to "DVC"; 55:71, 1984: in entry for White-throated Sparrow change "DOC" to "DOV"; 55:74, 1984: in discussion of banded Pine Siskins at KNX change "19 Mar" to "10 Mar"; 55:76, 1984: in "Observers" section add "OBL—O. Bedford Lochridge" and "RWS—Richard W. Simmers, Jr." in appropriate places.

*Locations:* BAH - Barnes Hollow, Putnam Co.; BAR - Barkley Waterfowl Management Unit, Stewart Co.; BYR - Byrdstown, Pickett Co.; CCNWR - Cross Creeks National Wildlife Refuge, Stewart Co.; CHC - Cheatham Co.; CLA - Clarksville, Montgomery Co.; DOV - Dover, Stewart Co.; DRU - Duck River Unit, Tennessee National Wildlife Refuge, Humphreys Co.; DVC - Davidson Co.; DYD - Dyson's Ditch, Cheatham Co.; EWP - Edwin Warner Park, Davidson Co.; FRR - Franklin Reservoir, Williamson Co.; GRP - Green's Pond, Sumner Co.; GSP - Gallatin Steam Plant, Sumner Co.; LAW - Lawrenceburg, Lawrence Co.; LBL - Land-Between-the-Lakes, Stewart Co.; LEF - Leiper's Fork, Williamson Co.; LOR - Loretto, Lawrence Co.; LWC - Lawrence Co.; LWP - Lewis Pond, Sumner Co.; MC - Metro Center, Davidson Co.; MOP - Monsanto Ponds, Maury Co.; MTC - Montgomery Co.; NA - Nashville Area (includes all of Davidson Co. and parts of 7 surrounding counties); NASH - Nashville; OHD - Old Hickory Dam, Davidson Co.; PPL - Percy Priest Lake (in Davidson, Wilson, and Rutherford Cos.); PUC - Putnam Co.; RDL - Radnor Lake State Natural Area, Davidson Co.; WLC - Wilson Co.; WMC - Williamson Co.

STEPHEN J. STEDMAN, Rt. 6, Pinewood Rd., Franklin, TN 37064.

**EASTERN RIDGE AND VALLEY REGION**—This reporting period was considered very dry throughout the region. In the Johnson City area Eller commented that one benefit of the drought was the many successful nests of Canada Geese. In the past they were usually washed away by the high swift flowing rivers.

At Knoxville early spring was fairly cool, which delayed the arrival of Purple Martins. Late March was warm with gnatcatchers and the early warblers arriving on schedule. Early April was cooler than average, delaying a few birds, then, after about the 11th of April, temperatures were near or above average. Many of the fairly late arriving migrants were earlier than average, and by the end of April, Red-eyed Vireos and Tennessee Warblers were present in numbers well above average. Knoxville's rainfall throughout the season was below average, with only 6 inches from March through May, 8 inches below normal and the driest in many years. They only recorded 2.4 inches of rainfall in May.

The combined rainfall at Chattanooga of just over 5 inches for March and April made the period the sixth driest on record. Temperature for May was near normal while precipitation was somewhat above average.

A good yellowlegs migration was recorded in the Johnson City area. Rick Knight reported a nice list of waterbirds in early March from Cherokee Lake, an area rarely reported on in these pages. Other than his observations, waterfowl seemed to have moved through with little comment being received.

The Kingston Steam Plant shorebird habitat continued to be poor. The ash pile where the Bank Swallows were found nesting in 1984 was leveled, but 30+ new nest holes were discovered elsewhere on the site.

Small numbers of Pine Siskins, along with Purple and House Finches lingered into the period. No Evening Grosbeaks were reported, while Red Crossbills were observed in the Catoosa Wildlife Management Area on 14 May, and the White-winged Crossbill remained at Chattanooga until 12 April. House Finches were documented nesting in Maryville, Cleveland and Chattanooga.

*Loon—Duck*: Common Loon: 7 Mar (6) CRL (RLK); 1 Mar - 1 Apr (6-19 irregular) CHL (KHD, LHD, RAR); last seen BOL 16 Apr (RLK); last report NRL 14 May (JCH). Pied-billed Grebe: 7 Mar (45) CRL (RLK); 1 Mar - 1 Apr (2-65) CHL (KHD, LHD). Horned Grebe: 7 Mar (130) CRL (RLK); 3-16 Mar (1-7) CHL (KHD, LHD, RAR). Double-crested Cormorant: 7 Mar (6) CRL (RLK); 7 Mar (1) WBL (LJF, DKF, WKJ); 9 Mar - 1 Apr (6-8 occasional) CHL (KHD, LHD); 4-7 Apr (1-3) BOL (RLK *et al.*); 27 Apr (2), 7 May (1) AUS (RLK *et al.*); 15 May (4) DOL (SJS). Great Blue Heron: 7 Mar (17) CRL (RLK). Great Egret: 6 Apr (5) SAB (KHD, LHD); 12 Apr - 7 May (2-3) AUS (RLK, RC); 30 Apr (2) HRA (KHD, LHD); 18 May (1) HRA (SJS); 22 May (1) Hawkins Co. (WKJ). Snowy Egret: 11 May (1) CHA (RAR). Little Blue Heron: 24 Apr, 2 May (1) WGC (RLK); 27 Apr (1) AUS (RLK, RC). Cattle Egret: 27 Apr (1) KNC (Morton Massey *fide* CPN); 18 May (1) COC (JAK); 20 May (1) SAB (KHD, LHD). Tundra Swan: 2 Mar (1) HRA (PCH, JDR, PHD *et al.*). Mute Swan: 9-20 Mar (2) CHL (GLF, KHD, LHD, RJH). Green-winged Teal: 9 Mar (4) HRA (KHD, LHD); 24 Mar (5) CHL (KHD, LHD). Amer. Black Duck: 3 Mar (6) HRA (KHD, LHD). Northern Pintail: 24 Mar (1) HRA (KHD, LHD). Blue-winged Teal: 25 Mar - 18 May (1+) WGC (LHTOS); 23 Mar - 1 Apr (7-45) CHL (KHD, LHD); 28 Apr - 16 May (1-5) CHA (RAR). Northern Shoveler: 2 Apr (2) JNC (RLK). Gadwall: max 9 Mar (115) CHL (KHD, LHD); 24 Mar (140) HRA (KHD, LHD); last 1 Apr (92) HRA (KHD, LHD). Amer. Wigeon: 7 Mar (4) CRL (RLK); 24 Mar (6) HRA (KHD, LHD). Canvasback: 1 Apr (1) CHL (KHD, LHD). Redhead: 2 Mar (2) JEC (JAK); 3 Mar (1) CHL (KHD, LHD); 7 Mar (25) CRL (RLK). Ring-necked Duck: 7 Mar (2) CRL (RLK); 3-24 Mar (12-150) CHL (KHD, LHD). Greater Scaup: 3-24 Mar (110-195) CHL (KHD, LHD). Lesser Scaup: 3 Mar - 1 Apr (3-275) CHL (KHD, LHD). Scaup sp.: 7 Mar (280) CRL (RLK). Oldsquaw: 8-9 Mar (3) CHL (KHD, LHD, RAR, JTP). Common Goldeneye: 7 Mar (6) CRL (RLK). Bufflehead: 7 Mar (2) CRL (RLK). Hooded Merganser: 7 Mar (10) CRL (RLK); 24 Mar (5) HRA (KHD, LHD); 7 Apr (3) BOL (RLK). Common Merganser: 7 Mar (75+) WBL (LJF, DKF, WKJ); 9 Mar (1) CHL (KHD, LHD). Red-breasted Merganser: 7 Mar (4) CRL (RLK); 9 Mar (150) CHL (KHD, LHD, RAR); 7 Apr (3) BOL (RLK). Ruddy Duck: 3 Mar - 1 Apr (2-69) CHL (KHD, LHD, RAR).

*Osprey—Tern*: Osprey: 7 Mar (at least 2 pairs returned and refurbishing nests) WBL (LJF, DKF, WKJ); 2 Apr - 14 May (1+) WGC (LHTOS). Bald Eagle: last report 16 Mar (1) CHL (KHD, LHD). Northern Harrier: 12 May (1) KNC (ARH, RDH). Sharp-shinned Hawk: only 2 sightings JNC area (LHTOS). Cooper's Hawk: no reports JNC area (LHTOS). Red-shouldered Hawk: 6 active nests in CHA area (KHD, LHD, JDR). Amer. Kestrel: pair regular WHP (JAK). Ruffed Grouse: 18 May (1) Sharp's Ridge, Knoxville (JCH, Greg Lagerberg *et al.*) - does not regularly occur there in the city. King Rail: 9-16 May (1-2) CHA (PDR, AMJ, TJW, RAR, JTP). Virginia Rail: 7 May (1) AUS (RLK). Sora: 14, 27 Apr (1) AUS (RLK, RC); 11 Apr (1 dead on road) SAB (KHD). Amer. Coot: 26 May (2) KSP (KHD). Lesser

Golden-Plover: 24 Mar (1) HRA (KHD, LHD); 29 Mar (1) CHA (AMJ, Eugene M. Ryther). Semipalmated Plover: 18 May (4) HRA (SJS). Greater Yellowlegs: 23 Mar - 30 Apr (only 3 singles reported!) HRA (KHD, LHD); 31 Mar (3) SAB (KHD, LHD). Lesser Yellowlegs: 25 Mar (1) JEC (JAK); 18 May (3) HRA (SJS). Solitary Sandpiper: 18 May (2) COC (JAK); 18 May (3) HRA (SJS). Spotted Sandpiper: 18 May (10) COC (JAK); 26 May (1) KSP (KHD). Semipalmated Sandpiper: 2 May (13) CHA (RAR); 11 May (1) HRA (KHD, LHD). Least Sandpiper: 11 May (5) HRA (KHD, LHD); 18 May (1) HRA (SJS); 26 May (5) KSP (KHD). Pectoral Sandpiper: 24 Mar (140) HRA (KHD, LHD); 29 Mar (5) CHA (RAR); 31 Mar (106) SAB (KHD, LHD). Dunlin: 31 Mar (37) SAB (KHD, LHD); 27 Apr (2) AUS (RLK, RC) - seldom reported from this area. Common Snipe: 18 May (1) HRA (SJS). Laughing Gull: 11 May (5) KNX (ARH, Marc W. Armstrong). Bonaparte's Gull: 1 Apr (1) CHL (KHD, LHD); 4 Apr (22) BOL (RLK). Ring-billed Gull: 7 Mar (2000) CRL (RLK); 1 Apr (46) CHL (KHD, LHD); 26 May (1) KSP (KHD). Herring Gull: 7 Mar (20) CRL (RLK); 1 Apr (1) CHL (KHD, LHD). Common Tern: 27 Apr (4) Blountville (Joy Kyle, MD); 16 May (1) HRA (AMJ, JTP). Forster's Tern: 16 Apr (1) BOL (RLK, RC); 27 Apr (4) AUS (RLK, RC).

*Barn-Owl—Kinglet:* Common Barn-Owl: pairs reported near BOL and at AUS (RLK). Great Horned Owl: nest w/2 young CHA (RAR); active nest HRA (JDR). Red-headed Woodpecker: wintering individuals at CHA last reported 12 Apr (RAR). Red-cockaded Woodpecker: 6 Apr (2) (CGD), 9 May (1) (TJW), 27 May (1) (SJS) Catoosa WMA - apparently did not raise young at this single known occupied site in area. Olive-sided Flycatcher: 28 Apr, 23 May (1) CHA (RAR). Willow Flycatcher: 14 May (first report at nesting site) AUS (RLK); 16 May (1) HRA (JTP, AMJ); 17 May (2) Alcoa Marsh (SJS). Tree Swallow: 2-28 Apr (3 reports, 5-120) CHA (RAR); 28 Mar (200+) WBL (LJF); 17 May (1) at prime nesting habitat 3 mi S of Chilhowee Dam, BLC (BHS, SJS); 18 May - 2 adults on DOL where nested past 3 summers (JAK). Bank Swallow: 13 Apr - 10 May (5 reports, 1-7) CHA (RAR, JTP, AMJ); 16-18 May (40+) AUS (RLK); 26 May - at KSP 30 + active nest holes in bank of fly ash on N side of disposal area, 1984 nest site leveled (KHD). Brown-headed Nuthatch: 4 new areas East Brainerd, CHA (RAR); active nest CLE (PHD). House Wren: 12 Apr (1) JNC (MD), ers; one regular Maryville from 29 Apr (JAK); 12 May (1) CHA (JRP). Marsh Wren: 4 May (2) CHA (RAR). Golden-crowned Kinglet: 28 Apr (1) Knox Spring Count (Knox Chapter, TOS), late. Ruby-crowned Kinglet: 11 May (1) KNX (ARH, JCH), lrs.

*Thrush—Warbler:* Hermit Thrush: 13 Apr (1) CHA (RAR). Water Pipit: 3 Apr (80+) WGC (RLK). Cedar Waxwing: last 27 May at CHA (RAR). Loggerhead Shrike: 27 Mar, 27 Apr (1) WGC (RLK); 28 Apr (2 ad, 3 y) CHA (RAR). Solitary Vireo: 17 Mar (1) Campbell Co. (JCH). Warbling Vireo: 18 May (1) Mascot (ARH, Paul Hartigan, Jim & Betty Mason, B. Jones) - stayed into summer, first local breeding season record in several years. Red-eyed Vireo: arrived KNX in large numbers earlier than usual, 20 Apr (12) KNX (JMC, CPN *et al.*); 194 on KNX spring count on 28 Apr, about twice normal number. Tennessee Warbler: first 24 Apr (3) KNX (JCH), then present there in higher than average numbers during rest of spring, with 101 on spring count. Orange-crowned Warbler: 15 Apr (1) NOR (CPN); 20 Apr (1), 22 Apr (2), 28 Apr (1) KNX (ARH *et al.*); more reports than normal there. Northern Parula: 1 Apr (1) Decatur (CPN); 16 Apr (1) JNC (RLK) - both early reports. Yellow-throated Warbler: 31 Mar (2) NOR

(CPN). Bay-breasted Warbler: very early, 20 Apr (3) KNX (JMC, CPN *et al.*). Prothonotary Warbler: first 21 Apr AUS with 2-3 then regular there (RLK).

*Grosbeak—Siskin:* Rose-breasted Grosbeak: 25 May (2) CHA (KHD). Blue Grosbeak: first 25 Apr AUS then several recorded there regularly (RLK). Dickcissel: 10 May (8) CHA (AMJ, JTP). Bachman's Sparrow: 12 May (1) Berry Island, Grainger Co. (RLK). Vesper Sparrow: 25-29 Mar (1-8) CHA (RAR); 28 Apr (1) KNX (CPN), late there; 14 May (1) AUS (RLK, RC). LeConte's Sparrow: 28 Apr (1) KNX (JCH). Bobolink: 10 May (50) CHA (JTP, AMJ); 18 May (30) WHP (JAK). Rusty Blackbird: 28 Feb - 16 Mar (7) BLC (JAK). Purple Finch: numbers continued low WGC with their last sighting JNC on 23 Apr (MD); no comment from KNX; 9 banded 16 Mar COL (REL), with last report CHA 13 Apr (RAR). House Finch: numerous JNC thru mid-April when the flocks broke up (LHTOS); no comment was received from KNX and 2 active nests in hanging baskets at CHA (KHD); also nested in similar habitat in CLE, apparently 2nd year at site (C. Richard Hughes); 22 May - pair nesting in trimmed hemlock tree at Alcoa (JAK). Red Crossbill: 14 May (7) Cumberland Co. (BHS, SJS). White-winged Crossbill: female reported last period at East Brainerd, CHA, remained until 12 Apr (Michael A. and Barbara McMahan). Pine Siskin: no sightings from JNC (LHTOS); present in small numbers in KNX and Oak Ridge (ARH, JMC *et al.*); 1-25 irregular CLE to 11 May (PHD); 4 Mar -29 Apr (35 banded) COL (REL) with last sighting COL 24 May (REL).

*Locations:* AUS - Austin Springs; BLC - Blount Co.; BOL - Boone Lake; CHA - Chattanooga; CRL - Cherokee Lake; CLE - Cleveland; COC - Cocke Co.; DOL - Douglas Lake; HRA - Hiwassee River Area; JEC - Jefferson Co.; KSP - Kingston Steam Plant; KNC - Knox Co.; KNX - Knoxville; NOR - Norris; NRL - Norris Lake; SAB - Savannah Bay; WGC - Washington Co.; WBL - Watts Bar Lake; WHP - White Pine.

KENNETH H. and LILLIAN H. DUBKE, 8139 Roy Lane, Ooltewah, TN 37363.

EASTERN MOUNTAIN REGION—Weather throughout this period was warm and very dry. Rainfall was below average all three months, and this was one of the driest spring seasons in many years.

Waterfowl numbers were down, and the few birds present left earlier than normal. Except for both species of yellowlegs, shorebirds were low in numbers. As during the winter, northern finches were very low in numbers. Especially noticeable were the few Purple Finch reports. No Evening Grosbeaks or crossbills were reported from the northern end of the region, but Pine Siskins did make brief appearances from mid-April through mid-May. Perhaps the best bird of the season was the first confirmed report of a Northern Saw-whet Owl, present during April on Roan Mountain.

*Grebe—Hawk:* Horned Grebe: 9 Mar (4) WTL (RC, SG, MD); only report. Great Egret: 12-13 Apr (2) Wagners Island, Watauga River (MD, SG, CFW). Green-backed Heron: 7 Apr (1) WTR (CFW), *ers.* Yellow-crowned Night-Heron: 29 Mar (2) Hunter Swamp, Carter Co. (LHTOS), *ers.* Mute Swan: 2 Mar (4) SHL (J. Wallace Coffey). Canada Goose: several broods from stocked birds in ELI area (GDE). Blue-winged Teal: 25 Mar - 18 May in ELI

area (LHTOS). Northern Shoveler: 6 Apr (6) ELI (GDE, CFW). Ring-necked Duck, Lesser Scaup, Bufflehead: fewer than average number of reports, ELI area (LHTOS). Hooded Merganser: 28 Mar, 5 Apr (4-6) RIL (CFW). Red-breasted Merganser: 29 Mar (9) WTL (RLK). Osprey: in ELI area 6 Apr - 14 May (LHTOS). Sharp-shinned Hawk: 7 Mar (1) PWB (RC); 9 Mar, 6 Apr, 3 May (1) ELI (GDE). Cooper's Hawk: 13 Mar (1) PWB (RC); 27 Apr (1) SMV (GOW); 3 May (1) RNM (GDE). Broad-winged Hawk: 9 Apr (1) Unicoi (GOW), ers.

*Yellowlegs—Flycatcher*: Greater Yellowlegs: 4 Apr (3) RZF (CFW), then several present thru 6 May. Lesser Yellowlegs: 30 Mar (2) RNC (GDE), ers, present thru 8 May. Pectoral Sandpiper: 27 Apr (1) ELI (GDE). Bonaparte's Gull: 29 Mar (1) ELI (LHTOS). Ring-billed Gull: 26 May (2) WTL (GDE), late. Herring Gull: 30 Mar (1) RNC (GDE), only report. Black-billed Cuckoo: 31 May (1) IMG (GWS, SG), ers, late. Common Barn-Owl: 15 May (1 road kill) SMV (GOW). Barred Owl: 31 May (1) IMG (GWS, SG). **NORTHERN SAW-WHET OWL**: 12 Apr - 27 Apr (1, possibly 2) RNM (RLK), first confirmed report from location; 15 May (2) Clingman's Dome, GSMNP (SJS, BHS). Chuck-will's-Widow: 27 Apr (3) Milligan College (RLK). Yellow-bellied Sapsucker: 23 Apr (1) ELI (HHF), lrs. Least Flycatcher: 3 May (1) RNM (GWS), ers. Alder Flycatcher: 15 May (1) RNM (SJS, BHS), ers. Olive-sided Flycatcher: 1 May (1) RNM (HHD); 15 May (2) Alum Cave Bluff, GSMNP (SJS, BHS).

*Martin—Vireo*: Purple Martin: 16 Mar (2) ELI (GDE), first report, about 1 week late. Tree Swallow: 1 Apr (12) RZF (CFW). Barn Swallow: 12 Mar (1) PWB (RC), early. Common Raven: 27 Apr (nest) near RIL (GDE, HHF). Red-breasted Nuthatch: few reports after 1 April. Veery: 16 May (1) RNM (RLK), ers. Swainson's Thrush: 8 May (1) WIL (RLK), only report. Gray-cheeked Thrush: no reports. Water Pipit: 2 Mar (20) PWB (RC). Loggerhead Shrike: no reports. Solitary Vireo: 30 Mar (1) SMV (GOW). Warbling Vireo: 27 Apr (2) ELI (GOW, HHF).

*Warbler—Grosbeak*: Blue-winged Warbler: 29 Apr (1) PWB (RC), ers. Golden-winged Warbler: 27 Apr (2) Holston Mountain (GOW, CFW), ers. Cape May Warbler: 22 Apr (1) PWB (RC), first report. Yellow-rumped Warbler: 14 May (2) ELI (HHF), last report. Pine Warbler: 11 Mar (1) WIL (RLK), ers. Black-and-white Warbler: 3 Apr (1) Erwin (GWS), ers. Swainson's Warbler: 27 Apr (1) WIL (GOW, CFW). Northern Waterthrush: 16 Apr (2) Laurels (GOW), ers. Louisiana Waterthrush: 29 Mar (10) Laurels (LHTOS), ers. Canada Warbler: 4 May (1) RNM (RLK), ers. Blue Grosbeak: 23 Apr (1) PWB (RC), ers, numerous later in period. Chipping Sparrow: 16 May (1) RNM, 5200' elev. (RLK). Vesper Sparrow: 12 Apr (6) RZF (LHTOS). Grasshopper Sparrow: 17 Apr (1) PWB (RC), ers, then numerous. Fox Sparrow: 12 Apr (1) RNM (RLK), only report. White-throated Sparrow: 12 May (1) ELI (HHF), lrs. White-crowned Sparrow: 29 Apr (2) SHL (RL), lrs. Rusty Blackbird: 3-23 Apr (1) RZF (GOW, CFW). Purple Finch: present in lower than normal numbers, 23 Apr (1) ELI (HHF), lrs. House Finch: wintering flocks left mid-April, reports of young birds by end of period at ELI (LHTOS). Pine Siskin: 3 Apr - 16 May (flocks of 8-15) ELI area (LHTOS). Evening Grosbeak: no reports.

*Locations*: ELI - Elizabethton; GSMNP - Great Smoky Mountains Nat. Park; IMG - Iron Mountain Gap; PWB - Powder Branch, Carter Co.; RIL



-Ripshin Lake; RNC - Roan Creek, Watauga Lake; RNM - Roan Mountain; RZF - Razor Farm, Carter Co.; SHL - South Holston Lake; SMV - Siam Valley, Carter Co.; WIL - Wilbur Lake; WTL - Watauga Lake; WTR - Watauga River, Carter Co.

GLEN D. ELLER, Rt. 9, Box 1340, Elizabethton, TN 37643.

### OBSERVERS

- |                           |                                 |
|---------------------------|---------------------------------|
| DWB—Donald W. Blunk       | WKJ—Wesley K. James             |
| JMC—James M. Campbell     | AMJ—Albert M. Jenkins           |
| RC—Richard Clark          | WNJ—William N. Jernigan         |
| BBC—Ben B. Coffey         | RLK—Richard L. Knight           |
| LCC—Lula C. Coffey        | JAK—Jon A. Koella               |
| DTC—Dot T. Crawford       | RL—Richard Lewis                |
| JPC—J. Paul Crawford      | REL—Mrs. R. E. Lynn             |
| DAD—Dollyann Daily        | MLM—Margaret L. Mann            |
| PHD—Paul H. Dietrich      | DWM—Don W. Manning              |
| MC—Martha Dillenbeck      | CPN—Charles P. Nicholson        |
| HHD—Helenhill Dove        | JTP—Johnny T. Parks             |
| CGD—C. Gerald Drewry, Jr. | GNP—G. New Piper                |
| KHD—Kenneth H. Dubke      | PDR—Peter D. Robinson           |
| LHD—Lillian H. Dubke      | JDR—James D. Rowell             |
| GDE—Glen D. Eller         | DJS—Damien J. Simbeck           |
| HLF—Harry L. Farthing     | RWS—Richard W. Simmers, Jr.     |
| GLF—Gertrude L. Fleming   | BHS—Barbara H. Stedman          |
| RPF—Robert P. Ford        | SJS—Stephen J. Stedman          |
| DKF—Dale K. Fowler        | GWS—Glen W. Swofford            |
| LJF—Linda J. Fowler       | RCS—Randy C. Stringer           |
| SG—Sally Goodin           | TOS—Tennessee Ornithol. Society |
| PBH—Paul B. Hamel         | MCT—Michael C. Todd             |
| PCH—Paul C. Harris        | EJW—Ellen J. Walker             |
| AHH—Annie H. Heilman      | GOW—Gary O. Wallace             |
| RJH—R. John Henderson     | CFW—C. Frank Ward               |
| ARH—Audrey R. Hoff        | MDW—Morris D. Williams          |
| RDG—Ron D. Hoff           | JRW—Jeff R. Wilson              |
| JCH—Joseph C. Howell      | TJW—Terry J. Witt               |
| LVH—Lillian V. Hunt       | LHTOS—Lee Herndon Chapter, TOS  |
| MLJ—M. Louise Jackson     | m.ob.—many observers            |

## BOOK REVIEW

BIRDS OF THE NASHVILLE AREA, 4th EDITION, by Henry E. Parmer, 1985. Nashville Chapter, Tennessee Ornithological Society. iv+60 pp.—The first three editions of this book were compiled entirely or largely by Henry E. Parmer. His death occurred during the preparation of this revision, which serves as a memorial to him. Furthermore, he donated the funds needed for the publication of the fourth edition. The committee which produced this revision may be considered along with Henry Parmer as coauthors; they are David F. Vogt, C. Gerald Drewry, Paul B. Hamel, and Stephen J. Stedman. They and members of the Nashville T.O.S. who made the bird records on which this book is based can be proud of their work.

The area covered has been enlarged from that of the previous editions. With Nashville at the center, it includes all of seven counties and parts of two others lying in the Central Basin and the edge of the Western Highland Rim. A two-page map shows the area and locations referred to in the text.

The introduction describes briefly the history of ornithological work in the area, and the physiography, vegetation, and climate of the area. Terms, sources of records, and standards used are described. Changes in the abundance of over 25 species since the third edition are summarized.

The bulk of the book consists of accounts of 306 species, describing for each its seasonal presence and relative abundance. The format is the same as in previous editions. New are bar graphs for each of the species to illustrate the seasonal occurrence.

Other changes since the third (1975) edition are that common names and the sequence of species now follow the 1983 edition of the "AOU Check-list", and that 22 species have been added as occurring in the area and four species have been added to the breeding bird list.

Page ii bears this message: "Requests for copies accepted by Treasurer, Nashville Chapter TOS, P. O. Box 24573, Nashville, TN 37202-4573."

This is certainly the most up-to-date and detailed report on the status of birds in any locality in Tennessee. It stands as a monument to Henry Parmer and to over two hundred observers, bird-watchers or amateur ornithologists, who made the observations and organized the records. And, as clearly stated in the introduction to this book, the work is not done and never will be because the whole of birdlife is always changing.—JAMEST. TANNER.

## PREPARATION OF COPY FOR PUBLICATION

The purpose of THE MIGRANT is the recording of observations and original information derived from the study of birds, primarily in the state of Tennessee or the area immediately adjacent to its borders. Articles for publication originate almost exclusively from T.O.S. members.

Contributors should prepare manuscripts and submit them in a form acceptable to the printer, after editorial approval. Both articles and short notes are solicited but their format should be somewhat different.

Some suggestions to authors for the preparation of papers for publication are given herewith.

**MATERIAL:** The subject matter should relate to some phase of Tennessee Ornithology. It should be original, factual, concise, scientifically accurate, and not submitted for publication elsewhere.

**TITLE:** The title should be concise, specific, and descriptive.

**STYLE:** Recent issues of THE MIGRANT should be used as a guide in the preparation of manuscripts. Where more detail is needed reference should be made to the *Style Manual for Biological Journals* available from the American Institute of Biological Sciences, 1401 Wilson Boulevard, Arlington, Virginia 22209.

**COPY:** Manuscripts should be typed double spaced on 8½ x 11" paper with adequate margins, for editorial notations, and should contain only entries intended for setting in type, except the serial page number. Tabular data should be entered on separate sheets with appropriate title and column headings. Photographs intended for reproduction should be sharp with good contrast on glossy white paper in black and white (not in color). Instructions to the editors should be given on a separate sheet. Weights and measurements should be in metric units. Dating should be in "continental" form (e.g., 7 March 1981).

**NOMENCLATURE:** Common names should be capitalized followed by binomial scientific names in italics only after the first occurrence in the text for both regular articles and ROUND TABLE NOTES, and should conform to the A.O.U. Check-list 5th edition, 1957 and its Thirty-second Supplement. Trinomial should be used only after the specimen has been measured or compared with typical specimens.

**BIBLIOGRAPHY:** When there are more than five references in an article, they should be placed at the end of the article, otherwise they should be appropriately included in the text.

**SUMMARY:** Articles of five or more pages in length should be summarized briefly, drawing attention to the main conclusions resulting from the work performed.

**IDENTIFICATION:** Rare or unusual species identification to be acceptable must be accompanied by verifying evidence. This should include: date, time, light and weather conditions, exact location, habitat, optical equipment, distance, behavior of bird, comparison with other similar species, characteristic markings, experience of observer, other observers verifying observation and reference works consulted.

**REPRINTS:** Reprints are available on request. Reprint requests should accompany article at the time of submission. Billing to authors will be through the state T.O.S. Treasurer.

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